Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report

Commission File Number: 001-40253

Zhihu Inc.

(Exact Name of Registrant as Specified in Its Charter)

N/A

(Translation of Registrant's Name into English)

Cayman Islands

(Jurisdiction of Incorporation or Organization)

A5 Xueyuan Road
Haidian District, Beijing 100083
People's Republic of China

(Address of Principal Executive Offices)

Wei Sun, Chief Financial Officer
Telephone: +86 (10) 8271-6605
Email: ir@zhihu.com
A5 Xueyuan Road
Haidian District, Beijing 100083
People's Republic of China

(Name, Telephone, Email and/or Facsimile Number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12 (b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
American depositary shares, two American depositary shares representing one Class A ordinary share, par value US$0.000125 per share	ZH	New York Stock Exchange
Class A ordinary shares, par value US$0.000125 per share*		

* Not for trading, but only in connection with the listing of American depositary shares on the New York Stock Exchange.

Securities registered or to be registered pursuant to Section 12 (g) of the Act:

None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15 (d) of the Act:

None

(Title of Class)

Table of Contents

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report : 279,835,705 Class A ordinary shares (excluding the 11,681,119 Class A ordinary shares issued to the depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plan), par value US$0.000125 per share, and 19,227,592 Class B ordinary shares, par value US$0.000125 per share, as of December 31, 2021.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

☐ Yes ☒ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

☐ Yes ☒ No

Note - Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☐ Accelerated Filer ☐ Non-Accelerated Filer ☒ Emerging Growth Company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

†The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☒ International Financial Reporting Standards as issued by the International Accounting Standards Board ☐ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

☐ Item 17 ☐ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☒ No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13, or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

☐ Yes ☐ No

TABLE OF CONTENTS

INTRODUCTION

In this annual report, unless otherwise indicated or unless the context otherwise requires:

- "ADRs" refers to the American depositary receipts that evidence the ADSs;
- "ADSs" refers to the American depositary shares, two of which represent one Class A ordinary share;
- "average revenue per subscribing member" for a period is calculated by dividing the paid membership revenue for a specified period by the average monthly subscribing members in the specified period;
- "engagements" refers to 13 kinds of virtual engagement activities in the Zhihu community, such as upvotes, downvotes, comments, likes, follows, favorites, and shares, among others;
- "CAGR" refers to compound annual growth rate;
- "China" or "PRC" refers to the People's Republic of China, excluding, for the purpose of this annual report only, Hong Kong, Macau, and Taiwan;
- "Class A ordinary shares" refers to our Class A ordinary shares with a par value of US$0.000125 per share;
- "Class B ordinary shares" refers to our Class B ordinary shares with a par value of US$0.000125 per share;
- "content creators" refers to users who have generated at least one piece of content;
- "mobile MAUs" refers to the number of mobile devices that launch our mobile app at least once in a given month. "average mobile MAUs" for a period is calculated by dividing the sum of mobile MAUs for each month during a specified period by the number of months in the period;
- "monthly active content creators" refers to the number of content creators who generate at least one piece of content in a given month. "average monthly active content creators" for a period is calculated by dividing the sum of monthly active content creators for each month during the specified period by the number of months in such period;
- "monthly renewal rate" for a period is calculated by dividing the number of subscribing members that subscribed for our monthly membership services in a specified month with renewed membership services in the following month by the total number of subscribing members that subscribed for our monthly membership services during the specified month. "average monthly renewal rate" for a period is calculated by dividing the sum of monthly renewal rates for each month during a specified period by the number of months in the specified period;
- "monthly active users" or "MAUs" refers to the sum of our mobile MAUs and the number of logged-in users who visit our PC or mobile website at least once in a given month, after eliminating duplicates. "average MAUs" for a period is calculated by dividing the sum of MAUs for each month during a specified period by the number of months in the period;
- "monthly subscribing members" refers to the number of our Yan Selection (盐选) members in a specified month. "average monthly subscribing members" for a period is calculated by dividing the sum of monthly subscribing members for each month during a specified period by the number of months in the period;

- "monthly viewers" refers to the sum of the number of mobile devices that launch our mobile app at least once in a specified month and the number of independent cookies that visit our PC or mobile website at least once in a specified month. The number of monthly viewers is calculated by treating each distinguishable independent cookie or mobile device as a separate user even though some individuals may access our community with more than one independent cookie or using more than one mobile device and multiple individuals may access our community with the same independent cookie or using the same mobile device;

- "ordinary shares" or "shares" refers to our Class A ordinary shares and Class B ordinary shares, par value US$0.000125 per share;

- "paying ratio" for a given period refers to the ratio of our average monthly subscribing members divided by the average MAUs in the period;

- "piece of content" refers to any piece of questions, answers, articles, videos, groups, or live streaming in our community;

- "PGC" refers to professionally generated content;

- "PUGC" refers to professional user-generated content;

- "Renminbi" or "RMB" refers to the legal currency of China;

- "retention rate," as applied to any cohort of *YanPlus* users in a given period, refers to the percentage of these *YanPlus* users who made at least one repeated visit to Zhihu after a certain duration. The "12th-month retention rate" for any cohort of *YanPlus* users in a given month refers to the retention rate in the 12th month after that month. "*YanPlus* users" for a given month refers to the active users, each with a Yan value of 300 or above. Yan value is a rating that is assigned to users based on their engagement in our community;

- "services offered to businesses and merchants" refers to online advertising services and content-commerce solutions;

- "UGC" refers to user-generated content;

- "U.S. dollars" or "US$" refers to the legal currency of the United States;

- "VIEs" refers to variable interest entities and "our VIEs" refers to Beijing Zhizhe Tianxia Technology Co., Ltd., or Zhizhe Tianxia, Shanghai Pinzhi Education Technology Co., Ltd., or Shanghai Pinzhi, and Shanghai Biban Network Technology Co., Ltd., or Shanghai Biban;

- "WFOEs" refers to wholly foreign-owned enterprises, and "our WFOEs" refers to Zhizhe Sihai (Beijing) Technology Co., Ltd., or Zhizhe Sihai, Shanghai Zhishi Commercial Consulting Co., Ltd., or Shanghai Zhishi, and Shanghai Paya Information Technology Co., Ltd., or Shanghai Paya; and

- "Zhihu," "we," "us," "our company," or "our" refers to Zhihu Inc., a Cayman Islands holding company, and its subsidiaries and, when describing our operations and consolidated financial information, also including our VIEs and their respective subsidiaries. Where the context requires, in respect of the period prior to our company becoming the holding company of its present subsidiaries, such subsidiaries as if they were subsidiaries of our company at the relevant time.

In this annual report, city tiers are determined based on a study published in 2021 by China Business Network, a finance media company in China. In particular, tier 1 cities refer to Shanghai, Beijing, Shenzhen, and Guangzhou; new tier 1 cities refer to Chengdu, Hangzhou, Chongqing, Xi'an, Suzhou, Wuhan, Nanjing, Tianjin, Zhengzhou, Changsha, Dongguan, Foshan, Ningbo, Qingdao, and Shenyang; tier 2 cities refer to Hefei, Kunming, Wuxi, Xiamen, Jinan, Fuzhou, Wenzhou, Dalian, Harbin, Changchun, Quanzhou, Shijiazhuang, Nanning, Jinhua, Guiyang, Nanchang, Changzhou, Jiaxing, Zhuhai, Nantong, Huizhou, Taiyuan, Zhongshan, Xuzhou, Shaoxing, Taizhou, Yantai, Lanzhou, Weifang, and Linyi.

Any discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

Our reporting currency is Renminbi. This annual report contains translations from Renminbi to U.S. dollars solely for the convenience of the reader. Unless otherwise stated, all translations from Renminbi to U.S. dollars were made at a rate of RMB6.3726 to US$1.00, which was the exchange rate in effect as of December 30, 2021 as set forth in the H.10 statistical release of The Board of Governors of the Federal Reserve System. We make no representation that any Renminbi amounts referred to in this annual report could have been, or could be, converted into U.S. dollars, as the case may be, at any particular rate, or at all.

FORWARD-LOOKING INFORMATION

This annual report contains forward-looking statements that reflect our current expectations and views of future events. These forward-looking statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Known and unknown risks, uncertainties and other factors, including those included in "Item 3. Key Information—D. Risk Factors," may cause our actual results, performance, or achievements to be materially different from those expressed or implied by the forward-looking statements.

You can identify some of these forward-looking statements by words or phrases such as "may," "might," "will," "would," "expect," "anticipate," "aim," "estimate," "intend," "plan," "believe," "is/are likely to," "potential," "continue," or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events that we believe may affect our financial condition, results of operations, business strategy, and financial needs. These forward-looking statements include statements relating to:

- our goals and strategies,
- our future business development, financial condition, and results of operations,
- the expected outlook of the online content market in China,
- our expectations regarding demand for and market acceptance of our products and services,
- our expectations regarding our relationships with our users, clients, business partners, and other stakeholders,
- competition in our industry,
- relevant government policies and regulations relating to our industry, and
- general economic and business conditions globally and in China.

These forward-looking statements involve various risks and uncertainties. Although we believe that our expectations expressed in these forward-looking statements are reasonable, our expectations may later be found to be incorrect. Our actual results could be materially different from our expectations. Important risks and factors that could cause our actual results to be materially different from our expectations are generally set forth in "Item 3. Key Information—D. Risk Factors," "Item 4. Information on the Company—B. Business Overview," "Item 5. Operating and Financial Review and Prospects," and other sections in this annual report. You should read thoroughly this annual report and the documents that we refer to in this annual report with the understanding that our actual future results may be materially different from and worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements.

We operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

PART I.

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Our Holding Company Structure and Contractual Arrangements with Our VIEs and Their Shareholders

Zhihu Inc. is a Cayman Islands holding company with no equity ownership in its VIEs and their subsidiaries and not a Chinese operating company. We conduct our operations in China through (i) our PRC subsidiaries and (ii) our VIEs, with which we have maintained contractual arrangements, and their subsidiaries. PRC laws and regulations restrict and impose conditions on foreign investment in value-added telecommunication services and certain other businesses. Accordingly, we operate these businesses in China through our VIEs and their subsidiaries, and rely on contractual arrangements among our PRC subsidiaries, our VIEs, and their nominee shareholders to control the business operations of our VIEs. Revenues contributed by our VIEs accounted for 15.3%, 27.4%, and 25.9% of our total revenues in 2019, 2020, and 2021, respectively. As used in this annual report, "we," "us," "our company," "our," or "Zhihu" refers to Zhihu Inc., its subsidiaries, and, in the context of describing our operations and consolidated financial information, our VIEs in China, including but not limited to Beijing Zhizhe Tianxia Technology Co., Ltd., or Zhizhe Tianxia, Shanghai Pinzhi Education Technology Co., Ltd., or Shanghai Pinzhi, and Shanghai Biban Network Technology Co., Ltd., or Shanghai Biban. Investors in our ADSs are not purchasing equity interest in our VIEs in China but instead are purchasing equity interest in a holding company incorporated in the Cayman Islands.

A series of contractual agreements, including exclusive business cooperation agreement or exclusive technology development, consultancy and services agreements, shareholders' rights entrustment agreement or powers of attorney, share pledge agreements, and exclusive option agreements, have been entered into by and among our PRC subsidiaries, our VIEs, and their respective shareholders. There is no material difference between the effect of each set of contractual arrangements. As a result of the contractual arrangements, we have effective control over and are considered the primary beneficiary of our VIEs, and we have consolidated the financial results of these companies in our consolidated financial statements. For more details of these contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with Our VIEs and Their Shareholders."

However, the contractual arrangements may not be as effective as direct ownership in providing us with control over our VIEs and their subsidiaries and we may incur substantial costs to enforce the terms of the arrangements. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—Our contractual arrangements may not be as effective in providing operational control as direct ownership and shareholders of our VIEs may fail to perform their obligations under our contractual arrangements." and "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—The equity holders, directors, and executive officers of our VIEs, as well as our employees who execute other strategic initiatives may have potential conflicts of interest with our company."

There are also substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations, and rules regarding the status of the rights of our Cayman Islands holding company with respect to its contractual arrangements with our VIEs and their nominee shareholders. It is uncertain whether any new PRC laws or regulations relating to variable interest entity structures will be adopted or, if adopted, what they would provide. If we or any of our VIEs is found to be in violation of any existing or future PRC laws or regulations, or fail to obtain or maintain any of the required licenses, permits, registrations, or approvals, the relevant PRC regulatory authorities would have broad discretion to take action in dealing with such violations or failures. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—If the PRC government finds that the agreements that establish the structure for operating our business do not comply with PRC laws and regulations, or if these regulations or their interpretations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations" and "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—Our current corporate structure and business operations may be affected by the Foreign Investment Law."

Our corporate structure is subject to risks associated with our contractual arrangements with our VIEs. If the PRC government deems that our contractual arrangements with our VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. Our Cayman Islands holding company, our PRC subsidiaries and VIEs and their subsidiaries, and investors of our company face uncertainty with respect to potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with our VIEs and, consequently, significantly affect the financial performance of our VIEs and our company as a whole. For a detailed description of the risks associated with our corporate structure, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure."

We face various risks and uncertainties relating to doing business in China. Our business operations are primarily conducted in China, and we are subject to complex and evolving PRC laws and regulations. For example, we face risks associated with regulatory approvals on overseas offerings, anti-monopoly regulatory actions, and oversight on cybersecurity and data privacy, as well as the lack of inspection on our auditors by the Public Company Accounting Oversight Board, or the PCAOB, which may impact our ability to conduct certain businesses, accept foreign investments, or list and conduct offerings on a stock exchange in the United States or other foreign country. These risks could result in a material adverse change in our operations and the value of our ADSs, significantly limit or completely hinder our ability to continue to offer securities to investors, or cause the value of such securities to significantly decline. For a detailed description of risks relating to doing business in China, see "Item 3.D. Key Information—Risk Factors—Risks Relating to Doing Business in China."

The PRC government's significant authority in regulating our operations and its oversight and control over offerings conducted overseas by, and foreign investment in, China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors. Implementation of industry-wide regulations in this nature, such as data security or anti-monopoly related regulations, may cause the value of such securities to significantly decline. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—The PRC government's oversight over our business operations could result in a material adverse change in our operations and the value of our ADSs."

Risks and uncertainties arising from the legal system in China, including risks and uncertainties regarding the enforcement of laws and quickly evolving rules and regulations in China, could result in a material adverse change in our operations and the value of our ADSs. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—The legal system in China embodies uncertainties which could limit the legal protections available to us or impose additional requirements and obligations on our business, and PRC laws, rules, and regulations can evolve quickly, which may materially and adversely affect our business, financial condition, and results of operations."

The Holding Foreign Companies Accountable Act

The Holding Foreign Companies Accountable Act, or the HFCAA, was enacted on December 18, 2020. The HFCAA states that if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspection by the PCAOB for three consecutive years beginning in 2021, the SEC should prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. Since our auditor is located in China, a jurisdiction where the PCAOB has been unable to conduct inspections without the approval of the Chinese authorities, our auditor is not currently inspected by the PCAOB, which may impact our ability to remain listed on a United States or other foreign exchange. The related risks and uncertainties could cause the value of our ADSs to significantly decline. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—The PCAOB is currently unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections over our auditor deprives our investors with the benefits of such inspections" and "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—Our ADSs will be prohibited from trading in the United States under the HFCAA in 2024 if the PCAOB is unable to inspect or fully investigate auditors located in China, or in 2023 if proposed changes to the law are enacted. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment."

Permissions Required from the PRC Authorities for Our Operations

We conduct our business primarily through our subsidiaries and VIEs in China. Our operations in China are governed by PRC laws and regulations. As of the date of this annual report, our PRC subsidiaries and VIEs and their subsidiaries have obtained the requisite licenses, permits, and registrations from the PRC government authorities that are material for their business operations in China, including, among others, Value-Added Telecommunication Business Operation Licenses, or ICP Licenses, Internet Cultural Business Licenses, or ICB Licenses, Radio and Television Program Production and Operation Licenses, an Internet Medicine Information Services Qualification, and Publication Operation Licenses. Given the uncertainties of interpretation and implementation of relevant laws and regulations and the enforcement practice by relevant government authorities, we may be required to obtain additional licenses, permits, registrations, filings or approvals for our business operations in the future. For more detailed information, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—If we fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment applicable to our businesses in China, or if we are required to take compliance actions in this regard, our business, financial condition, and results of operations may be materially and adversely affected."

Furthermore, in connection with our issuance of securities to foreign investors, under current PRC laws, regulations, and rules, as of the date of this annual report, we, our PRC subsidiaries and our VIEs, (i) are not required to obtain permissions from the China Securities Regulatory Commission, or the CSRC, (ii) are not required to go through cybersecurity review by the Cyberspace Administration of China, or the CAC, and (iii) have not been asked to obtain or denied such permissions by any PRC authority.

However, the PRC government has recently indicated an intent to exert more oversight and control over offerings that are conducted overseas by and/or foreign investment in China-based issuers. For more detailed information, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—The PRC government's oversight over our business operations could result in a material adverse change in our operations and the value of our ADSs."

Cash and Asset Flows Through Our Organization

Zhihu Inc. is a holding company with no operations of its own. We conduct our operations in China primarily through our subsidiaries and VIEs in China. As a result, although other means are available for us to obtain financing at the holding company level, Zhihu Inc.'s ability to pay dividends to the shareholders and to service any debt it may incur may depend upon dividends paid by our PRC subsidiaries and service fees paid by our VIEs and their subsidiaries. If any of our subsidiaries incurs debt on its own behalf in the future, the instruments governing such debt may restrict its ability to pay dividends to Zhihu Inc. In addition, under PRC laws and regulations, our PRC subsidiaries are permitted to pay dividends only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Furthermore, our PRC subsidiaries and VIEs and their subsidiaries are required to make appropriations to certain statutory reserve funds or may make appropriations to certain discretionary funds, which are not distributable as cash dividends except in the event of a solvent liquidation of the companies. For more details, see "Item 5. Operating and Financial Review and Prospects—Liquidity and Capital Resources—Holding Company Structure."

Our VIEs may transfer cash to the relevant WFOE by paying service fees according to the exclusive business cooperation agreement or exclusive technology development, consultancy and services agreements. In 2019, 2020, and 2021, the total amount of such service fees that VIEs paid to the relevant WFOE under the relevant agreements was RMB215.2 million, RMB159.7 million and RMB45.6 million, respectively.

Under PRC laws and regulations, our PRC subsidiaries and VIEs and their subsidiaries are subject to certain restrictions with respect to payment of dividends or otherwise transfers of any of their net assets to us. Remittance of dividends by a wholly foreign-owned enterprise out of China is also subject to examination by the banks designated by the PRC State Administration of Foreign Exchange, or SAFE. These restrictions are benchmarked against the paid-up capital and the statutory reserve funds of our PRC subsidiaries and the net assets of our VIEs in which we have no legal ownership. As of December 31, 2019, 2020, and 2021, the total amount of such restriction to which our PRC subsidiaries and VIEs and their subsidiaries are subject was RMB143.5 million, RMB754.4 million, and RMB3.6 billion (US$560.7 million), respectively. For risks relating to the fund flows of our operations in China, see "Item 3. Key Information—Risk Factors—Risks Relating to Doing Business in China—We principally rely on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have. Any limitation on the ability of our PRC subsidiaries to make payments to us could materially and adversely affect our ability to conduct our business or financial condition."

Under PRC laws, Zhihu Inc. may fund our PRC subsidiaries only through capital contributions or loans, and fund our VIEs or their subsidiaries only through loans, subject to satisfaction of applicable government registration and approval requirements. As of December 31, 2019, 2020, and 2021, the aggregate amount of capital contribution by Zhihu Inc. to our intermediate holding companies and subsidiaries was RMB4.5 billion, RMB5.9 billion, and RMB10.5 billion (US$1.7 billion), respectively, and the outstanding balance of the principal amount of loans by Zhihu Inc. to our VIEs and their subsidiaries was RMB45.7 million, RMB45.7 million, and RMB51.7 million (US$8.1 million), respectively.

In 2019, 2020, and 2021, no assets other than cash were transferred through our organization.

Zhihu Inc. has not declared or paid any cash dividends, nor does it have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividend Policy." For PRC and United States federal income tax considerations of an investment in our ADSs, see "Item 10. Additional Information—E. Taxation."

A. [reserved]

Selected Financial Data

The following selected consolidated statements of operations data and selected consolidated statements of cash flow data for the years ended December 31, 2019, 2020, and 2021 and the selected consolidated balance sheet data as of December 31, 2020 and 2021 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. Our historical results are not necessarily indicative of results expected for future periods. You should read this selected financial data together with our audited consolidated financial statements and the related notes and information under "Item 5. Operating and Financial Review and Prospects" in this annual report. Our consolidated financial statements are prepared and presented in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP.

The following table sets forth our selected consolidated statements of operations data for the years indicated.

	For the Year Ended December 31,			
	2019	2020	2021	
	RMB	RMB	RMB	US$
	(in thousands)			
Selected Consolidated Statements of Operations Data:				
Revenue	**670,511**	**1,352,196**	**2,959,324**	**464,382**
Cost of revenue	(358,241)	(594,399)	(1,405,423)	(220,542)
Gross profit	**312,270**	**757,797**	**1,553,901**	**243,840**
Selling and marketing expenses	(766,465)	(734,753)	(1,634,733)	(256,525)
Research and development expenses	(351,012)	(329,763)	(619,585)	(97,226)
General and administrative expenses	(253,268)	(296,162)	(690,292)	(108,322)
Total operating expenses	**(1,370,745)**	**(1,360,678)**	**(2,944,610)**	**(462,073)**
Loss from operations	**(1,058,475)**	**(602,881)**	**(1,390,709)**	**(218,233)**
Investment income	25,035	56,087	59,177	9,286
Interest income	28,669	24,751	31,305	4,912
Fair value change of financial instrument	7,132	(68,818)	27,846	4,370
Exchange (losses)/gains	(9,216)	62,663	(16,665)	(2,615)
Others, net	2,675	11,728	(4,391)	(689)
Loss before income tax	**(1,004,180)**	**(516,470)**	**(1,293,437)**	**(202,969)**
Income tax expense	(40)	(1,080)	(5,443)	(854)
Net loss	**(1,004,220)**	**(517,550)**	**(1,298,880)**	**(203,823)**
Net loss per share				
Basic	(22.99)	(18.36)	(6.12)	(0.96)
Diluted	(22.99)	(18.36)	(6.12)	(0.96)
Weighted average shares used in net loss per share				
Basic	62,249,946	65,279,970	240,174,108	240,174,108
Diluted	62,249,946	65,279,970	240,174,108	240,174,108

The following table sets forth our selected consolidated balance sheet data as of the dates indicated.

	As of December 31,		
	2020	2021	
	RMB	RMB	US$
		(in thousands)	
Selected Consolidated Balance Sheet Data:			
Cash and cash equivalents	957,820	2,157,161	338,506
Term deposits	1,092,921	2,815,509	441,815
Short-term investments	1,046,000	2,239,596	351,441
Total current assets	**3,720,166**	**8,334,165**	**1,307,813**
Term deposits	—	159,393	25,012
Intangible assets, net	23,478	68,308	10,719
Total non-current assets	**41,275**	**471,000**	**73,909**
Total assets	**3,761,441**	**8,805,165**	**1,381,722**
Accounts payable and accrued liabilities	501,848	1,026,534	161,086
Salary and welfare payables	231,847	313,676	49,223
Contract liabilities	159,995	239,757	37,623
Total current liabilities	**1,014,568**	**1,897,714**	**297,793**
Net current assets	**2,705,598**	**6,436,451**	**1,010,020**
Total non-current liabilities	**—**	**169,302**	**26,567**
Total liabilities	**1,014,568**	**2,067,016**	**324,360**
Net assets	**2,746,873**	**6,738,149**	**1,057,362**
Total mezzanine equity	**7,891,348**	**—**	**—**
Total shareholders' (deficit)/equity	**(5,144,475)**	**6,738,149**	**1,057,362**
Total liabilities, mezzanine equity and shareholders' (deficit)/equity	**3,761,441**	**8,805,165**	**1,381,722**

The following table sets forth our selected consolidated statements of cash flow data for the years indicated.

	For the Year Ended December 31,			
	2019	2020	2021	
	RMB	RMB	RMB	US$
		(in thousands)		
Selected Consolidated Statements of Cash Flow Data:				
Net cash used in operating activities	(715,522)	(244,421)	(440,234)	(69,084)
Net cash (used in)/generated from investing activities	(2,102,488)	430,113	(3,136,503)	(492,185)
Net cash generated from financing activities	2,997,575	9,286	4,876,247	765,190
Effect of exchange rate changes on cash and cash equivalents	7,491	(137,508)	(100,169)	(15,718)
Net increase in cash and cash equivalents	187,056	57,470	1,199,341	188,203
Cash and cash equivalents at the beginning of the year	713,294	900,350	957,820	150,303
Cash and cash equivalents at the end of the year	900,350	957,820	2,157,161	338,506

Financial Information Relating to Our VIEs

The following tables present the condensed consolidating schedules for our consolidated variable interest entities and other entities for the years and as of the dates indicated.

Selected Condensed Consolidated Statements of Operations and Comprehensive Loss Data

	For the Year Ended December 31, 2021					
	Parent Company	Other Subsidiaries	WFOEs as Primary Beneficiaries	VIEs and Their Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Inter-company revenues[1][4]	—	85,835	1,817,488	196	(1,903,519)	—
Third-party revenues	—	2,187,253	6,039	766,032	—	2,959,324
Inter-company cost[1] [4]	—	(1,487,138)	(85,844)	(330,486)	1,903,468	—
Third-party cost	—	(444,113)	(587,920)	(373,390)	—	(1,405,423)
Gross profit	**—**	**341,837**	**1,149,763**	**62,352**	**(51)**	**1,553,901**
Others, net	—	11,770	(13,075)	(3,137)	51	(4,391)
Share of loss of subsidiaries and VIEs and VIEs' subsidiaries[2]	(1,268,461)	(1,308,592)	(22,746)	—	2,599,799	—
Loss before income tax	**(1,298,880)**	**(1,267,933)**	**(1,308,592)**	**(17,831)**	**2,599,799**	**(1,293,437)**
Income tax expense	—	(2,008)	—	(3,435)	—	(5,443)
Net loss	**(1,298,880)**	**(1,269,941)**	**(1,308,592)**	**(21,266)**	**2,599,799**	**(1,298,880)**
Foreign currency translation adjustments	(143,190)	(65,566)	—	—	65,566	(143,190)
Accretions of convertible redeemable preferred shares to redemption value	(170,585)	—	—	—	—	(170,585)
Comprehensive loss attributable to Zhihu Inc.'s shareholders	**(1,612,655)**	**(1,335,507)**	**(1,308,592)**	**(21,266)**	**2,665,365**	**(1,612,655)**

	For the Year Ended December 31, 2020					
	Parent Company	Other Subsidiaries	WFOE as Primary Beneficiary	VIE and its Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Inter-company revenues[1][4]	—	30,547	991,771	1,113	(1,023,431)	—
Third-party revenues	—	982,821	442	368,933	—	1,352,196
Inter-company cost[1][4]	—	(804,374)	(31,064)	(187,993)	1,023,431	—
Third-party cost	—	(101,203)	(315,598)	(177,598)	—	(594,399)
Gross profit	**—**	**107,791**	**645,551**	**4,455**	**—**	**757,797**
Share of loss of subsidiaries and VIE and VIE's subsidiaries[2]	(507,712)	(524,073)	(13,422)	—	1,045,207	—
Loss before income tax	**(517,550)**	**(513,520)**	**(524,073)**	**(6,534)**	**1,045,207**	**(516,470)**
Income tax expense	—	(31)	—	(1,049)	—	(1,080)
Net loss	**(517,550)**	**(513,551)**	**(524,073)**	**(7,583)**	**1,045,207**	**(517,550)**
Foreign currency translation adjustments	(143,326)	(98,859)	—	—	98,859	(143,326)
Accretions of convertible redeemable preferred shares to redemption value	(680,734)	—	—	—	—	(680,734)
Comprehensive loss attributable to Zhihu Inc.'s shareholders	**(1,341,610)**	**(612,410)**	**(524,073)**	**(7,583)**	**1,144,066**	**(1,341,610)**

Selected Condensed Consolidated Statements of Operations and Comprehensive Loss Data (Continued)

	For the Year Ended December 31, 2019					
	Parent Company	Other Subsidiaries	WFOE as Primary Beneficiary	VIE and its Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Inter-company revenues[1][4]	—	26,744	395,960	438	(423,142)	—
Third-party revenues	—	567,074	1,280	102,157	—	670,511
Inter-company cost[1][4]	—	(364,471)	(26,743)	(31,928)	423,142	—
Third-party cost	—	(59,696)	(226,422)	(72,123)	—	(358,241)
Gross profit	**—**	**169,651**	**144,075**	**(1,456)**	**—**	**312,270**
Share of loss of subsidiaries and VIE and VIE's subsidiaries[2]	(1,000,119)	(1,010,630)	(15,943)	—	2,026,692	—
Loss before income tax	**(1,004,220)**	**(1,004,310)**	**(1,010,630)**	**(11,712)**	**2,026,692**	**(1,004,180)**
Income tax expense	—	(40)	—	—	—	(40)
Net loss	**(1,004,220)**	**(1,004,350)**	**(1,010,630)**	**(11,712)**	**2,026,692**	**(1,004,220)**
Foreign currency translation adjustments	(4,021)	(14,494)	—	—	14,494	(4,021)
Accretions of convertible redeemable preferred shares to redemption value	(426,781)	—	—	—	—	(426,781)
Comprehensive loss attributable to Zhihu Inc.'s shareholders	**(1,435,022)**	**(1,018,844)**	**(1,010,630)**	**(11,712)**	**2,041,186**	**(1,435,022)**

Selected Condensed Consolidated Balance Sheet Data

	As of December 31, 2021					
	Parent Company	Other Subsidiaries	WFOEs as Primary Beneficiaries	VIEs and Their Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Cash and cash equivalents	94,427	478,265	1,525,156	59,313	—	2,157,161
Term deposits	—	2,815,509	—	—	—	2,815,509
Short-term investments	—	941,909	863,182	434,505	—	2,239,596
Trade receivable, net	—	771,225	2,121	58,282	—	831,628
Amounts due from related parties	—	5,818	4,407	7,971	—	18,196
Amounts due from Group companies[3] [4]	12,711	62,646	1,553,054	7,742	(1,636,153)	—
Prepayments and other current assets	42,232	33,149	145,941	50,753	—	272,075
Total current assets	**149,370**	**5,108,521**	**4,093,861**	**618,566**	**(1,636,153)**	**8,334,165**
Property and equipment, net	—	2,700	6,608	557	—	9,865
Intangible assets, net	—	—	2,122	66,186	—	68,308
Goodwill	—	—	—	73,663	—	73,663
Investment in subsidiaries and VIEs and VIEs' subsidiaries[2]	6,666,713	3,260,373	7,708	—	(9,934,794)	—
Long-term investments	—	19,127	—	—	—	19,127
Term deposits	—	159,393	—	—	—	159,393
Right-of-use assets	—	14,504	106,130	5,878	—	126,512
Other non-current assets	—	791	13,098	243	—	14,132
Total non-current assets	**6,666,713**	**3,456,888**	**135,666**	**146,527**	**(9,934,794)**	**471,000**
Total assets	**6,816,083**	**8,565,409**	**4,229,527**	**765,093**	**(11,570,947)**	**8,805,165**
Accounts payable and accrued liabilities	30,828	455,139	420,510	120,057	—	1,026,534
Salary and welfare payables	—	29,956	281,247	2,473	—	313,676
Taxes payable	—	3,359	60,317	2,508	—	66,184
Contract liabilities	—	108,994	343	130,420	—	239,757
Amounts due to related parties	—	—	67,288	16,303	—	83,591
Amounts due to Group companies[3] [4]	54,601	1,139,697	21,444	420,411	(1,636,153)	—
Short term lease liabilities	—	5,927	32,985	1,613	—	40,525
Other current liabilities	—	89,204	15,706	22,537	—	127,447
Total current liabilities	**85,429**	**1,832,276**	**899,840**	**716,322**	**(1,636,153)**	**1,897,714**
Long term lease liabilities	—	9,130	69,314	3,689	—	82,133
Deferred tax liabilities	—	—	—	14,030	—	14,030
Other non-current liabilities	—	64,700	—	8,439	—	73,139
Total non-current liabilities	**—**	**73,830**	**69,314**	**26,158**	**—**	**169,302**
Total liabilities	**85,429**	**1,906,106**	**969,154**	**742,480**	**(1,636,153)**	**2,067,016**
Total Zhihu Inc.'s shareholders' equity	**6,730,654**	**6,651,808**	**3,260,373**	**22,613**	**(9,934,794)**	**6,730,654**
Noncontrolling interests	—	7,495	—	—	—	7,495
Total shareholders' equity	**6,730,654**	**6,659,303**	**3,260,373**	**22,613**	**(9,934,794)**	**6,738,149**
Total liabilities and shareholders' equity	**6,816,083**	**8,565,409**	**4,229,527**	**765,093**	**(11,570,947)**	**8,805,165**

Selected Condensed Consolidated Balance Sheet Data (Continued)

	As of December 31, 2020					
	Parent Company	Other Subsidiaries	WFOE as Primary Beneficiary	VIE and its Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Cash and cash equivalents	6,834	845,198	19,301	86,487	—	957,820
Term deposits	—	1,092,921	—	—	—	1,092,921
Short-term investments	—	207,035	787,486	51,479	—	1,046,000
Trade receivable, net	—	453,039	700	32,307	—	486,046
Amounts due from related parties	—	5,420	360	8,063	—	13,843
Amounts due from Group companies[3] [4]	11,530	74,839	321,610	6,587	(414,566)	—
Prepayments and other current assets	183	23,781	76,220	23,352	—	123,536
Total current assets	**18,547**	**2,702,233**	**1,205,677**	**208,275**	**(414,566)**	**3,720,166**
Property and equipment, net	—	840	7,212	53	—	8,105
Intangible assets, net	—	—	2,430	21,048	—	23,478
Investment/(deficit) in subsidiaries and VIE and VIE's subsidiaries[2]	2,760,778	656,208	(58,307)	—	(3,358,679)	—
Right-of-use assets	—	1,180	2,061	—	—	3,241
Other non-current assets	—	241	6,180	30	—	6,451
Total non-current assets	**2,760,778**	**658,469**	**(40,424)**	**21,131**	**(3,358,679)**	**41,275**
Total assets	**2,779,325**	**3,360,702**	**1,165,253**	**229,406**	**(3,773,245)**	**3,761,441**
Accounts payable and accrued liabilities	5,500	235,618	209,409	51,321	—	501,848
Salary and welfare payables	—	15,538	214,772	1,537	—	231,847
Taxes payable	—	3,107	3,372	587	—	7,066
Contract liabilities	—	82,803	200	76,992	—	159,995
Amounts due to related parties	—	—	41,041	4,942	—	45,983
Amounts due to Group companies[3] [4]	26,952	235,311	30,926	121,377	(414,566)	—
Short term lease liabilities	—	1,013	1,880	—	—	2,893
Other current liabilities	—	40,388	7,445	17,103	—	64,936
Total current liabilities	**32,452**	**613,778**	**509,045**	**273,859**	**(414,566)**	**1,014,568**
Total liabilities	**32,452**	**613,778**	**509,045**	**273,859**	**(414,566)**	**1,014,568**
Total mezzanine equity	**7,891,348**	**—**	**—**	**—**	**—**	**7,891,348**
Total shareholders' (deficit)/equity	**(5,144,475)**	**2,746,924**	**656,208**	**(44,453)**	**(3,358,679)**	**(5,144,475)**
Total liabilities, mezzanine equity and shareholders' (deficit)/equity	**2,779,325**	**3,360,702**	**1,165,253**	**229,406**	**(3,773,245)**	**3,761,441**

Selected Condensed Consolidated Statements of Cash Flow Data

	For the Year Ended December 31, 2021					
	Parent Company	Other Subsidiaries	WFOEs as Primary Beneficiaries	VIEs and Their Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Purchases of goods and services from Group Companies[1]	—	(676,191)	(95,561)	(45,579)	817,331	—
Sales of goods and services to Group Companies[1]	—	115,561	701,770	—	(817,331)	—
Other operating/administrative activities with external parties	(3,182)	1,490,154	(2,359,237)	432,031	—	(440,234)
Net cash provided by/(used in) operating activities	**(3,182)**	**929,524**	**(1,753,028)**	**386,452**	—	**(440,234)**
Purchases of short-term investments	—	(2,532,000)	(3,016,000)	(870,000)	—	(6,418,000)
Proceeds of maturities of short-term investments	—	1,804,592	2,940,000	490,000	—	5,234,592
Purchases of term deposits	(64,596)	(3,719,638)	(1,162,729)	—	—	(4,946,963)
Proceeds from withdrawal of term deposits	64,707	1,788,963	1,164,726	—	—	3,018,396
Investment in subsidiaries and VIEs and VIEs' subsidiaries[2]	(4,695,120)	(3,301,321)	—	—	7,996,441	—
Other investing activities with external parties	(19,380)	(2,571)	31,049	(33,626)	—	(24,528)
Net cash used in investing activities	**(4,714,389)**	**(5,961,975)**	**(42,954)**	**(413,626)**	**7,996,441**	**(3,136,503)**
Proceeds from issuance of Class A ordinary shares upon the completion of IPO, net of issuance cost	4,853,293	—	—	—	—	4,853,293
Investment from Group Companies[2]	—	4,695,120	3,301,321	—	(7,996,441)	—
Other financing activities with external parties	15,544	—	7,410	—	—	22,954
Net cash provided by financing activities	**4,868,837**	**4,695,120**	**3,308,731**	—	**(7,996,441)**	**4,876,247**
Effect of exchange rate changes on cash and cash equivalents	**(63,673)**	**(29,602)**	**(6,894)**	—	—	**(100,169)**
Net increase/(decrease) in cash and cash equivalents	87,593	(366,933)	1,505,855	(27,174)	—	1,199,341
Cash and cash equivalents at beginning of the year	6,834	845,198	19,301	86,487	—	957,820
Cash and cash equivalents at end of the year	**94,427**	**478,265**	**1,525,156**	**59,313**	—	**2,157,161**

Selected Condensed Consolidated Statements of Cash Flow Data (Continued)

	For the Year Ended December 31, 2020					
	Parent Company	Other Subsidiaries	WFOE as Primary Beneficiary	VIE and its Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Purchases of goods and services from Group Companies[1]	—	(965,110)	(35,230)	(159,651)	1,159,991	—
Sales of goods and services to Group Companies[1]	—	35,230	1,124,761	—	(1,159,991)	—
Other operating/administrative activities with external parties	(2,606)	837,392	(1,304,643)	225,436	—	(244,421)
Net cash provided by/(used in) operating activities	**(2,606)**	**(92,488)**	**(215,112)**	**65,785**	**—**	**(244,421)**
Purchases of short-term investments	—	(1,013,104)	(4,965,000)	(175,000)	—	(6,153,104)
Proceeds of maturities of short-term investments	—	1,199,676	5,230,000	165,000	—	6,594,676
Purchases of term deposits	—	(2,328,717)	—	—	—	(2,328,717)
Proceeds from withdrawal of term deposits	356,580	1,962,621	—	—	—	2,319,201
Proceeds from repayments of loans to Group companies	978,735	—	45,000	—	(1,023,735)	—
Loans to Group companies	—	—	(70,000)	—	70,000	—
Investment in subsidiaries and VIE and VIE's subsidiaries[2]	(1,407,173)	(893,805)	—	—	2,300,978	—
Other investing activities with external parties	—	(586)	(1,357)	—	—	(1,943)
Net cash provided by/(used in) investing activities	**(71,858)**	**(1,073,915)**	**238,643**	**(10,000)**	**1,347,243**	**430,113**
Repayments of loans from Group companies	—	(45,000)	(978,735)	—	1,023,735	—
Loans from Group companies	—	70,000	—	—	(70,000)	—
Investment from Group Companies[2]	—	1,407,173	893,805	—	(2,300,978)	—
Other financing activities with external parties	—	739	8,547	—	—	9,286
Net cash provided by/(used in) financing activities	**—**	**1,432,912**	**(76,383)**	**—**	**(1,347,243)**	**9,286**
Effect of exchange rate changes on cash and cash equivalents	**(4,450)**	**(67,996)**	**(65,062)**	**—**	**—**	**(137,508)**
Net increase/(decrease) in cash and cash equivalents	(78,914)	198,513	(117,914)	55,785	—	57,470
Cash and cash equivalents at beginning of the year	85,748	646,685	137,215	30,702	—	900,350
Cash and cash equivalents at end of the year	**6,834**	**845,198**	**19,301**	**86,487**	**—**	**957,820**

Selected Condensed Consolidated Statements of Cash Flow Data (Continued)

	For the Year Ended December 31, 2019					
	Parent Company	Other Subsidiaries	WFOE as Primary Beneficiary	VIE and its Subsidiaries	Eliminations	Consolidated Total
	RMB (in thousands)					
Purchases of goods and services from Group Companies[1]	—	(350,044)	(24,434)	(215,200)	589,678	—
Sales of goods and services to Group Companies[1]	—	24,434	565,244	—	(589,678)	—
Other operating/administrative activities with external parties	(10,722)	275,982	(1,067,001)	86,219	—	(715,522)
Net cash used in operating activities	**(10,722)**	**(49,628)**	**(526,191)**	**(128,981)**	**—**	**(715,522)**
Purchases of short-term investments	—	(1,269,524)	(2,160,000)	(120,000)	—	(3,549,524)
Proceeds of maturities of short-term investments	—	910,000	1,115,000	255,000	—	2,280,000
Purchases of term deposits	(354,395)	(809,313)	—	—	—	(1,163,708)
Proceeds from withdrawal of term deposits	335,705	610	—	—	—	336,315
Investment in subsidiaries and VIE and VIE's subsidiaries[2]	(1,893,991)	(590,691)	—	—	2,484,682	—
Other investing activities with external parties	—	(186)	(5,385)	—	—	(5,571)
Net cash provided by/(used in) investing activities	**(1,912,681)**	**(1,759,104)**	**(1,050,385)**	**135,000**	**2,484,682**	**(2,102,488)**
Proceeds from issuance of convertible redeemable preferred shares, net of issuance cost	1,984,556	—	1,026,516	—	—	3,011,072
Investment from Group Companies[2]	—	1,893,991	590,691	—	(2,484,682)	—
Other financing activities with external parties	6,167	—	(19,664)	—	—	(13,497)
Net cash provided by financing activities	**1,990,723**	**1,893,991**	**1,597,543**	**—**	**(2,484,682)**	**2,997,575**
Effect of exchange rate changes on cash and cash equivalents	**(1,270)**	**10,763**	**(2,002)**	**—**	**—**	**7,491**
Net increase in cash and cash equivalents	66,050	96,022	18,965	6,019	—	187,056
Cash and cash equivalents at beginning of the year	19,698	550,663	118,250	24,683	—	713,294
Cash and cash equivalents at end of the year	**85,748**	**646,685**	**137,215**	**30,702**	**—**	**900,350**

Notes:

(1) Intercompany sales of goods and services were eliminated at the consolidation level.

(2) It represents the elimination of the investment in the subsidiaries and VIEs and VIEs' subsidiaries by Group Companies.

(3) It represents the elimination of intercompany balances among parent, WFOEs as primary beneficiaries, the VIEs and their subsidiaries and other subsidiaries.

(4) For the years ended December 31, 2019, 2020, and 2021, VIEs have incurred RMB31.9 million, RMB186.1 million, and RMB330.5 million in fees related to technical services provided by the WFOEs and WFOEs concurrently recognized same amounts as revenues. Unsettled balance of such transactions was RMB63.8 million and RMB345.9 million as of December 31, 2020 and 2021, respectively.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risks Factors

Summary of Risk Factors

An investment in our ADSs involves significant risks. Below is a summary of material risks that we face, organized under relevant headings. These risks are discussed more fully in "Item 3. Key Information—D. Risk Factors."

Risks Relating to Our Business and Industry

- Our business depends on our ability to offer high-quality user-generated content for our users.
- Our success depends on our ability to attract and maintain an engaged user base.
- If we fail to maintain and strengthen our community culture, brand, and reputation, our ability to expand our user base and enhance content-centric monetization could be impaired, and our business, financial condition, and results of operations could be materially and adversely affected.
- We have incurred net loss and negative operating cash flow in the past, which may continue in the future.
- We may not be able to manage our growth effectively, which may compromise the success of our business.
- We are subject to risks associated with financing activities and liquidity.
- If we fail to retain or attract merchants and brands, or to increase their spending with us, our business, financial condition, and results of operations may be materially and adversely affected.
- We cannot assure you that our new business initiatives and monetization strategies will be successfully implemented.
- We operate in a highly competitive market, and may not be able to compete effectively.
- If we fail to keep up with the technological developments, our business, financial condition, results of operations, and prospects may be materially and adversely affected.
- Our business is subject to complex and evolving laws and regulations regarding cybersecurity and data privacy.
- The PCAOB is currently unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections over our auditor deprives our investors with the benefits of such inspections. Our ADSs will be prohibited from trading in the United States under the HFCAA if the PCAOB is unable to inspect or fully investigate auditors located in China. On December 16, 2021, PCAOB issued the HFCAA Determination Report, according to which our auditor is subject to the determinations that the PCAOB is unable to inspect or investigate completely. Under the current law, delisting and prohibition from over-the-counter trading in the United States could take place in 2024. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment. In addition, the proposed changes to the law would decrease the number of non-inspection years from three years to two, thus reducing the time period before our ADSs may be prohibited from over-the-counter trading or delisted. If the proposed provision is enacted, our ADS could be delisted from the exchange and prohibited from over-the-counter trading in the United States in 2023.

Risks Relating to Our Corporate Structure

- We are a Cayman Islands holding company with no equity ownership in our VIEs and we conduct our operations in China through (i) our PRC subsidiaries and (ii) our VIEs, with which we have maintained contractual arrangements, and their subsidiaries. Investors in our ADSs thus are not purchasing equity interest in our VIEs in China but instead are purchasing equity interest in a Cayman Islands holding company. If the PRC government deems that our contractual arrangements with our VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. Our holding company in the Cayman Islands, our VIEs, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with our VIEs and, consequently, significantly affect the financial performance of our consolidated VIEs and our company as a group.

- Our contractual arrangements may not be as effective in providing operational control as direct ownership and shareholders of our VIEs may fail to perform their obligations under our contractual arrangements.

- Our current corporate structure and business operations may be affected by the Foreign Investment Law.

Risks Relating to Doing Business in China

- Changes in China's economic, political or social conditions, or government policies could materially and adversely affect our business and results of operations.

- The legal system in China embodies uncertainties which could limit the legal protections available to us or impose additional requirements and obligations on our business, and PRC laws, rules, and regulations can evolve quickly, which may materially and adversely affect our business, financial condition, and results of operations.

- The PRC government's oversight over our business operations could result in a material adverse change in our operations and the value of our ADSs.

- If we fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment applicable to our businesses in China, or if we are required to take compliance actions in this regard, our business, financial condition, and results of operations may be materially and adversely affected.

Risks Relating to Our ADSs

- The trading price of our ADSs has been and may be volatile, which could result in substantial losses to investors.

- Our dual-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

Risks Relating to Our Business and Industry

Our business depends on our ability to offer high-quality user-generated content for our users.

Our success depends on our ability to offer high-quality user-generated content, including such content that broadens horizons, provides solutions, and resonates with minds, for our users, which we refer to as "fulfilling" content. The quality of the Zhihu content is fundamental in providing superior user experience and maintaining the attractiveness and value of the Zhihu community. We rely on our experience from past and current operations to inspire, manage, and refine high-quality content, which may not be effective as we do not simply follow user preferences and market trends. If we are unable to expand into new verticals or further develop existing verticals, we may not be able to keep our content offerings comprehensive and up to date. If we fail to maintain the balance between user preferences and our assessment of content quality, the quality of the Zhihu content may be compromised, and the Zhihu community may be less attractive for users. We cannot assure you that our "fulfillness" approach made through our content operations could always effectively yield fulfilling content for users, or that the function and iteration of TopicRank algorithms could interact smoothly with such "fulfillness" approach with our understanding as expected.

We are a UGC-based online content community, where content creators are critical to our continued success. We encourage users to become content creators and provide ongoing support and guidance to them. We cannot assure you that our content creators will continue to create sufficient high-quality content for the Zhihu community, or at all. Any failure to continue to encourage, support, or incentivize content creators may materially and adversely affect the quality of our content offerings.

We offer and curate premium content for our subscribing members through our Yan Selection (盐选) membership program. If our premium content fails to attract users or meet their expectations, we may not be able to maintain or increase the number of our subscribing members, which could materially and adversely affect our business, financial condition, and results of operations.

If we cannot continue to offer high-quality content and enhance our content offerings, the reputation and attractiveness of the Zhihu community could be compromised and we may experience a decline in our user base, which could materially and adversely affect our business, financial condition, and results of operations.

Our success depends on our ability to attract and maintain an engaged user base.

Our success and continued growth are driven by our fast growing, diverse, and highly engaged user base. We have experienced significant user growth since inception. We had 99.6 million average mobile MAUs in the fourth quarter of 2021, representing a 38.1% increase from the fourth quarter of 2020. Our users also exhibit a high level of engagement through active participation and contribution. We attract and retain users with high-quality content, and any decline in the breadth, depth, and quality of our content offerings may adversely affect our ability to maintain and further expand a large and engaged user base.

We also strategically deploy multi-dimensional growth strategies to complement our word-of-mouth referrals, such as brand marketing, targeted campaigns, and pre-installations on mobile devices, to achieve user growth and increase the engagement of new and existing users. These strategies and user growth efforts may turn out to be ineffective, and we may not be able to acquire more users effectively or may experience a decline in our user base. For example, if some of our efforts to increase user traffic are found to be ineffective or even objectionable, such efforts may not justify the associated costs and could be counterproductive if they lead to negative user experience. Furthermore, we benefit from our strong Zhihu brand and reputation as a go-to destination for trustworthy content, which leads to our low user acquisition costs. Damage to our brand and reputation could materially and adversely affect our user growth and increase our user acquisitions costs.

If we fail to maintain and strengthen our community culture, brand, and reputation, our ability to expand our user base and enhance content-centric monetization could be impaired, and our business, financial condition, and results of operations could be materially and adversely affected.

Our community culture, underpinned by sincerity, expertise, and respect (认真、专业、友善), is critical to the attractiveness of the Zhihu community and user experience. However, we cannot assure you that we can maintain our community culture along with our fast growth, as new users may not honor our community governance protocols or fit well into our culture, which could disrupt the good order of the Zhihu community despite our efforts to encourage new users to embrace and honor our community culture, which could in turn damage other users' experience and discourage them from joining, engaging in, or contributing to, the Zhihu community. In addition, frictions among users and objectionable or otherwise valueless content in our community may damage our community culture and adversely affect the emotional and psychological well-being of our users. If we are unable to maintain our sound community culture, the attractiveness of the Zhihu community could be diminished.

In addition, our brand and reputation are critical to our success and may be adversely affected by objectionable content or user activities in the Zhihu community that are perceived as inappropriate, hostile, or illegal, or by information that is perceived as misleading. We may fail to respond expeditiously to such objectionable content or user activity, or otherwise address user concerns. As our community further grows in scale, we may not be able to identify and respond to such content or user activity in a timely manner, which could erode the trust in our brand and damage our reputation. Any government or regulatory inquiry, investigation, or action based on objectionable content or user activity in the Zhihu community, our business practices, or failure to comply with laws and regulations, could damage our brand and reputation regardless of the outcome.

Furthermore, it is important for us to maintain a good balance between monetization and our reputation for providing superior user experience. Our users may find the advertisements or the commercial content in the Zhihu community irrelevant, unhelpful, or intrusive. If we fail to balance user experience as we further enhance monetization, our brand and reputation may be adversely affected.

We have experienced, and may continue to experience, government, regulatory, investor, media, and other third-party scrutiny of our community, content, data privacy, cybersecurity, or other business practice. Actions of our employees, users, or business partners, or other issues, may also harm our brand and reputation. If we fail to promote and maintain the Zhihu brand or preserve our reputation, or if we incur excessive expenses in this effort, our business, financial condition, and results of operations could be materially and adversely affected.

We have incurred net loss and negative operating cash flow in the past, which may continue in the future.

We have incurred net loss and negative operating cash flow in the past. In 2019, 2020, and 2021, we had net loss of RMB1.0 billion, RMB517.6 million, and RMB1.3 billion (US$203.8 million) and negative operating cash flow of RMB715.5 million, RMB244.4 million, and RMB440.2 million (US$69.1 million), respectively. We cannot assure you that we will be able to generate net profit or positive operating cash flow in the future. Our ability to achieve profitability and positive operating cash flow largely depends on our ability to further expand our user base and enhance monetization, but we cannot assure you that we will continue to maintain a sound growth momentum. We may continue to experience net loss and negative operating cash flow in the future due to increasing content and other costs, including those for commercial content, as well as our continued spending in growth and marketing and investments in technology, people, infrastructure, and new initiatives. We incurred in the past, and expect to continue to incur in future periods, share-based compensation expenses, and we expect our costs and operating expenses to continue to increase in absolute amounts as we expand our business, which may result in future losses. In addition, our ability to achieve and sustain profitability is affected by various factors, some of which are beyond our control, such as changes in macroeconomic conditions, regulatory environment, or competitive dynamics in the industry. If we cannot effectively maintain or achieve revenue growth at scale, or if we are unable to achieve profitability or maintain and enhance our liquidity, our business, financial condition, and results of operations may be materially and adversely affected.

We may not be able to manage our growth effectively, which may compromise the success of our business.

We have experienced rapid growth since our inception. The success of our business largely depends on our ability to effectively maintain our user and revenue growth. We attract and retain users with high-quality content, and we also strategically deploy marketing and other user acquisition strategies. Our MAU growth may fluctuate on a quarterly basis, which makes it difficult to predict. For instance, our quarterly average MAUs generally increased on a year-over-year basis during the Track Record Period. Although we expect our user base to continue to experience a growing trend in the near future, we may experience fluctuations of quarterly average MAUs on a quarterly basis, particularly during the fourth and first quarter of a year. For instance, on a year-over-year basis, our quarterly average MAUs in the first quarter of 2022 will continue to experience a growth, but on a quarter-over-quarter basis, it may stay relatively flat or even experience a decrease compared with the quarterly average MAUs in the previous quarter, primarily attributable to the seasonality and the impact of external environment and market condition. For further details, see "Item 4. Information on the Company—B. Business Overview—Our Monetization."

As we further expand our business, content offerings, and products and services, we may face challenges arising from our continued growth in relation to managerial resources, human resources, technological infrastructure, capital resources, and corporate culture. Therefore, we need to continually expand and enhance our technological infrastructure, operating and financial systems, and other controls and procedures. We also need to expand, train, and manage our growing employees while maintaining our corporate culture. We cannot assure you that our current infrastructure, systems, procedures, and internal controls will be adequate to support our expanding operations, that we can maintain our collaborative corporate culture, or that we can continuously manage our relationships with third parties with success. If we fail to manage our expansion effectively, our business, financial condition, results of operations, and prospects may be materially and adversely affected.

As we only have a limited history of operating our business at scale, it is difficult to evaluate our current business and future prospects, including our ability to grow in the future. Continued growth could also challenge our ability to provide consistent experience for new and existing users, content creators, and business partners, develop and improve our operating, financial, legal, and management controls, and enhance our reporting systems and procedures. Our costs and expenses may grow faster than our revenues and may be greater than what we anticipate. Managing our growth will require significant expenditures and appropriate allocation of valuable management resources. If we fail to achieve the necessary level of efficiency in our organization as it grows, our business, financial condition, and results of operations could be adversely affected.

We are subject to risks associated with financing activities and liquidity.

Growing and operating our business may require significant cash investments, capital expenditures, and commitments to respond to business challenges, including developing or enhancing new or existing services and technologies and expanding our infrastructure. If cash on hand and cash generated from operations are not sufficient to meet our cash and liquidity needs, we may need to seek additional capital, potentially through debt or equity financings. We may not be able to raise required cash on terms acceptable to us in a timely manner, or at all. Such financings may be on terms that are dilutive or potentially dilutive to our shareholders, and the prices at which new investors would be willing to purchase our securities or related financial instruments may be lower than the current market price per share of our ADSs. The holders of new securities may also have rights, preferences, or privileges that are senior to those of existing stockholders. In addition, we currently have limited asset to pledge for loans or other debt financing transactions. If new financing sources are required, but are insufficient or unavailable, we may need to modify our growth and operating plans and business strategies based on available funding, if any, which would harm our ability to grow our business.

If we fail to retain or attract merchants and brands, or to increase their spending with us, our business, financial condition, and results of operations may be materially and adversely affected.

Revenue generated from our business side customers, such as advertising and content- commerce solutions revenue from merchants and brands, is crucial to our business. In 2019, 2020, and 2021, advertising revenue and content- commerce solutions revenue accounted for 86.2%, 72.4%, and 72.1% of our total revenue, respectively. We cannot assure you that we will be able to retain existing or attract new merchants and brands effectively. If the marketing budgets of merchants and brands decrease, or if they believe that they can achieve better returns elsewhere, we may experience a decline in their spending with us. Our competitors may provide better advertising or content-commerce solutions. If merchants and brands believe that their spending on online content communities do not generate expected returns, they may also switch to other internet channels such as search engines, news platforms, short video platforms, e-commerce platforms, and social media platforms, or other traditional channels such as television, newspapers, and magazines, and reduce or discontinue business with us. Merchants and brands may find online advertising to be ineffective to market their products and services, and competition may lead to a decrease in our fee rates. In addition, our content-commerce solutions are still at an early stage of development. If the commercial content created through our content-commerce solutions does not appeal to or is not successfully distributed to the targeted audience, this business may not attract sufficient merchants and brands or generate expected revenue. Moreover, merchants and brands may have limited experience in content-commerce solutions, and may not be able to utilize our solutions effectively to achieve expected commercial results or otherwise meet their expectation. Furthermore, some of the merchants and brands may have different budget allocation strategies, which may affect their spending on our online advertising and content-commerce solutions. Failure to retain existing or attract new merchants and brands, to increase their spending with us, or to develop effective online advertising or content-commerce solutions may materially and adversely affect our business, financial condition, and results of operations.

We cannot assure you that our new business initiatives and monetization strategies will be successfully implemented.

Our content-centric monetization strategies are evolving. We derive revenues primarily from online advertising, paid membership, content-commerce solutions, and vocational training. We also continue to identify monetization opportunities and introduce additional products and services, such as e-commerce. We may have limited experience in operating and achieving profitability in new business initiatives. If our new business initiatives or monetization strategies fail, we may not be able to maintain or increase our revenue or recover any associated costs, expenses, and other expenditures. If these new business initiatives fail to attract or retain users or to generate sufficient revenue to justify our investments, our business, financial condition, and results of operations may be materially and adversely affected.

We operate in a highly competitive market, and may not be able to compete effectively.

We operate along other online content communities, including Q&A-inspired online communities. Some of our competitors have a longer operating history, a larger user base, or greater financial resources than we do. We compete to attract, engage, and retain users, content creators, and merchants and brands. Our competitors may compete with us in a variety of ways, including by providing better content, fulfilling evolving user needs, providing content creation utilities, as well as conducting brand promotions and other marketing activities. Except for certain exclusive content on Zhihu, our content creators are generally free to post their content on our competitors' communities or platforms, which may divert user traffic from the Zhihu community. If any of our competitors achieves greater market acceptance than we do or is able to offer more attractive content, our user base and our market share may decrease, which may materially and adversely affect our business, financial condition, and results of operations.

If we fail to keep up with the technological developments, our business, financial condition, results of operations, and prospects may be materially and adversely affected.

The online content communities are rapidly evolving with continued technological advancement, and our success will depend on our ability to keep up with such technological advancement. For example, failure to maintain or improve the effectiveness of our "fulfillness" approach and TopicRank algorithms may impair our comprehension of content and understanding of content creators and thus adversely affect our capability to manage content operations and the user experience; failure of our low-quality content-filtering system and anti-spamming system may adversely affect our ability to ensure a healthy community culture and provide superior user experience; failure to introduce effective productivity tools to content creators may cause a decline in the volume and quality of our content, which would adversely affect the attractiveness of the Zhihu community; and failure to continually refine our question routing system may lead to difficulties in distributing content to relevant users, which could result in reduced user traffic and user base.

We may not be able to execute our technological strategies successfully due to a variety of reasons such as technical difficulties, inaccurate predictions of industry trend and demand, or lack of necessary resources. Failure to keep up with technological advancement may result in less attractive products and services, which may in turn materially and adversely affect our business, financial condition, results of operations, and prospects.

Our business is subject to complex and evolving laws and regulations regarding cybersecurity and data privacy.

We face challenges with respect to the complex and evolving laws and regulations regarding cybersecurity and data privacy. We collect personal data from our users in order to better understand them and their needs, and are subject to cybersecurity and data privacy laws in China and other applicable jurisdictions, including without limitation the PRC Cybersecurity Law, the PRC Data Security Law, and the PRC Personal Information Protection Law, pursuant to which we are required to maintain the confidentiality, integrity, and availability of the information of our users, customers, and suppliers, which is also essential to maintaining their confidence in our services. However, the interpretation and implementation of such laws in China and elsewhere are often subject to uncertainties. Concerns about the collection, use, disclosure, or security of personal information or other privacy-related matters, with or without merit, or failure to comply with the relevant laws and regulations could subject us to penalties, damage our reputation and brand, cause us to lose users, or result in increased operating cost and expenses, any of which could materially and adversely affect our business and results of operations.

In November 2016, the Standing Committee of the National People's Congress promulgated the PRC Cybersecurity Law, which took effect on June 1, 2017 and provides that network operators must meet their cybersecurity obligations and must take technical measures and other necessary measures to protect the safety and stability of their networks. The Cybersecurity Law is still subject to interpretation by the PRC government authorities. Although we only gain access to user information that is necessary for, and relevant to, the services provided, the data we obtain and use may include information that is deemed as "personal information" under the Cybersecurity Law and related data privacy and protection laws and regulations. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Information Security."

In addition, on June 10, 2021, the Standing Committee of the National People's Congress promulgated the PRC Data Security Law, which took effect on September 1, 2021. The PRC Data Security Law provides for a data security review procedure for the data processing activities that affect or may affect national security. It also imposes data security obligations on persons and entities conducting data processing activities and requires data processors to take necessary measures to protect data security. On August 20, 2021, the Standing Committee of the National People's Congress promulgated the PRC Personal Information Protection Law, which took effect on November 1, 2021. Although it is our policy to only access user information that is necessary for, and relevant to, the services provided and we update our privacy policies and practices in accordance with regulatory developments, we may be required to make further adjustments to our data practices as the PRC Personal Information Protection Law is newly promulgated and the interpretation of many of its specific requirements remain to be clarified by the government authorities or is otherwise subject to uncertainties.

While we take measures to comply with all applicable cybersecurity and data privacy laws and regulations, we cannot assure you the effectiveness of the measures undertaken by us and our business partners. The activities of third parties, such as merchants, brands, and other business partners are beyond our control. If any of these third parties violate the PRC Cybersecurity Law and related laws and regulations, or fail to fully comply with the service agreements with us, or if any of our employees fails to comply with our control measures and misuses the information, we may be subject to regulatory actions, disputes and litigations. Any actual or perceived failure to comply with all applicable cybersecurity and data privacy laws and regulations, or any actual or perceived failure of our business partners to do so, or any actual or perceived failure of our employees to comply with our internal control measures, may result in legal proceedings or regulatory actions against us, and could damage our reputation, discourage current and potential users and business partners from using our services and subject us to claims, fines, and damages, which could materially and adversely affect our business and results of operations.

New laws or regulations concerning data protection, or the interpretation and implementation of existing data security and privacy protection laws or regulations may be announced, published for public consultations, issued, or promulgated from time to time. For example, on December 28, 2021, the CAC, the NDRC, the MIIT, and several other PRC government authorities jointly issued the Cybersecurity Review Measures, which took effect on February 15, 2022 and restate and expand the applicable scope of the cybersecurity review as set forth in the Measures for Cybersecurity Review that were promulgated in April 2020 and effective in June 2020. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that intend to purchase internet products and services and internet platform operators engaging in data processing activities that affect or may affect national security must be subject to the cybersecurity review. The Cybersecurity Review Measures further stipulate that if an internet platform operator has personal information of over one million users and pursues a foreign listing, it must be subject to the cybersecurity review. Given that the Cybersecurity Review Measures was recently promulgated, there are substantial uncertainties as to its interpretation, application, and enforcement. On November 14, 2021, the CAC published a draft of the Administrative Regulations for Internet Data Security, or the Draft Data Security Regulations, for public comments. The Draft Data Security Regulations provides that data processors conducting the following activities must apply for cybersecurity review: (i) merger, reorganization, or division of internet platform operators that have acquired a large number of data resources related to national security, economic development, or public interests, which affects or may affect national security; (ii) a foreign listing by a data processor processing personal information of over one million users; (iii) a listing in Hong Kong which affects or may affect national security; or (iv) other data processing activities that affect or may affect national security. There have been no further clarifications from the authorities as of the date of this annual report as to the standards for determining such activities that "affects or may affect national security." The period for which the CAC solicited comments on this draft ended on December 13, 2021, but there is no timetable as to when the draft regulations will be enacted. As such, substantial uncertainties exist with respect to the enactment timetable, final content, interpretation, and implementation of the draft regulations, including the standards for determining activities that "affects or may affect national security."

Furthermore, the PRC government authorities have taken steps to limit the method and manner that the internet companies may apply when using the algorithms. For instance, the CAC, together with eight other government authorities, jointly issued the Guidelines on Strengthening the Comprehensive Regulation of Algorithms for Internet Information Services on September 17, 2021, which provide that daily monitoring of data use, application scenarios, and effects of algorithms must be carried out by the relevant regulators, and relevant regulators should conduct security assessments of algorithms. The guidelines also provide that an algorithm filing system should be established, and classified security management of algorithms should be promoted. In addition, on December 31, 2021, the CAC, the MIIT, the Ministry of Public Security, and the SAMR promulgated the Administrative Provisions on Internet Information Service Algorithm-Based Recommendation, which took effect on March 1, 2022. The Administrative Provisions on Internet Information Service Algorithm-Based Recommendation stipulates that algorithm-based recommendation service providers should inform users of their provision of algorithm-based recommendation services in a conspicuous manner, and publicize the basic principles, purpose intentions, and main operating mechanisms of algorithm-based recommendation services in an appropriate manner. Although our current operations were in compliance in material respects with the algorithm-based recommendation rules, we cannot assure you that our content operations will continue to be in compliance with the algorithm-based recommendation rules in all respects. If our content operations are forced to change in a way to ensure full compliance with the algorithm-based recommendation rules, our ability to enhance the quality of content in the Zhihu community may be adversely affected.

The interpretation and application of these PRC cybersecurity and data privacy laws, regulations, and standards are still evolving. It hence remains uncertain whether the future regulatory changes would impose additional compliance requirements on companies like us. We cannot predict the impact of the Draft Data Security Regulations, if any, at this stage, and we will closely monitor and follow any development in the promulgation process. It is uncertain when the final measures will be issued and take effect, how they will be enacted, interpreted, or implemented, and whether and how they will affect us. If the enacted version of the Draft Data Security Regulations mandates clearance of cybersecurity review and other specific actions on companies like us, we face uncertainties as to whether such clearance can be timely obtained, or at all. If we are not able to comply with the cybersecurity and data privacy requirements in a timely manner, or at all, we may be subject to government enforcement actions and investigations, fines, penalties, suspension of our non-compliant operations, or removal of our app from the relevant application stores, among other penalties, which could materially and adversely affect our business and results of operations. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Information Security."

Complying with evolving laws and regulations could cause us to incur substantial costs or require us to change our business practices in a manner materially increases our operating cost and expenses or affects our growth momentum that can be adverse to our business. In addition, some foreign countries are considering or have passed legislation implementing data protection requirements or requiring local storage and processing of data or similar requirements that could increase the cost and complexity of delivering our services.

Any compromise of the cybersecurity of our online community could materially and adversely affect our business, operations, and reputation.

Our products and services involve the storage and transmission of users' and other customers' information, and security breaches or vulnerabilities affecting our or our vendors' technology, products, and systems could expose us to a risk of loss of this information, litigation, and potential liability. We experience cyber-attacks of varying degrees from time to time, and we have been able to neutralize attacks without significant impact to our operations in the past. We use third-party technology and systems for a variety of reasons, such as data storage and transmission, cloud services, and other functions. Some of such systems have experienced past security breaches, and, although they did not have a material adverse effect on our operating results, we cannot assure you a similar result in the future. Our security measures may also be breached due to employee error, malfeasance, or otherwise. In addition, outside parties may attempt to fraudulently induce employees, users, or other customers to disclose sensitive information in order to gain access to our data or our users' or other customers' data or accounts, or may otherwise obtain access to such data or accounts. Because the techniques used to obtain unauthorized access, disable, or degrade service or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed, we could lose users and other customers, and may be exposed to significant legal and financial risks, including legal claims and regulatory fines and penalties. Any of these actions could materially and adversely affect our business, reputation, and results of operations.

We may be subject to regulatory actions or legal proceedings in the ordinary course of our business. If the outcomes of these regulatory actions or legal proceedings are adverse to us, it could materially and adversely affect our business, financial condition, and results of operations.

We may be subject to regulatory actions, litigation, disputes, or claims of various types brought by relevant regulatory authorities or our competitors, users, content creators, employees, or other third parties against us in the ordinary course of our business. Such regulatory actions, disputes, allegations, complaints, or legal proceedings may damage our reputation, evolve into litigations, or otherwise materially and adversely affect our reputation and business. For example, as a UGC-based online content community, we may not be able to identify and remove all illegal or inappropriate content in response to user or any third party complaints on a timely basis. As such, we have been, and expect to continue to be, involved in disputes or legal proceedings arising out of defamation, invasion of privacy, or other infringement claims. We may become subject to additional types of legal or regulatory proceedings as our business grows and the variety of our services expands. Litigation is expensive, may subject us to the risk of significant damages, requires significant managerial resources and attention, and could materially and adversely affect our business, financial condition, and results of operations. The outcomes of actions we institute may not be successful or favorable to us. Lawsuits against us, whether meritorious or not, may also generate negative publicity that significantly harms our reputation, which may adversely affect our user base.

Advertisements displayed in the Zhihu community may subject us to penalties and other administrative actions.

We monitor the advertisements displayed in the Zhihu community to ensure that they comply with applicable laws and regulations. In addition, where advertisers are required to obtain special government approvals for specific types of advertisements prior to delivering such advertisements on the internet, such as advertisements relating to medical care, pharmaceuticals, medical instruments, agrochemicals, and veterinary pharmaceuticals, we take steps to check or verify that the advertisers have fulfilled the requisite government requirements. Non- compliance with these laws and regulations may subject us to penalties, including imposition of fines, confiscation of our advertising income, order to cease dissemination of the advertisements, and order to publish an announcement correcting the misleading information. Under the circumstances of any serious violation by us, PRC government authorities may force us to terminate our online advertising services or revoke our licenses, and we and responsible persons may incur criminal liability.

We cannot assure you that all content contained in the advertisements displayed in the Zhihu community complies with applicable advertising laws and regulations, especially given the uncertainty in the interpretation of certain relevant PRC laws and regulations. The PRC government may, from time to time, promulgate new advertising laws and regulations in the future to impose further requirements on online advertising services relating to specific industries, such as medical care, pharmaceuticals, health care, and other similar businesses If we are found to be in violation of applicable PRC advertising laws and regulations, we may be subject to penalties and our reputation may be harmed, which may materially and adversely affect our business, financial condition, results of operations, and prospects.

We depend on service providers to provide services that are critical to our business, which exposes us to various risks that may materially and adversely affect our reputation, business, financial condition, and results of operations.

We currently use a large number of third-party service providers to provide services that are critical to our businesses. We have engaged third-party service providers to provide online payment, content distribution, data support, and other services. If any of these service providers breaches the obligations under the contractual arrangements to provide such service to us, or refuses to renew these service agreements on terms acceptable to us, we may not be able to find a suitable alternative provider for the service. Similarly, any failure of or significant quality deterioration in such service provider's service platform or system could materially and adversely affect our user perception and may also result in reduced user visits or cancelation of premium content purchases. If any such risks were to materialize, our reputation, business, financial condition, and results of operations could be materially and adversely affected.

Any significant disruption to our technology infrastructure or our failure to maintain the satisfactory performance, security, and integrity of our technology infrastructure would adversely affect user experience and harm our reputation.

Our ability to provide users with superior experience depends on the continuous and reliable operation of our technology infrastructure, including our IT systems and cloud infrastructure, the failure of which may significantly impair our user experience and decrease the overall attractiveness of our community to both users and advertisers. Disruptions, failures, or unscheduled service interruptions could hurt our reputation and cause our users and advertising clients to choose our competitors' platforms. Our IT systems are vulnerable to damage or interruption as a result of fires, floods, earthquakes, power losses, telecommunications failures, undetected errors in software, computer viruses, hacking, and other attempts to harm our systems. These interruptions may be due to unforeseen events that are beyond our control or the control of our third-party service providers. We have experienced general intermittent interruptions in the past, and may continue to experience similar interruptions in the future despite our continuous efforts to improve our IT systems. Since we host our servers at third-party internet data centers, any natural disaster or unexpected closure of internet data centers operated by third-party providers may result in lengthy service interruptions.

If we experience frequent or persistent service disruptions, whether caused by failures of our own systems or those of third-party service providers, the experience of our users and merchants and brands with us may be negatively affected, which in turn, may materially and adversely affect our reputation. We cannot assure you that we will be successful in minimizing the frequency or duration of service interruptions. As our user base further grows and our users generate more content in our community, including videos which are larger in size, we may be required to expand and adapt our technology infrastructure to reliably store, process, monitor, and distribute the content, the failure of which could also adversely affect our user experience.

Non-compliance on the part of our employees, business partners, or other third parties involved in our business could adversely affect our business.

Our compliance controls, policies, and procedures may not protect us from acts of our employees, business partners, or other third-parties that violate the laws or regulations of the jurisdictions in which we operate, which may adversely affect our business. In addition, our business partners may be subject to regulatory penalties or punishments because of their regulatory compliance failures, which may, directly or indirectly, disrupt our business. We identify irregularities or non-compliance in the business practices of any parties with whom we pursue existing or future cooperation and we cannot assure you that any of these irregularities will be corrected in a prompt and proper manner. The legal liabilities and regulatory actions on our business partners or other third parties involved in our business may affect our business activities and reputation and in turn, our results of operations.

If content in our online community is found to be objectionable or in violation of any PRC laws or regulations, we may be subject to administrative actions or negative publicity.

Content in our community may draw social attention, which may cause controversies. Moreover, the PRC government and regulatory authorities have adopted regulations governing illegal content and information over the internet. Under these regulations, internet content providers are prohibited from posting or displaying over the internet content that, among other things, violates PRC laws and regulations, impairs the national dignity of China or the public interest, or is obscene, superstitious, fraudulent, violent, or defamatory. Internet content providers are also prohibited from displaying content that may be deemed by relevant government authorities as socially destabilizing or leaking state secrets of China. The PRC government and regulatory authorities strengthen the regulation on internet content from time to time. For example, the PRC Cybersecurity Law provides that, among other things, a network operator must keep record of and report any instances of public dissemination of prohibited content and failure to do so may result in revocation of its relevant business license and termination of business. With respect to audio-visual and live streaming content, the Administrative Provisions on Online Audio-Visual Information Services provide that online audio-visual information service providers are the principals responsible for managing the security of information content, and should establish and improve their internal policies on user registration, scrutiny of information publication, and information security management, and that they must report users' production, publication, and dissemination of prohibited content. In addition, the Regulations on Administration of Network Short Video Platforms require that all short videos to be reviewed before being broadcasted. Moreover, the Circular of the State Administration of Press, Publication, Radio, Film and Television on Issues Concerning Strengthening the Administration of Online Live Streaming of Audio-Visual Programs requires online audio-visual live streaming service providers to monitor the living streaming content, and to have an established emergency reaction plan to replace content that violates PRC laws and regulations. The Administrative Regulations on Online Live Streaming Services require online live streaming service providers to establish review platforms for live streaming content. Any failure to comply with the aforementioned regulations may cause negative publicity and subject us to fines or other penalties, which could materially and adversely affect our business, reputation, and results of operations. We have been fined and subject to other penalties imposed by the relevant authorities, including official reprimands, suspension of content dissemination, fines, and removal or suspension of our apps from mobile app distribution channels, due to illegal content in our community. For example, in March 2018, per order by Beijing Cybersecurity Administration, our Zhihu app was temporarily removed from Apple's and Android's app stores for seven days due to dissemination of inappropriate information and mismanagement of the community. In addition, the PRC regulatory authorities may conduct supervisory interviews with internet content providers, including us, regarding content deemed to be inappropriate or objectionable. We have been subject to, and expect to continue to be subject to, supervisory interviews from time to time, which may cause negative publicity and harm our reputation. For more information on relevant laws and regulations, see "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Internet Audio-Visual Program Services," and "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Information Security."

We cannot assure you that we can identify all objectionable or illicit content or timely remove such content due to the large amount of content uploaded by our users every day. Failure to identify and prevent illegal or inappropriate content from being uploaded to our community could, from time to time, subject us to negative publicity or regulatory challenges and actions, such as official reprimands, imposition of fines, limiting the dissemination of content, and suspension or removal from app distribution channels.

Laws, regulations, and rules, government or judicial interpretations, and implementations may change in a manner that could render our current efforts insufficient. If government actions or penalties are brought or pending against us, or if there is publicity that government actions or penalties have been brought or otherwise are pending against us, our reputation and brand image could be harmed, we may lose users and business partners, and our revenue and results of operation may be materially and adversely affected.

We may be subject to risks associated with strategic acquisitions.

When appropriate opportunities arise, we may strategically acquire additional businesses or assets that are complementary to our existing business. The acquisitions and the subsequent integration of new businesses and assets into our own require significant attention from our management and could result in a diversion of resources from our existing business, which in turn could materially and adversely affect on our operations. Acquired assets or businesses may not generate the financial results or realize the synergies as we expect. For example, we may not realize the intended synergies following our acquisitions of related businesses in vocational training space in enriching the content supply for our relevant operations if we fail to effectively integrate their businesses.

In addition, we may not be able to effectively identify appropriate businesses for strategic acquisitions, and the costs of identifying and consummating acquisitions may be significant. Acquisitions could result in the use of substantial amount of cash, potentially dilutive issuances of equity securities, the recognition of goodwill in connection with acquisitions, which may lead to significant impairment charges, amortization expenses for other intangible assets, and exposure to potential unknown liabilities of the acquired business. Our acquisitions involved and may continue to involve performance-based purchase price adjustments, which may result in an increase in the cash or equity-based consideration. We may need approvals and licenses from relevant government authorities for the acquisitions and to comply with any applicable PRC laws and regulations, which could result in increasing delay and costs and may derail our business strategy if we fail to do so. Any failure in relation to the potential strategic acquisitions, or other potential strategic alliances we may enter with various parties from time to time, may materially and adversely affect our business, financial condition, and results of operations.

We work with certain channel partners, which mainly include partners for pre-installations on mobile devices and application marketplaces, for our user growth. If any of our major channel partners becomes less effective or terminates collaboration with us, our user growth, financial condition, results of operations, and prospects could be materially and adversely affected.

We work with certain channel partners for app pre-installations of on mobile devices to support our user growth. Currently, all pre-installations of the Zhihu app are made on Android devices, representing an insignificant portion of the Zhihu app installations on Android devices. Due to the intense competition, these channel partners may raise their charges on us to a point where it becomes cost inefficient for us to increase user growth through them, or they may decide to discontinue their collaboration with us. In addition, if these channel partners raise their charges on us, our margins could be adversely affected. The collaboration also highly depends on the total amount of smartphone shipment and sales of these channel partners, which may fluctuate or slow down compared with prior years. The growth of our user base is impacted by the pre-installations of the Zhihu app on mobile devices. A continued slowdown of new smartphone market in China may adversely affect our user growth.

In addition, we work with application marketplaces, such as Apple's app store and various app stores on Android devices, to drive downloads of the Zhihu app. Currently, a majority of the downloads of the Zhihu app are from the app stores on Android devices. As such, the promotion, distribution, and operation of the Zhihu app are subject to the standard terms and policies for application developers of these application marketplaces, which are subject to the interpretation of, and frequent changes by, these application marketplaces. If these third-party application marketplaces change their terms and conditions in a manner that is detrimental to us, or refuse to distribute the Zhihu app, or if any other major channel with which we seek collaboration becomes less popular or effective, or refuses to collaborate with us in the future on commercially favorable terms, our user growth, financial condition, results of operations, and prospects may be materially and adversely affected.

Many of our products and services utilize open-source software, which may pose particular risks to our proprietary software, products and services in a manner that negatively affects our business.

We use open source software in our products and services and will continue to use open source software in the future. There is a risk that open source software licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to provide or distribute our products or services. Additionally, we may face claims from third parties claiming ownership of, or demanding release of, the open source software or derivative works that we developed using such software. These claims could result in litigation and could require us to make our software source code freely available, purchase a costly license or cease offering the implicated products or services unless and until we can re-engineer them to avoid infringement. This re-engineering process could require significant additional research and development resources, and we may not be able to complete it successfully.

Our success depends on the efforts of our key employees, including our senior management members and other technology talents. If we fail to hire, retain, and motivate our key employees, our business may suffer.

We depend on the continued contributions of our senior management and other key employees, many of whom are difficult to replace. The loss of the services of any of our executive officers or other key employees could harm our business. Competition for qualified talent in China is intense, particularly in the content-related internet and technology industries. Our future success depends on our ability to attract a large number of qualified employees and retain existing key employees. If we are unable to do so, our business and growth may be materially and adversely affected and the trading price of our ADSs could suffer. Our need to significantly increase the number of our qualified employees and retain key employees may cause us to materially increase compensation-related costs, including stock-based compensation.

We have granted, and may continue to grant, options and other types of awards under our share incentive plan, which may result in increased share-based compensation expenses.

We adopted an equity incentive plan in 2012, or the 2012 Plan. For the years ended December 31, 2019, 2020, and 2021, we recorded RMB179.7 million, RMB180.1 million, and RMB541.0 million (US$84.9 million), respectively, in share-based compensation expenses. We also dopted a 2022 share incentive plan, which will become effective upon our proposed listing on the Hong Kong Stock Exchange. Competition for highly skilled personnel is often intense and we may incur significant costs or may not be successful in attracting, integrating, or retaining qualified personnel to fulfill our current or future needs. We believe the granting of share-based awards is of significant importance to our ability to attract and retain key personnel and employees, and we will continue to grant share-based awards in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

Furthermore, perspective candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. Thus, our ability to attract or retain highly skilled employees may be adversely affected by declines in the perceived value of our equity or equity awards. Furthermore, there are no assurances that the number of shares reserved for issuance under the 2012 Plan will be sufficient to grant equity awards adequate to recruit new employees and to compensate existing employees

We are subject to risks associated with cash management activities.

We invest our cash reserved for future deployment in wealth management products for cash management purposes from time to time, which generate investment income. Our investment in wealth management products are associated with various risks. Under PRC law, banks and wealth management agencies are not allowed to contractually promise that the wealth management products that they offer are principal-guaranteed or will yield interest income. In addition, we are subject to risks that any of the banks or wealth management agencies that sell us wealth management products may not perform their contractual obligations, such as in the event of insolvency. As a result, the income generated from and the market value of the wealth management products that we purchase may be adversely affected. The aforementioned risks are subject to market and economic conditions. Government policies affecting wealth management products and our investment policy may also change in ways unfavorable to us. As we may continue to conduct those cash management activities, if any of the above adverse events occur, the products may fail to generate our expected return and we may even incur loss as a result.

We are subject to payment processing risk.

Our subscribing members and business partners pay us using a variety of different online payment methods. We rely on third parties to process such payment. Acceptance and processing of these payment methods are subject to certain rules and regulations and require payment of interchange and other fees. To the extent there are increases in payment processing fees, material changes in the payment ecosystem, such as delays in receiving payments from payment processors and/or changes to rules or regulations concerning payment processing, our revenue, operating expenses and results of operation could be adversely impacted.

We also do not have control over the security measures of our third-party payment service providers, and security breaches of the online payment systems that we use could expose us to litigation and possible liability for failing to secure confidential customer information and could, among other things, damage our reputation and the perceived security of all of the online payment systems that we use. If a well-publicized internet security breach were to occur, users concerned about the security of their online payments may become reluctant to purchase our products and services through payment service providers even if the publicized breach did not involve the payment systems or methods we use. If any of the above were to occur and damage our reputation or the perceived security of the payment systems that we use, we may lose subscribing members as they may be discouraged from purchasing products or services in our community, which may adversely affect our business and results of operations.

We have been, and may continue to be, subject to claims and allegations relating to intellectual property and other causes.

As a leading online content community, it is essential for us to operate our business without infringing or otherwise violating third-party rights, including third-party intellectual property rights. Companies in the internet, technology, and media industries own, and are seeking to obtain, a large number of patents, copyrights, trademarks, know-how, and trade secrets, and they are frequently involved in litigation arising from allegations of infringement, misappropriation, or other violations of intellectual property rights. There may be third-party patents issued or pending that cover significant aspects of our technologies, products, or services, and such third parties may attempt to enforce such rights against us. The content in our community may expose us to claims and allegations relating to intellectual property and other causes. Although we have processes and procedures to screen content that is subject to copyright or other intellectual property right claims, we may not be able to identify, remove, or disable all potentially infringing content that may exist. As a result, third parties may act and file claims against us if they believe that certain Zhihu content violates their copyright or other intellectual property rights.

We are presently involved in and expect to continue to be subject to legal or administrative actions for defamation, negligence, copyright and trademark infringement, unfair competition, breach of service terms, or other purported injuries resulting from the Zhihu content and the nature of our services. Such legal and administrative actions, with or without merits, may be expensive and time-consuming, may result in significant diversion of resources and management attention from our business operations, and may adversely affect our brand and reputation. As of the date of this annual report, we were not subject to any claims or allegations relating to intellectual property that were material to our business operations.

We may not be able to adequately protect our intellectual property rights, and any failure to protect our intellectual property rights from infringement such as unauthorized use of our intellectual properties by third parties and the expenses incurred in protecting our intellectual property rights could materially and adversely affect our business and competitive position.

We rely on a combination of patent, trademark, copyright, domain name, and trade secret protection laws in China and other jurisdictions, as well as confidentiality procedures and other contractual terms to protect our intellectual property rights and brand. Protection of intellectual property rights in China may not be effective in protecting our rights, and, as a result, we may not be able to adequately protect our intellectual property rights, which could materially and adversely affect our business and competitive position. These violations of intellectual property rights, whether or not successfully defended, may also discourage content creation. In addition, any unauthorized use of our intellectual properties by third parties may adversely affect our business and reputation. In particular, our members may abuse their membership privilege or illegally distribute paid content exclusively available to paid members, which could materially and adversely affect our business. Furthermore, we may have difficulty addressing the threats to our business associated with infringement of our copyrighted content, particularly our premium content available under our Yan Selection (盐选) membership program. Our content may be potentially subject to unauthorized copying and illegal digital dissemination without any economic return to us. We adopt a variety of measures to mitigate such risks, including by litigation and through technology measures. However, we cannot assure you that such measures will be effective in protecting our intellectual property rights.

While we typically require our employees, consultants, and contractors who may be involved in the development of intellectual properties to execute agreements assigning such intellectual property rights to us, we may fail to execute such an agreement with each party who in fact develops intellectual properties that we regard as our own. In addition, such agreements may not be self-executing such that the intellectual property rights subject to such agreements may be assigned to us only with additional assignments being executed, and we may fail to obtain such assignments. Furthermore, such agreements may be breached. Accordingly, we may be forced to act against third parties, or defend claims that they may bring against us relating to the ownership of such intellectual property rights.

Managing or preventing unauthorized use of intellectual properties is difficult and expensive, and we may need to resort to litigation or other legal proceedings to enforce or defend intellectual property rights or to determine the enforceability, scope, and validity of our proprietary rights or those of others. Such litigation or other legal proceedings and an adverse determination in any such litigation or other legal proceedings could result in significant costs and diversion of resources and management attention, which could materially and adversely affect our business, financial condition, and results of operations.

If we fail to implement and maintain an effective system of internal controls to remediate our material weakness over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud, and investor confidence and the market price of our ADSs may be materially and adversely affected.

In the course of auditing our consolidated financial statements as of and for the years ended December 31, 2019 and 2020, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting and other control deficiencies. The material weakness identified relates to our lack of sufficient financial reporting and accounting personnel with appropriate understanding and knowledge of U.S. GAAP to handle complex accounting issues and to establish and implement key controls over period end closing and financial reporting to properly prepare and review financial statements and related disclosures in accordance with U.S. GAAP and SEC reporting requirements. Neither we nor our independent registered public accounting firm undertook a comprehensive assessment of our internal control under the Sarbanes-Oxley Act of 2002 for purposes of identifying and reporting any weakness in our internal control over financial reporting. Had we performed a formal assessment of our internal control over financial reporting or had our independent registered public accounting firm performed an audit of our internal control over financial reporting, additional material weaknesses or control deficiencies may have been identified.

We have implemented a number of measures to address the material weakness, including: (i) we have hired additional accounting staff with adequate experience and knowledge with U.S. GAAP and SEC reporting requirements to address complex U.S. GAAP technical accounting issues, strengthen the financial reporting function, and set up an internal control framework to prepare and review the financial statements and related disclosures in accordance with U.S. GAAP and SEC financial reporting requirements; (ii) we have implemented regular U.S. GAAP and SEC financial reporting training programs for the accounting and financial personnel to equip them with sufficient knowledge and practical experience of preparing financial statements under U.S. GAAP and SEC reporting requirements; and (iii) we have developed and implement a comprehensive set of period-end financial reporting policies and procedures, especially for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are in compliance with U.S. GAAP and SEC reporting requirements.

Although the aforementioned remediation measures were implemented, these measures will require validation and testing of the operating effectiveness of internal controls over a sustained period of financial reporting cycles. As a result, the previously identified material weakness still existed as of December 31, 2021.

We are a public company in the United States and are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, and the rules and regulations of the New York Stock Exchange. Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, requires that we include a report from management on our internal control over financial reporting in our annual report on Form 20-F beginning with our annual report for the fiscal year ending December 31, 2022. In addition, once we cease to be an "emerging growth company" as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. Our management may conclude that our internal control over financial reporting is not effective. Moreover, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may issue a report that is qualified if it is not satisfied with our internal controls or the level at which our controls are documented, designed, operated, or reviewed, or if it interprets the relevant requirements differently from us. In addition, as we have become a public company, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation.

During the course of documenting and testing our internal control procedures, in order to satisfy the requirements of Section 404, we may identify other or more material weaknesses or deficiencies in our internal control over financial reporting. In addition, if we fail to maintain the adequacy of our internal control over financial reporting, as these standards are modified, supplemented, or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404. Generally speaking, if we fail to achieve and maintain an effective internal control environment, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations and lead to a decline in the trading price of our ADSs. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations, and civil or criminal liabilities.

The PCAOB is currently unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections over our auditor deprives our investors with the benefits of such inspections.

Our auditor, the independent registered public accounting firm that issues the audit report included elsewhere in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with the applicable professional standards. Since our auditor is located in China, a jurisdiction where the PCAOB has been unable to conduct inspections without the approval of the PRC authorities, our auditor is not currently inspected by the PCAOB. As a result, we and investors in our ADSs are deprived of the benefits of such PCAOB inspections. The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to auditors outside of China that are subject to the PCAOB inspections, which could cause investors and potential investors in our ADSs to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

Our ADSs will be prohibited from trading in the United States under the HFCAA in 2024 if the PCAOB is unable to inspect or fully investigate auditors located in China, or in 2023 if proposed changes to the law are enacted. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

The HFCAA, which was signed into law on December 18, 2020, states that if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspection by the PCAOB for three consecutive years beginning in 2021, the SEC should prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB is unable to inspect or investigate completely registered public accounting firms headquartered in Mainland China and Hong Kong. The PCAOB identified our auditor as one of the registered public accounting firms that the PCAOB is unable to inspect or investigate completely. In March 2022, the SEC issued its first list of issuers identified under the HFCAA indicating that the companies on the list are now formally subject to the delisting provisions if they remain on the list for three consecutive years. After we file this annual report on Form 20-F, we may be identified by the SEC under the HFCAA as having filed audit reports issued by a registered public accounting firm that cannot be inspected or investigated completely by the PCAOB.

Whether the PCAOB will be able to conduct inspections of our auditor before the issuance of our financial statements on the annual report on Form 20-F for the year ending December 31, 2023, which is due by April 30, 2024, or at all, is subject to substantial uncertainty and depends on a number of factors out of our and our auditor's control. If our shares and ADSs are prohibited from trading in the United States, there is no certainty that we will be able to list our securities on a non-U.S. exchange or that a market for our securities will develop outside of the United States. Such a prohibition would substantially impair your ability to sell or purchase our ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our ADSs. In addition, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would materially and adversely affect our business, financial condition, and prospects.

On June 22, 2021, the U.S. Senate passed a bill, which would reduce the number of consecutive non-inspection years required for triggering the prohibitions under the HFCAA from three years to two. On February 4, 2022, the U.S. House of Representatives passed a bill, which contained, among other things, an identical provision. If this provision is enacted into law and the number of consecutive non-inspection years required for triggering the prohibitions under the HFCAA is reduced from three years to two, then our shares and ADSs could be prohibited from trading in the United States in 2023.

It may be difficult for overseas regulators to conduct investigations or collect evidence within China.

Shareholder claims or regulatory investigation that are initiated in or otherwise relevant to jurisdictions outside China are difficult to pursue as a matter of law or practicality in China. For example, in China, there are legal and other requirements for providing information needed for regulatory investigations or litigation initiated outside China. Although the authorities in China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, such cooperation with the securities regulatory authorities in the United States or other jurisdictions may not be efficient in the absence of mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigations or evidence collection activities within the PRC territory, and without the consent by the Chinese securities regulatory authorities and the other competent governmental agencies, no entity or individual may provide documents or materials related to securities business to any foreign party. While detailed interpretation of or implementation rules under the article have yet to be promulgated, the inability for an overseas securities regulator to directly conduct investigations or evidence collection activities within China and the potential obstacles for information provision may further increase difficulties faced by you in protecting your interests. See also "—Risks Relating to Our Shares and ADSs—You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law" for risks associated with investing in us as a Cayman Islands company.

A severe or prolonged downturn in the Chinese or global economy could materially and adversely affect our business, financial condition, and results of operations.

The COVID-19 pandemic may continue to have a severe and prolonged negative impact on the Chinese and the global economy, including potential reductions in the advertising budget of our merchants and brands, which may affect our revenue and financial performance generally. Even before the outbreak of COVID-19, the global macroeconomic environment was facing challenges. The growth rate of the Chinese economy has gradually slowed in recent years and the trend may continue. There is considerable uncertainty over the long-term effects of the monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. Unrest, terrorist threats and the potential for war in the Middle East and elsewhere may increase market volatility across the globe. In particular, there is significant uncertainty about the future relationship between the United States and China with respect to trade policies, treaties, government regulations and tariffs. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. Any severe or prolonged slowdown in the global or PRC economy may materially and adversely affect our business, financial condition, and results of operations. In addition, continued turbulence in the international markets may adversely affect our ability to access capital markets to meet liquidity needs.

We face uncertainties associated with real name registration requirements.

In accordance with the Administrative Provisions on Mobile Internet Applications Information Services and Administrative Provisions on Account Names of Internet Users, among other relevant laws and regulations, we impose real name registration requirements for all users in our Zhihu community when they sign up. When registering a Zhihu account, an individual user is required to submit her or his mobile phone number or alternative identification information, and a non-individual user is required to submit information of its business license and basic information of its designated person in charge of the account (including her or his real name, mobile phone number, identification card number, and other relevant identification documents). However, the relevant laws and regulations on real name registration, data privacy, and the internet information services in general are evolving, the interpretation and implementation of which are subject to uncertainties. See "Item 4. Information on the Company—B. Business Overview—Regulations —Regulations Relating to Mobile Internet Applications Information Services" and "Regulations—Regulations Relating to Internet Privacy" for more details. Any further rulemaking or intensifying regulations with respect to real name registration may increase our compliance burden and may adversely affect our user growth. In addition, we cannot assure you that all the information provided by our users will be accurate and free from fraudulent behaviors, which may adversely affect our compliance with the relevant provisions on real name registration requirements. Furthermore, in light of the evolving industry and technological advancements, we face challenges in developing our capabilities to meet the evolving demand for providing more meaningful identity means for our users while staying in compliance with the regulatory developments on real name registration and user privacy protection. Any failure in compliance may materially and adversely affect our business and prospects.

Our insurance coverage may not be adequate, which could expose us to costs and business disruption.

We do not have any business liability or disruption insurance coverage for our operations in China. Any material or extended business disruption may result in substantial costs and expenses and the diversion of our resources, financial, managerial, or otherwise, which could have an adverse effect on our business, financial condition, results of operations, and prospects.

We face risks related to natural disasters, health epidemics, and other outbreaks, which could significantly disrupt our operations.

Our business could be adversely affected by the effects of epidemics. The COVID-19 pandemic has caused, and may continue to cause, us and certain of our business partners to implement adjustment of work arrangements enabling employees to work from home and collaborate remotely. We have taken measures to reduce the negative impact of the COVID-19 pandemic, including upgrading our telecommuting system or monitoring our employees' health on a daily basis. However, we might still be subject to related impact, such as travel restrictions and delay or cancelation in our offline events, which may adversely affect our service quality. As a result, our business, financial condition, and results of operations have been adversely affected. For example, we experienced negative impact on our advertising revenue in the first half of 2020. Although our advertising revenue increased by 22.7% to RMB293.0 million in the first half of 2020 from RMB238.8 million in the first half of 2019, a higher growth rate might have been achieved if the COVID-19 pandemic had not taken place. We may continue to experience negative impact due to the COVID-19 pandemic. The extent to which the COVID-19 pandemic affects our operations and financial performance will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions to contain the coronavirus, such as the availability of effective vaccines or cure, among others. Relaxation of restrictions on economic and social activities may also lead to new cases which may lead to re-imposed restrictions. We cannot assure you that the COVID-19 pandemic can be eliminated or contained in the near future, or at all, or a similar pandemic will not occur again. Another wave of COVID-19 or a similar pandemic could materially and adversely affect our business, financial condition, and results of operations.

In recent years, there have been other breakouts of epidemics in China and globally. Our operations could be disrupted if one of our employees is suspected of having H1N1 flu, avian flu, or another epidemic, since it could require our employees to be quarantined and/or our offices to be disinfected. In addition, our results of operations could be adversely affected to the extent that the outbreak harms the PRC economy in general.

We are also vulnerable to natural disasters, extreme weather (including as a result of the global climate change) and other calamities. Although we have servers that are hosted in an offsite location, our backup system does not capture data on a real-time basis and we may be unable to recover certain data in the event of a server failure. We cannot assure you that any backup systems will be adequate to protect us from the effects of fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks, or similar events. Any of the foregoing events may give rise to server interruptions, breakdowns, system failures, technology platform failures or internet failures, which could cause the loss or corruption of data or malfunctions of software or hardware as well as adversely affect our ability to provide services.

Any future outbreak of contagious diseases, extreme unexpected bad weather or natural disasters (including as a result of the climate change) would adversely affect our offline events. If there is a recurrence of an outbreak of certain contagious diseases or natural disasters, the offline events operated by us may be canceled or delayed. Government advices regarding, or restrictions on, holding offline events, in the event of an outbreak of any contagious disease or occurrence of natural disasters may materially and adversely affect our business and operating results.

The current tensions in international trade and rising geopolitical tensions involving China may adversely impact our business, financial condition, and results of operations.

Our business could be materially and adversely affected by the tensions in international trade such as the one between the United States and China in recent years. Changes to international trade policies could adversely affect the global economic conditions. In addition, geopolitical tensions between the United States and China have escalated due to, among other things, trade disputes, the COVID-19 outbreak, sanctions imposed by the U.S. Department of Treasury, and the executive orders issued by the U.S. government that may prohibit transactions with certain selected Chinese companies as well as their products and services. Rising political tensions could reduce levels of trades, investments, technological exchanges, and other economic activities between the two major economies. Such tensions involving China, and any escalation thereof, may negatively affect trading and business environments, which may, in turn, adversely impacting our business, financial condition, and results of operations.

We are subject to credit risk for trade receivables.

We may face credit risks in relation to our trade receivables, which primarily consist of outstanding amounts receivable from third parties. Our trade receivables increased from RMB245.9 million as of December 31, 2019 to RMB486.0 million as of December 31, 2020 and further increased to RMB831.6 million (US$130.5 million) as of December 31, 2021, primarily due to the increases in revenues relating to our advertising services due from third parties. Collection of such trade receivables may be difficult and liquidity condition of these third parties may deteriorate. If a large number of third parties with outstanding trade receivables were to become insolvent or otherwise become unable or refuse to make payments in a timely manner, or at all, we would have to make provisions for these trade receivables, which could adversely affect our financial condition and results of operations. We recorded provision of allowance for expected credit losses of trade receivables in the amount of RMB11.9 million, RMB27.9 million, and RMB58.6 million (US$9.2 million) as of December 31, 2019, 2020, and 2021, respectively.

Impairment loss charged against our intangible assets or goodwill could materially and adversely affect us.

Our results of operations could be adversely affected by impairment losses for our intangible assets and goodwill. As of December 31, 2019, 2020, and 2021, we had net intangible assets of RMB34.9 million, RMB23.5 million, and RMB68.3 million (US$10.7 million), respectively, which primarily consist of license, content, brand name, and others. Intangible assets acquired in a business combination were recognized initially at fair value at the date of acquisition and are subsequently carried at cost less accumulated amortization and impairment losses (if any). Our goodwill amounted to RMB73.7 million (US$11.6 million) as of December 31, 2021 in connection with our acquisitions and there was no impairment recorded in 2021. We will first perform a qualitative assessment on impairment of goodwill when necessary and perform a quantitative impairment test if it is more likely than not that the fair value of a reporting unit is less than the carrying amount. Any significant impairment loss charged against our intangible assets or goodwill could materially and adversely affect our business, financial condition, and results of operations.

Proceedings instituted by the SEC against PRC-based "big four" accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Exchange Act.

Starting in 2011 the PRC-based "big four" accounting firms, including our independent registered public accounting firm, were affected by a conflict between U.S. and PRC law. Specifically, for certain U.S.-listed companies operating and audited in China, the SEC and the PCAOB sought to obtain from the Chinese firms access to their audit work papers and related documents. The firms were, however, advised and directed that under Chinese law, they could not respond directly to the U.S. regulators on those requests, and that requests by foreign regulators for access to such papers in China had to be channeled through the CSRC.

In late 2012, this impasse led the SEC to commence administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the Chinese accounting firms, including our independent registered public accounting firm. A first instance trial of the proceedings in July 2013 in the SEC's internal administrative court resulted in an adverse judgment against the firms. The administrative law judge proposed penalties on the firms including a temporary suspension of their right to practice before the SEC, although that proposed penalty did not take effect pending review by the Commissioners of the SEC. On February 6, 2015, before a review by the Commissioner had taken place, the firms reached a settlement with the SEC. Under the settlement, the SEC accepts that future requests by the SEC for the production of documents will normally be made to the CSRC. The firms will receive matching Section 106 requests, and are required to abide by a detailed set of procedures with respect to such requests, which in substance require them to facilitate production via the CSRC. If they fail to meet specified criteria, the SEC retains authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure. Remedies for any future non-compliance could include, as appropriate, an automatic six-month bar on a single firm's performance of certain audit work, commencement of a new proceeding against a firm, or, in extreme cases, the resumption of the current proceeding against all four firms. If additional remedial measures are imposed on the PRC-based "big four" accounting firms, including our independent registered public accounting firm, in administrative proceedings brought by the SEC alleging the firms' failure to meet specific criteria set by the SEC with respect to requests for the production of documents, we could be unable to timely file future financial statements in compliance with the requirements of the Exchange Act.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in China, which could result in financial statements being determined not to be in compliance with the requirements of the Exchange Act, including possible delisting. Moreover, any negative news about any such future proceedings against these audit firms may cause investor uncertainty regarding China-based, U.S.-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm was denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined to be not in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to the delisting of the ADSs or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of the ADSs in the United States.

We use certain key operating metrics to evaluate the performance of our business, and real or perceived inaccuracies in such metrics may harm our reputation and adversely affect our business.

We use certain key operating metrics, such as MAUs, number of monthly subscribing members, and paying ratio, among others, to evaluate the performance of our business. Our operating metrics may differ from estimates published by third parties or from similarly titled metrics used by other companies due to differences in methodology and assumptions. We calculate these operating metrics using internal company data. There are inherent challenges in measuring such key metrics and internal data, and measurement of such metrics and data may be susceptible to delays and technical errors. For example, for purposes of calculating mobile MAUs, we treat each device as a separate user even though it is possible that there may be circumstances where some users may use more than one mobile devices to access our platform or where multiple users may share one mobile device to access our platform. As such, we are unable to quantify such potential duplication. If we discover material inaccuracies in the operating metrics we use, or if they are perceived to be inaccurate, our reputation may be harmed and the evaluation methods and results of our business may be impaired, which could adversely affect our business. If investors make investment decisions based on the operating metrics we disclose that are inaccurate, we may also face potential lawsuits or disputes.

The fair value measurement of our short-term investments inherently involves a certain degree of uncertainty, and such investments may incur fair value losses.

From time to time, we purchase short-term investments, which mainly include investments in financial instruments with a variable interest rate indexed to performance of underlying assets, mostly held in state-owned or reputable financial institutions in China and reputable international financial institutions outside of China. Our short-term investments amounted to RMB1.5 billion, RMB1.0 billion, and RMB2.2 billion (US$0.4 billion) as of December 31, 2019, 2020, and 2021, respectively. The methodologies that we use to assess the fair value of the short-term investments involve a significant degree of management judgment and are inherently uncertain. In addition, although we prudently manage our short-term investments portfolio and their respective term to ensure that they are readily convertible into cash from time to time in the event that there is a need for liquidity, we are exposed to credit risks in relation to our short-term investments, which may adversely affect the net changes in their fair value. We cannot assure you that market conditions will create fair value gains on our short-term investments or we will not incur any fair value losses on our investments in the future. If we incur such fair value losses, our liquidity, financial condition, results of operations, and prospects may be adversely affected.

We are subject to risks associated with contract liabilities.

We had contract liabilities of RMB107.1 million, RMB160.0 million, and RMB239.8 million (US$37.6 million) as of December 31, 2019, 2020, and 2021, respectively, which primarily relate to the payments received for advertising services, paid membership services, and content-commerce solutions in advance of performance under the contracts in the ordinary course of business. If for any reason we were to become unable to fulfill a large amount of these contract liabilities, we would have to refund the payments we received, which could materially and adversely affect our financial condition and liquidity position, and our brand image, reputation, and relationship with our customers and merchants and brands might be damaged.

Risks Relating to Our Corporate Structure

If the PRC government finds that the agreements that establish the structure for operating our business do not comply with PRC laws and regulations, or if these regulations or their interpretations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.

Foreign ownership of internet-based businesses, such as provision of commercial internet information services, internet culture activities, and internet audio-visual program services, is subject to restrictions under current PRC laws and regulations. For example, foreign investors are not allowed to own more than 50% of the equity interests in a value-added telecommunication enterprise (except for e-commerce, domestic multi-party communications, storage-forwarding, and call centers) and the main foreign investor of such enterprise must have experience in providing value-added telecommunications services overseas and maintain a good track record in accordance with the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition) issued on December 27, 2021 and effective on January 1, 2022, by the NDRC and the PRC Ministry of Commerce, and other applicable laws and regulations. In addition, foreign investors are prohibited from investing in enterprises engaging in internet culture activities except for music and providing internet audio-visual program services.

We are an exempted company with limited liability incorporated under the laws of the Cayman Islands. To comply with PRC laws and regulations, we conduct our internet-related business in China through our VIEs incorporated in China. Our VIEs are owned by PRC citizens or entities with whom we have contractual arrangements. The contractual arrangements give us effective control over our VIEs and enable us to obtain substantially all of the economic benefits arising from our VIEs as well as consolidate the financial results of our VIEs in our results of operations. Although the structure we have adopted is consistent with longstanding industry practice, and is commonly adopted by comparable companies in China, the PRC government may not agree that these arrangements comply with PRC licensing, registration or other regulatory requirements, with existing policies or with requirements or policies that may be adopted in the future. Our VIEs and their subsidiaries hold the licenses, approvals, and key assets that are essential for the operations of certain of our businesses.

In the opinion of Han Kun Law Offices, our PRC legal counsel, (i) as of the date of this annual report, the ownership structures of our WFOEs and our VIEs in China do not violate any applicable and explicit PRC law, regulations, or rules currently in effect, and (ii) subject to the risks as disclosed in "—Risks Relating to Our Corporate Structure" and "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with Our VIEs and Their Shareholders," each agreement of the contractual arrangements between our WFOEs, our VIEs, and their equity holders governed by PRC law is valid, binding, and enforceable in accordance with their terms and applicable PRC laws and regulations currently in effect and does not violate any applicable and explicit PRC law currently in effect. There may be, however, uncertainties regarding the interpretation and application of current or future PRC laws and regulations. The relevant PRC regulatory authorities have broad discretion in determining whether a particular contractual structure violates PRC laws and regulations. Thus, we cannot assure you that the PRC government will not ultimately take a view contrary to the opinion of Han Kun Law Offices. If we are found in violation of any PRC laws or regulations or if the contractual arrangements among our WFOEs, our VIEs, and their equity holders are determined as illegal or invalid by any PRC court, arbitral tribunal or regulatory authorities, the relevant governmental authorities would have broad discretion in dealing with such violation, including, without limitation:

- revoke the agreements constituting the contractual arrangements;
- revoke our business and operating licenses;
- require us to discontinue or restrict operations;
- restrict our right to collect revenue;
- restrict or prohibit our use of the proceeds from our offshore offerings to fund our business and operations in China;
- shut down all or part of our websites, apps, or services;
- levy fines on us or confiscate the proceeds that they deem to have been obtained through non-compliant operations;

- require us to restructure the operations in such a way as to compel us to establish a new enterprise, re-apply for the necessary licenses or relocate our businesses, staff, and assets;
- impose additional conditions or requirements with which we may not be able to comply; or
- take other regulatory or enforcement actions that could be harmful to our business.

Consequently, if the PRC government determines that the contractual arrangements constituting part of our VIE structure do not comply with PRC regulations, or if these regulations change or are interpreted differently in the future, our ADSs may decline in value or become worthless if we are unable to assert our contractual control rights over the assets of our VIEs. Our holding company in the Cayman Islands, our VIEs, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with our VIEs and, consequently, significantly affect the financial performance of our VIEs and our company as a group.

Furthermore, any of the equity interest in our VIEs under the name of any record equity holder of our VIEs may be put under court custody in connection with litigation, arbitration, or other judicial or dispute resolution proceedings against that record holder. We cannot be certain that the equity interest will be disposed of in accordance with the contractual arrangements. In addition, new PRC laws, rules, and regulations may be introduced to impose additional requirements that may impose additional challenges to our corporate structure and contractual arrangements. The occurrence of any of these events or the imposition of any of these penalties may materially and adversely affect our ability to conduct internet-related businesses. In addition, if the imposition of any of these penalties causes us to be unable to direct the activities of our VIEs and their subsidiaries or the right to receive their economic benefits, we would no longer be able to consolidate our VIEs into our financial statements, which could materially and adversely affect our financial condition and results of operations.

Our contractual arrangements may not be as effective in providing operational control as direct ownership and shareholders of our VIEs may fail to perform their obligations under our contractual arrangements.

Since PRC laws limit foreign equity ownership in certain businesses in China, such as provision of commercial internet information services, internet culture activities, and internet audio-visual program services, we operate such businesses in China through our VIEs, in which we have no ownership interest and rely on a series of contractual arrangements with our VIEs and their respective equity holders to control and operate these businesses. Our revenue and cash flow from our such businesses are attributed to our VIEs. The contractual arrangements may not be as effective as direct ownership in providing us with control over our VIEs. Direct ownership would allow us, for example, to exercise our rights directly or indirectly as a shareholder to effect changes in the boards of directors of our VIEs, which, in turn, could effect changes, subject to any applicable fiduciary obligations at the management level. However, under the contractual arrangements, as a legal matter, if our VIEs or their equity holders fail to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend significant resources to enforce those arrangements and resort to litigation or arbitration and rely on legal remedies under PRC laws. These remedies may include seeking specific performance or injunctive relief and claiming damages, any of which may not be effective. In the event we are unable to enforce these contractual arrangements or we experience significant delays or other obstacles in the process of enforcing these contractual arrangements, we may not be able to exert effective control over our VIEs and may lose control over the assets owned by our VIEs. As a result, we may be unable to consolidate our VIEs in our consolidated financial statements, which could materially and adversely affect our financial condition and results of operations.

Our current corporate structure and business operations may be affected by the Foreign Investment Law.

On March 15, 2019, the National People's Congress approved the Foreign Investment Law, which took effect on January 1, 2020. Along with the Foreign Investment Law, the Implementing Rules of Foreign Investment Law promulgated by the State Council and the Interpretation of the Supreme People's Court on Several Issues Concerning the Application of the Foreign Investment Law promulgated by the Supreme People's Court became effective on January 1, 2020. Since the Foreign Investment Law and its current implementation and interpretation rules are relatively new, uncertainties still exist in relation to their further application and improvement. According to the Foreign Investment Law, "foreign investment" refers to investment activities carried out directly or indirectly by foreign natural persons, enterprises, or other organizations, or "foreign investors," including the following: (i) foreign investors establishing foreign-invested enterprises in China alone or collectively with other investors; (ii) foreign investors acquiring shares, equities, properties, or other similar rights of Chinese domestic enterprises; (iii) foreign investors investing in new projects in China alone or collectively with other investors; and (iv) foreign investors investing through other ways prescribed by laws, regulations, or guidelines of the State Council. The Foreign Investment Law and its current implementation and interpretation rules do not explicitly classify whether variable interest entities that are controlled through contractual arrangements would be deemed as foreign-invested enterprises if they are ultimately "controlled" by foreign investors. However, it has a catch-all provision under the definition of "foreign investment" that includes investments made by foreign investors in China through other means as provided by laws, administrative regulations, or the State Council. Therefore, it still leaves leeway for future laws, administrative regulations, or provisions of the State Council to provide for contractual arrangements as a form of foreign investment. Therefore, there can be no assurance that our control over our VIEs through contractual arrangements will not be deemed as a foreign investment in the future.

The Foreign Investment Law grants national treatment to foreign-invested entities, except for those foreign-invested entities that operate in industries specified as either "restricted" or "prohibited" from foreign investment in a "negative list." The Foreign Investment Law provides that foreign-invested entities operating in "restricted" industries will require market entry clearance and other approvals from relevant PRC government authorities. Pursuant to the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition), the value-added telecommunication services we provide fall within the restricted category. If our control over our VIEs through contractual arrangements is deemed as a foreign investment in the future, and any business of our VIEs is "restricted" or "prohibited" from foreign investment under the "negative list" effective at the time, we may be deemed to be in violation of the Foreign Investment Law, the contractual arrangements that allow us to have control over our VIEs may be deemed as invalid and illegal, and we may be required to unwind such contractual arrangements and/or restructure our business operations, any of which may materially and adversely affect our business operations.

Furthermore, if future laws, administrative regulations or provisions mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure and business operations.

We may lose the ability to use, or otherwise benefit from, the licenses, approvals, and assets held by our VIEs, which could, render us unable to conduct some or all of our business operations and constrain our growth.

Our VIEs and their subsidiaries hold licenses, approvals, and assets that are necessary for the operation of certain of our businesses, as well as equity interests in a series of our portfolio companies, to which foreign investments are typically restricted or prohibited under applicable PRC law. The contractual arrangements contain terms that specifically obligate the equity holders of our VIEs to ensure the valid existence of our VIEs and restrict the disposition of material assets or any equity interest of our VIEs. However, in the event the equity holders of our VIEs breach the terms of these contractual arrangements and voluntarily liquidate any of our VIEs, or any of our VIEs declares bankruptcy and all or part of its assets become subject to liens or rights of third-party creditors, or are otherwise disposed of without our consent, we may be unable to operate some or all of our businesses or otherwise benefit from the assets held by our VIEs, which could materially and adversely affect our business, financial condition, and results of operations. Furthermore, if any of our VIEs undergoes a voluntary or involuntary liquidation proceeding, its equity holders or unrelated third-party creditors may claim rights to some or all of the assets of the VIEs, thereby hindering our ability to operate our business as well as constrain our growth.

The contractual arrangements with our VIEs may be subject to scrutiny by the tax authorities in China. Any adjustment of related party transaction pricing could lead to additional taxes, and therefore substantially reduce our consolidated profit and the value of your investment.

The tax regime in China is rapidly evolving, and there is significant uncertainty for taxpayers in China as PRC tax laws may be interpreted in different ways. The PRC tax authorities may assert that we or our subsidiaries or our VIEs owe and/or are required to pay additional taxes on previous or future revenue or income. In particular, under applicable PRC laws, rules, and regulations, arrangements and transactions among related parties, such as the contractual arrangements with our VIEs, may be subject to audit or challenge by the PRC tax authorities. If the PRC tax authorities determine that any contractual arrangements were not entered into on an arm's length basis and therefore constitute a favorable transfer pricing, the PRC tax liabilities of the relevant subsidiaries and/or our VIEs could be increased, which could increase our overall tax liabilities. In addition, the PRC tax authorities may impose late payment interest. Our profit may be materially reduced if our tax liabilities increase.

The equity holders, directors, and executive officers of our VIEs, as well as our employees who execute other strategic initiatives may have potential conflicts of interest with our company.

The PRC laws provide that a director and an executive officer owes a fiduciary duty to the company he or she directs or manages. The directors and executive officers of our VIEs must act in good faith and in the best interests of our VIEs and must not use their respective positions for personal gain. On the other hand, under Cayman Islands law, our directors (i) owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly, and a duty to act in what they consider in good faith to be in our best interests, (ii) must also exercise their powers only for a proper purpose, and (iii) owe to our company a duty to act with skill and care. We control our VIEs through contractual arrangements, and the business and operations of our VIEs are closely integrated with the business and operations of our subsidiaries. Nonetheless, conflicts of interests for these persons may arise due to dual roles both as directors and executive officers of our VIEs and as directors or employees of our company, and may also arise due to dual roles both as equity holders of our VIEs and as directors or employees of our company.

We cannot assure you that these persons will always act in the best interests of our company should any conflicts of interest arise, or that any conflicts of interest will always be resolved in our favor. We also cannot assure you that these persons will ensure that our VIEs will not breach the existing contractual arrangements. If we cannot resolve any such conflicts of interest or any related disputes, we would have to rely on legal proceedings to resolve these disputes and/or take enforcement action under the contractual arrangements. There is substantial uncertainty as to the outcome of any such legal proceedings. See "—We may lose the ability to use, or otherwise benefit from, the licenses, approvals, and assets held by our VIEs, which could, render us unable to conduct some or all of our business operations and constrain our growth" above.

If we exercise the option to acquire equity ownership of our VIEs, the ownership transfer may subject us to certain limitations and substantial costs.

Pursuant to the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition), foreign investors are not allowed to hold more than 50% of the equity interests of any company providing value-added telecommunications services, including ICP services, with the exception of e-commerce, domestic multi-party communications, storage- forwarding, and call centers businesses. Pursuant to the Regulations for the Administration of Foreign-Invested Telecommunications Enterprises promulgated by the State Council, the main foreign investor who invests in a value-added telecommunications business in China must possess prior experience in operating value-added telecommunications businesses and a proven track record of business operations overseas, or the Qualification Requirements. Currently none of the applicable PRC laws, regulations, or rules provides clear guidance or interpretation on the Qualification Requirements. We face the risk of not satisfying the requirement promptly. In addition, the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition) prohibits foreign investors from investing in internet audio-visual program services and internet culture activities with the exception of music. If the PRC laws were revised to allow foreign investors to invest in enterprises with internet audio-visual program or internet culture activities businesses in China, or to hold more than 50% of the equity interests of value-added telecommunications enterprises, due to the necessity of ICP services for internet audio-visual program services and internet cultural activities, we might be unable to unwind the contractual arrangements before we were able to comply with the Qualification Requirements, or if we attempt to unwind the contractual arrangements before we are able to comply with the Qualification Requirements we may be ineligible to operate our value-added telecommunication, internet audio-visual program, and internet culture activities businesses and may be forced to suspend their operations, which could materially and adversely affect our business, financial condition, and results of operations.

Pursuant to the contractual arrangements, we have the exclusive right to purchase all or any part of the equity interests in our VIEs from the respective equity holders for a nominal price, unless the relevant government authorities or PRC laws request otherwise, in which case the purchase price shall be adjusted to a minimum amount that meets the relevant requirements. Subject to relevant laws and regulations, the respective equity holders shall return any amount of purchase price they have received to the respective WFOE. If such a return of purchase price takes place, the competent tax authority may require the WFOE to pay enterprise income tax for ownership transfer income, in which case the amount of tax could be substantial.

Risks Relating to Doing Business in China

Changes in China's economic, political or social conditions, or government policies could materially and adversely affect our business and results of operations.

Substantially all of our operations are conducted in China. Accordingly, our financial condition, results of operations, and prospects are influenced by economic, political, and legal developments in China. China's economy differs from the economies of other countries in many respects, including with respect to the government role, level of development, growth rate, control of foreign exchange, and allocation of state-owned or controlled resources. The PRC government exercises significant control over China's economic growth through strategically allocating resources, controlling the payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies. While the PRC economy has experienced significant growth over the past decades, that growth has been uneven across different regions and between economic sectors and may not continue. The growth of the Chinese economy may not continue at a rate experienced in the past, and the impact of COVID-19 on the Chinese economy may continue. Any prolonged slowdown in the Chinese economy may reduce the demand for our services and materially and adversely affect our business and results of operations. Furthermore, any adverse changes in the policies of the PRC government or in the laws and regulations in China could have a material adverse effect on China's overall economic growth. Such developments could adversely affect our business and results of operations, lead to reduction in demand for our products and services and adversely affect our competitive position.

The legal system in China embodies uncertainties which could limit the legal protections available to us or impose additional requirements and obligations on our business, and PRC laws, rules, and regulations can evolve quickly, which may materially and adversely affect our business, financial condition, and results of operations.

We conduct our business primarily through our PRC subsidiaries and our VIEs and their subsidiaries in China. Our operations in China are governed by PRC laws and regulations. The legal system in China is a civil law system based on statutes. Unlike common law systems, it is a system in which decided legal cases may be of reference value but have less precedential value. The legal system in China evolves rapidly, and the interpretations of laws, regulations, and rules may contain uncertainties. These uncertainties could limit the legal protections available to us. In addition, we cannot predict the effect of future developments in the PRC legal system, particularly with regard to internet-related industries, including the promulgation of new laws, changes to existing laws or the interpretation or enforcement thereof, or the preemption of local regulations by national laws. Such unpredictability towards our contractual, property (including intellectual property) and procedural rights could adversely affect our business and impede our ability to continue our operations. Furthermore, any litigation may be protracted and result in substantial costs and diversion of resources and management attention.

In addition, new laws and regulations may be enacted from time to time, and PRC laws, rules, and regulations can evolve quickly. Substantial uncertainties exist regarding the interpretation and implementation of current and any future PRC laws and regulations applicable to our businesses. In particular, the PRC government authorities may continue to promulgate new laws, regulations, rules and guidelines governing internet companies with respect to a wide range of issues, such as competition and antitrust, privacy and data protection, intellectual property, and other matters, which may result in additional obligations imposed on us. Compliance with these laws, regulations, rules, guidelines, and implementations may be costly, and any incompliance or associated inquiries, investigations, and other governmental actions may divert significant management time and attention and our financial resources, bring negative publicity, subject us to liabilities or administrative penalties, or materially and adversely affect our business, financial condition, and results of operations.

The PRC government's oversight over our business operations could result in a material adverse change in our operations and the value of our ADSs.

We conduct our business primarily through our PRC subsidiaries and our VIEs and their subsidiaries in China. Our operations in China are governed by PRC laws and regulations. The PRC government has significant oversight over the operation of our business, and it may influence our operations, which could result in a material adverse change in our operation and the value of our ADSs.

The PRC government authorities may strengthen oversight over offerings that are conducted overseas and/or foreign investment in overseas-listed China-based issuers like us. Such actions taken by the PRC government authorities may intervene our operations at any time, which are beyond our control. For instance, on July 6, 2021, the relevant PRC governments promulgated the Opinions on Lawfully and Strictly Cracking Down Illegal Securities Activities, among which it is mentioned that the administration and supervision of overseas-listed China-based companies will be strengthened, and the special provisions of the State Council on overseas issuance and listing of shares by such companies will be revised, clarifying the responsibilities of relevant domestic industry regulatory authorities and other regulatory authorities. However, the Opinions on Lawfully and Strictly Cracking Down Illegal Securities Activities were only issued recently, leaving uncertainties regarding the interpretation and implementation of these opinions. There is no assurance that any new rules or regulations promulgated in the future will impose additional requirements on us. On December 24, 2021, the CSRC released the Provisions of the State Council on the Administration of Overseas Securities Offering and Listing by Domestic Companies (Draft for Comments), or the Draft Overseas Listing Provisions, which require that, among other things, domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedure and report relevant information with the CSRC. If a domestic company fails to complete the filing procedure or conceals any material fact or falsifies any major content in its filing documents, such domestic company will be subject to administrative penalties such as warnings, fines, suspension of relevant business or operations, and revocation of licenses and permits, and its controlling shareholders, actual controllers, directors, supervisors, and senior executives may also be subject to administrative penalties such as warnings and fines. On the same day, the CSRC also issued the Administrative Measures for the Filing of Overseas Securities Offering and Listing by Domestic Companies (Draft for comments), or the Draft Filing Measures, which, among others, set forth the standards in determination of an indirect overseas listing by a domestic company, the responsible filing persons, and the procedures for the filing. The period for which the CSRC solicits comments on the Draft Overseas Listing Provisions and the Draft Filing Measures ended on January 23, 2022. As the Draft Overseas Listing Provisions and the Draft Filing Measures are not adopted as of the date of this annual report, and it remains unclear whether the formal version adopted in the future will have any further material changes, there remains substantial uncertainties as to how these drafts will be enacted, interpreted, or implemented and how they will affect our operations and our future overseas offerings.

In addition, on November 14, 2021, the CAC published the Draft Data Security Regulations for public comments, according to which, among others, a foreign listing of data processors processing personal information of over one million users and listing in Hong Kong by data processors that affects or may affect national security must apply for cybersecurity review. In addition, on December 28, 2021, the CAC and several other PRC government authorities jointly issued the Cybersecurity Review Measures, according to which, among others, if an internet platform operator has personal information of over one million users and pursues a foreign listing, it must be subject to the cybersecurity review. The Cybersecurity Review Measures took effect on February 15, 2022. As the Draft Data Security Regulations have not been adopted and it remains unclear whether the formal version adopted in the future will have any further material changes, it is uncertain how the draft regulations will be enacted, interpreted or implemented and how they will affect us.

It remains uncertain how PRC government authorities will regulate overseas listing in general and whether we are required to complete filing or obtain any specific regulatory approvals from the CSRC, CAC, or any other PRC government authorities for our overseas offerings. If the CSRC, CAC, or other government authorities later promulgate new rules or explanations requiring that we obtain their approvals or complete filing procedures with them for our future overseas offerings, we may be unable to obtain such approvals or complete such filing procedures in a timely manner, or at all, and such approvals or filings may be rescinded even if obtained or completed. Any such circumstance could significantly limit or completely hinder our ability to continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless. In addition, implementation of industry-wide regulations directly targeting our operations could cause the value of our securities to significantly decline. Therefore, investors of our company and our business face potential uncertainty from actions taken by the PRC government affecting our business.

If we fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment applicable to our businesses in China, or if we are required to take compliance actions in this regard, our business, financial condition, and results of operations may be materially and adversely affected.

The internet and mobile internet industries in China are highly regulated. Our VIEs and their subsidiaries are required to obtain and maintain applicable licenses and approvals from different regulatory authorities in order to provide their current services. Under the current PRC regulatory regime, a number of regulatory authorities, including but not limited to the NRTA, the PRC Ministry of Culture and Tourism, the MIIT, the PRC State Council Information Office, and the CAC, jointly regulate all major aspects of the internet industry, including the mobile internet and online content communities. Operators must obtain various government approvals and licenses for relevant business.

We have obtained, among others, Value-Added Telecommunication Business Operation Licenses, or ICP Licenses, for the provision of commercial internet information services, Internet Cultural Business Licenses, or ICB Licenses, for commercial internet culture activities, Radio and Television Program Production and Operation Licenses, an Internet Medicine Information Services Qualification for non-commercial internet medicine information services, and Publication Operation Licenses through our VIEs and their subsidiaries.

We offer content in various formats, including certain video and live streaming content on our Zhihu app and website operated by Zhizhe Tianxia, and we plan to continue to offer video and live streaming content in our community. As such content offerings are considered as online transmission of audio and video programs, we may be required to obtain a Permit for Transmission of Audio-Visual Programs via Information Network, or an Audio-Visual Permit. Zhizhe Tianxia, the operator of our Zhihu app and website, does not hold the Audio-Visual Permit, but has registered with the National Internet Audio-Visual Platforms Information Registration and Management System instead. Based on our consultation with the NRTA, Zhizhe Tianxia is able to carry on its provision of video and live streaming contents on our Zhihu app and website upon registration with the National Internet Audio-Visual Platforms Information Registration and Management System. However, if the PRC regulatory authorities deem that we are not in compliance with the relevant legal requirements of holding a valid Audio-Visual Permit to cover the video and live streaming content in our community, we may be subject to fines, penalties, and/or orders to cease offering video and live streaming content, shut down website or revoke licenses, which may materially and adversely affect our business, financial condition, and results of operations. In addition, certain information posted on our Zhihu app and website by our users may be viewed as news information and the transmission of such information may be deemed as internet news information services, thereby requiring us to obtain an internet news information license. We cannot assure you that we will be able to obtain all the licenses necessary for our business operations if and when we are required to do so. Moreover, as we are and will continue to further develop and expand our business, we may need to obtain additional qualifications, permits, approvals, or licenses. We may also be required to obtain additional licenses or approvals if the PRC government adopts more stringent policies or regulations for our business. There is no assurance that we will be able to obtain such additional qualifications, permits, approvals, or licenses in a timely manner, or at all.

These licenses are essential to the operation of our business and are generally subject to regular government review or renewal. We cannot assure you that we will be able to maintain our existing licenses or permits necessary for our business operations, update information (such as website, apps, or legal representative) on file, or renew any of them when their current term expires.

In addition, considerable uncertainties exist in relation to the interpretation and implementation of existing and future laws and regulations governing our business activities. We could be found not in compliance with any future laws and regulations or of the laws and regulations currently in effect due to changes in the relevant authorities' interpretation of these laws and regulations. If we fail to complete, obtain, or maintain any of the required licenses or approvals or make the necessary filings, we may be subject to various penalties, such as confiscation of unlawful gains, the imposition of fines, revocation of licenses, and the discontinuation or restriction of our operations. Any such penalties or changes in policies, regulations, or enforcement by government authorities, may disrupt our operations and materially and adversely affect our business, financial condition, and results of operations.

We may be classified as a "PRC resident enterprise" for PRC enterprise income tax purposes, which could result in unfavorable tax consequences to us and our shareholders and materially and adversely affect our results of operations and the value of your investment.

Under the PRC Enterprise Income Tax Law, or the EIT Law, which became effective on January 1, 2008, an enterprise established outside China whose "de facto management body" is located in China is considered a "PRC resident enterprise" and will generally be subject to the uniform 25% enterprise income tax rate, or the EIT rate, on its global income. Under the implementation rules of the EIT Law, "de facto management body" is defined as the organization body that effectively exercises full management and control over such aspects as the business operations, personnel, accounting and properties of the enterprise.

On April 22, 2009, the STA released the Notice of the State Taxation Administration Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as People's Republic of China Tax Resident Enterprises on the Basis of De Facto Management Bodies, or STA Circular 82, that sets out the standards and procedures for determining whether the "de facto management body" of an enterprise registered outside of China and controlled by PRC enterprises or PRC enterprise groups is located within China. Further to STA Circular 82, on July 27, 2011, STA issued the Administrative Measures for Enterprise Income Tax of Chinese-Controlled Offshore Incorporated Resident Enterprises (Trial), or STA Bulletin 45, to provide more guidance on the implementation of STA Circular 82; the bulletin became effective on September 1, 2011 and revised on June 15, 2018. STA Bulletin 45 clarified certain issues in the areas of resident status determination, post-determination administration and competent tax authorities' procedures.

Under STA Circular 82, a foreign enterprise controlled by a PRC enterprise or PRC enterprise group is considered a PRC resident enterprise if all of the following apply: (i) the senior management and core management departments in charge of daily operations are located mainly within China; (ii) financial and human resources decisions are subject to determination or approval by persons or bodies in China; (iii) major assets, accounting books, company seals, and minutes and files of board and shareholders' meetings are located or kept within China; and (iv) at least half of the enterprise's directors with voting rights or senior management reside within China. STA Bulletin 45 specifies that when provided with a copy of Chinese tax resident determination certificate from a resident Chinese controlled offshore incorporated enterprise, the payer should not withhold 10% income tax when paying the Chinese-sourced dividends, interest, royalties, etc. to the PRC controlled offshore incorporated enterprise.

Although STA Circular 82 and STA Bulletin 45 explicitly provide that the above standards only apply to enterprises which are registered outside of China and controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreign individuals, STA Circular 82 and STA Bulletin 45 may reflect STA's criteria for how the "de facto management body" test should be applied in determining the tax residence of foreign enterprises in general, regardless of whether they are controlled by PRC enterprises or PRC enterprise groups or by PRC or foreign individuals. If the PRC tax authorities determine that we were treated as a PRC resident enterprise for PRC enterprise income tax purposes, the 25% PRC enterprise income tax on our global taxable income could materially and adversely affect our ability to satisfy any cash requirements we may have.

China's M&A Rules and certain other regulations establish complex procedures for certain acquisitions of PRC companies by foreign investors, which could make it more difficult for us to pursue growth through acquisitions in China.

A number of PRC laws and regulations have established procedures and requirements that could make merger and acquisition activities in China by foreign investors more time consuming and complex. In addition to the PRC Anti-monopoly Law, these include the M&A Rules, adopted by six PRC regulatory agencies in 2006 and amended in 2009, and the Rules of the Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the Security Review Rules, promulgated in 2011. These laws and regulations impose requirements in some instances that the Ministry of Commerce be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise. In addition, the Anti-Monopoly Law requires that the anti-monopoly enforcement agency be notified in advance of any concentration of undertaking if certain thresholds are triggered. On February 7, 2021, the Anti-Monopoly Committee of the State Council published the Anti-Monopoly Guidelines for the Internet Platform Economy Sector, which stipulates that any concentration of undertakings involving variable interest entities is subject to anti-monopoly review. Moreover, the Security Review Rules specify that mergers and acquisitions by foreign investors that raise "national defense and security" concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise "national security" concerns are subject to strict review by the Ministry of Commerce, and prohibit any attempt to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. On December 19, 2020, the NDRC and the Ministry of Commerce jointly issued the Measures for the Security Review for Foreign Investment, which took effect on January 18, 2021. These measures set forth the provisions concerning the security review mechanism on foreign investment, including, among others, the types of investments subject to review, and the review scopes and procedures. In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the relevant regulations to complete such transactions could be time consuming, and any required approval processes, including approval from the Ministry of Commerce and other PRC government authorities, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

If the chops of our PRC subsidiaries, our VIEs, and their subsidiaries are not kept safely, are stolen, or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised.

Under PRC laws, a company chop or seal serves as the legal representation of the company towards third parties. The company chop of a legally registered company in China shall be registered with the local Public Security Bureau. In addition to this mandatory company chop, companies may have several other chops which can be used for specific purposes. The chops of our PRC subsidiaries, our VIEs, and their subsidiaries are generally held securely by personnel designated or approved by us in accordance with our internal control procedures. To the extent those chops are not kept safe, are stolen, or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised and those corporate entities may be bound to abide by the terms of any documents so chopped, even if they were chopped by an individual who lacked the requisite power and authority to do so.

The heightened scrutiny over acquisition transactions by PRC tax authorities may have a negative impact on our business operations, our acquisition or restructuring strategy or the value of your investment in us.

On February 3, 2015, STA issued the Bulletin of the State Taxation Administration on Issues of Enterprise Income Tax on Indirect Transfers of Assets by Non-PRC Resident Enterprises, or STA Bulletin 7, which provided comprehensive guidelines relating to, and also heightened the PRC tax authorities' scrutiny over, indirect transfers by a non-resident enterprise of PRC taxable assets. Under STA Bulletin 7, the PRC tax authorities are entitled to reclassify the nature of an indirect transfer of PRC taxable assets, when a non-resident enterprise transfers PRC taxable assets indirectly by disposing of equity interests in an overseas holding company directly or indirectly holding such PRC taxable assets, by disregarding the existence of such overseas holding company and considering the transaction to be a direct transfer of PRC taxable assets and without any other reasonable commercial purpose. However, STA Bulletin 7 contains certain exemptions, including (i) where a non-resident enterprise derives income from the indirect transfer of PRC taxable assets by acquiring and selling shares of an overseas listed company which holds such PRC taxable assets on a public market; and (ii) where there is an indirect transfer of PRC taxable assets, but if the non-resident enterprise had directly held and disposed of such PRC taxable assets, the income from the transfer would have been exempted from PRC enterprise income tax under an applicable tax treaty or arrangement.

On October 17, 2017, STA issued the Announcement of the State Taxation Administration on Issues Concerning the Withholding of Enterprise Income Tax at Source on Non-PRC Resident Enterprises, or STA Circular 37, which became effective on December 1, 2017 and abolish certain provisions in STA Bulletin 7. STA Circular 37 further clarifies the practice and procedure of withholding non-resident enterprise income tax. Pursuant to STA Circular 37, where the party responsible to deduct such income tax did not or was unable to make such deduction, or the non-resident enterprise receiving such income failed to declare and pay the taxes that should have been deducted to the relevant tax authority, both parties may be subject to penalties. The taxable gain is calculated as balance of the total income from such transfer net of the net book value of equity interest.

We may conduct acquisitions involving changes in corporate structures. We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing obligations on us or require us to provide assistance for the investigation of PRC tax authorities with respect thereto. Any PRC tax imposed on a transfer of our ADSs or any adjustment of such gains would cause us to incur additional costs and may have a negative impact on the value of your investment in us.

Discontinuation of preferential tax treatments we currently enjoy or other unfavorable changes in tax law could result in additional compliance obligations and costs.

A number of our PRC operating entities enjoy various types of preferential tax treatment pursuant to the prevailing PRC tax laws. Our PRC subsidiaries and VIEs may, if they meet the relevant requirements, qualify for certain preferential tax treatment.

For a qualified "high and new technology enterprise," the applicable enterprise income tax rate is 15%. For a qualified "small low-profit enterprise," the applicable enterprise income tax rate is 20%. Zhizhe Sihai was certified as a "high and new technology enterprise," and some of our PRC subsidiaries were qualified as "small low-profit enterprises" under the relevant PRC laws and regulations. If these entities fail to maintain their respective qualification under the relevant PRC laws and regulations, their applicable enterprise income tax rates may increase to up to 25%, which could materially and adversely affect our financial condition.

PRC regulations of loans and direct investment by offshore holding companies to PRC entities may delay or prevent us from using the proceeds of our offshore financing to make loans or additional capital contributions to our PRC subsidiaries, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

We may transfer funds to our PRC subsidiaries or finance our PRC subsidiaries by means of shareholders' loans or capital contributions. Any loans to our PRC subsidiaries, which are foreign-invested enterprises, cannot exceed a statutory limit, and shall be filed with the SAFE or its local counterparts. Furthermore, any capital contributions we make to our PRC subsidiaries shall be registered with the PRC State Administration for Market Regulation or its local counterparts, and filed with the Ministry of Commerce or its local counterparts.

On March 30, 2015, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Reforming the Administration Measures on Conversion of Foreign Exchange Registered Capital of Foreign-invested Enterprises, or SAFE Circular 19. SAFE Circular 19, however, allows foreign invested enterprises in China to use their registered capital settled in RMB converted from foreign currencies to make equity investments, but the registered capital of a foreign invested company settled in RMB converted from foreign currencies remains not allowed to be used, among other things, for investment in the security markets, or offering entrustment loans, unless otherwise regulated by other laws and regulations. On June 9, 2016, SAFE further issued the Circular of the State Administration of Foreign Exchange on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular 16, which, among other things, amended certain provisions of Circular 19. According to SAFE Circular 19 and SAFE Circular 16, the flow and use of the RMB capital converted from foreign currency-denominated registered capital of a foreign invested company is regulated such that Renminbi capital may not be used for purposes beyond its business scope or to provide loans to non-affiliates unless otherwise permitted under its business scope. On October 23, 2019, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Further Promoting the Facilitation of Cross-Border Trade and Investment, or SAFE Circular 28, which removes the restrictions on domestic equity investments by non-investment foreign-invested enterprises with their capital funds, provided that certain conditions are met. If our VIEs require financial support from us or our PRC subsidiaries in the future, and we find it necessary to use foreign currency-denominated capital to provide such financial support, our ability to fund our VIEs' operations will be subject to statutory limits and restrictions, including those described above. The applicable foreign exchange circulars and rules may limit our ability to transfer the net proceeds from our overseas offerings to our PRC subsidiaries and convert the net proceeds into Renminbi, which may adversely affect our business, financial condition, and results of operations.

We may be subject to penalties, including restriction on our ability to inject capital into our PRC subsidiaries and our PRC subsidiaries' ability to distribute profits to us, if our resident shareholders or beneficial owners in China fail to comply with relevant PRC foreign exchange regulations.

SAFE issued the Notice of the State Administration of Foreign Exchange on Relevant Issues Concerning Foreign Exchange Administration for Domestic Residents to Engage in Overseas Investment, Financing and Round-Trip Investment via Special Purpose Vehicles, or SAFE Circular 37, effective on July 4, 2014. The SAFE Circular 37 requires PRC residents, including PRC individuals and institutions, to register with SAFE or its local branches in connection with their direct establishment or indirect control of an offshore special purpose vehicle, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests. In addition, such PRC residents must update their foreign exchange registrations with SAFE or its local branches when the offshore special purpose vehicle in which such residents directly hold the equity interests undergoes material events relating to any change of basic information (including change of such PRC individual shareholder, name and operation term), increases or decreases in investment amount, share transfers or exchanges, or mergers or divisions.

If any shareholder holding interest in an offshore special purpose vehicle, who is a PRC resident as determined by SAFE Circular 37, fails to fulfill the required foreign exchange registration with the local SAFE branches, the PRC subsidiaries of that offshore special purpose vehicle may be prohibited from distributing their profits and dividends to their offshore parent company or from carrying out other subsequent cross-border foreign exchange activities, and the offshore special purpose vehicle may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration described above could result in liability under PRC laws for evasion of applicable foreign exchange restrictions.

On February 13, 2015, SAFE promulgated a Notice of the State Administration of Foreign Exchange on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, effective on June 1, 2015. In accordance with SAFE Notice 13, entities and individuals are required to apply for foreign exchange registration of foreign direct investment and overseas direct investment, including those required under SAFE Circular 37, with qualified banks, instead of SAFE or its local branches. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration.

We may not be fully informed of the identities of all our shareholders or beneficial owners who are PRC residents, and therefore, we may not be able to identify all our shareholders or beneficial owners who are PRC residents to ensure their compliance with SAFE Circular 37 or other related rules. In addition, we cannot provide any assurance that all of our shareholders and beneficial owners who are PRC residents will comply with our request to make, obtain or update any applicable registrations or comply with other requirements required by the SAFE Circular 37 or other related rules in a timely manner. Even if our shareholders and beneficial owners who are PRC residents comply with such request, we cannot provide any assurance that they will successfully obtain or update any registration required by the SAFE Circular 37 or other related rules in a timely manner due to many factors, including those beyond our and their control. If any of our shareholders who is a PRC resident as determined by SAFE Circular 37 fails to fulfill the required foreign exchange registration, they could be subject to fines or legal penalties, our PRC subsidiaries may be prohibited from distributing their profits and dividends to us or from carrying out other subsequent cross-border foreign exchange activities, and we may be restricted in our ability to contribute additional capital to our PRC subsidiaries, which may adversely affect our business.

We principally rely on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have. Any limitation on the ability of our PRC subsidiaries to make payments to us could materially and adversely affect our ability to conduct our business or financial condition.

We are a holding company, and we principally rely on dividends and other distributions on equity that may be paid by our PRC subsidiaries and remittances from our VIEs, for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to the holders of our ordinary shares and service any debt we may incur. If any of our PRC subsidiaries, our VIEs, or their subsidiaries incur debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us.

Under PRC laws and regulations, wholly foreign-owned enterprises in China, may pay dividends only out of their accumulated after-tax profits as determined in accordance with PRC accounting standards and regulations. In addition, a wholly foreign-owned enterprise is required to set aside at least 10% of its after-tax profits each year, after making up previous years' accumulated losses, if any, to fund certain statutory reserve funds, until the aggregate amount of such a fund reaches 50% of its registered capital. At the discretion of the wholly foreign-owned enterprise, it may allocate a portion of its after-tax profits based on PRC accounting standards to enterprise expansion funds, and staff welfare and bonus funds. These reserve funds and staff welfare and bonus funds are not distributable as cash dividends. Any limitation on the ability of our VIEs to make remittance to our wholly-owned PRC subsidiaries to pay dividends or make other distributions to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

Restrictions on the remittance of Renminbi into and out of China and governmental control of currency conversion may limit our ability to pay dividends and other obligations, and affect the value of your investment.

The PRC government imposes controls on the convertibility of Renminbi into foreign currencies and the remittance of currency out of China. We receive substantially all of our revenue in Renminbi. Under our current corporate structure, our income is primarily derived from dividend payments from our PRC subsidiaries. We may convert a portion of our revenue into other currencies to meet our foreign currency obligations, such as payments of dividends declared in respect of our ADSs, if any. Shortages in the availability of foreign currency may restrict the ability of our PRC subsidiaries to remit sufficient foreign currency to pay dividends or other payments to us, or otherwise satisfy their foreign currency denominated obligations.

Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments, and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval by complying with certain procedural requirements. However, approval from or registration or filings with competent government authorities is required where Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. Pursuant to SAFE Circular 19, a foreign-invested enterprise may convert up to 100% of the foreign currency in its capital account into Renminbi on a discretionary basis according to the actual needs. The SAFE Circular 16 provides for an integrated standard for conversion of foreign exchange under capital account items on a discretionary basis, which applies to all enterprises registered in China. In addition, SAFE Circular 16 has narrowed the scope of purposes for which an enterprise must not use the Renminbi funds so converted, which include, among others, (i) payment for expenditure beyond its business scope or otherwise as prohibited by the applicable laws and regulations, (ii) investment in securities or other financial products other than banks' principal-secured products, (iii) provision of loans to non-affiliated enterprises, except where it is expressly permitted in the business scope of the enterprise, and (iv) construction or purchase of non-self-used real properties, except for real estate developers. The PRC government may at its discretion further restrict access to foreign currencies for current account transactions or capital account transactions in the future. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency needs, we may not be able to pay dividends in foreign currencies to our shareholders. Further, there is no assurance that new regulations will not be promulgated in the future that would have the effect of further restricting the remittance of Renminbi into or out of China.

Fluctuations in exchange rates could result in foreign currency exchange losses.

The conversion of Renminbi into foreign currencies, including Hong Kong dollars and the U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against Hong Kong dollars and the U.S. dollars, at times significantly and unpredictably. The value of Renminbi against Hong Kong dollars, the U.S. dollars and other currencies is affected by changes in China's political and economic conditions and by China's foreign exchange policies, among other things. We cannot assure you that Renminbi will not appreciate or depreciate significantly in value against Hong Kong dollars and the U.S. dollars in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and the U.S. dollars in the future.

There remains significant international pressure on the PRC government to adopt a more flexible currency policy. Any significant appreciation or depreciation of Renminbi may materially and adversely affect our revenues, earnings and financial position, and the value of, and any dividends payable on, our ADSs in foreign currency.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. While we may decide to enter into further hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert Renminbi into foreign currency. As a result, fluctuations in exchange rates may materially and adversely affect your investment.

Any failure to comply with PRC regulations regarding the registration requirements for employee stock incentive plans may subject the PRC plan participants or us to fines and other legal or administrative penalties.

In February 2012, SAFE promulgated the Notices of the State Administration of Foreign Exchange on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly-Listed Company, replacing earlier rules promulgated in 2007. Pursuant to these rules, PRC citizens and non-PRC citizens who reside in China for a continuous period of not less than one year participating in any stock incentive plan of an overseas publicly listed company, subject to a few exceptions, are required to register with SAFE through a domestic qualified agent, which could be the PRC subsidiaries of such overseas-listed company, and complete certain other procedures. In addition, an overseas-entrusted institution must be retained to handle matters in connection with the exercise or sale of stock options and the purchase or sale of shares and interests. We and our executive officers and other employees who are PRC citizens or who reside in China for a continuous period of not less than one year and who have been granted options are subject to these regulations as our company is an overseas-listed company. Failure to complete SAFE registrations may subject them to fines and legal penalties, and may also limit our ability to contribute additional capital into our PRC subsidiary and limit our PRC subsidiary's ability to distribute dividends to us. We also face regulatory uncertainties that could restrict our ability to adopt additional incentive plans for our directors, executive officers and employees under PRC law.

In addition, the STA has issued certain circulars concerning employee share options and restricted shares. Under these circulars, our employees working in China who exercise share options or are granted restricted shares will be subject to PRC individual income tax. Our PRC subsidiaries have obligations to file documents related to employee share options or restricted shares with relevant tax authorities and to withhold individual income taxes of those employees who exercise their share options. If our employees fail to pay or we fail to withhold their income taxes according to relevant laws and regulations, we may face penalties imposed by the tax authorities or other PRC government authorities. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Stock Incentive Plans" for further details.

Failure to make adequate contributions to various employee benefit plans as required by PRC regulations may subject us to penalties.

Companies operating in China are required to participate in various government sponsored employee benefit plans, including certain social insurance, housing funds and other welfare-oriented payment obligations, and contribute to the plans in amounts equal to certain percentages of salaries, including bonuses and allowances, of their employees up to a maximum amount specified by the local government from time to time at locations where the businesses are operated. The requirement of employee benefit plans has not been implemented consistently by the local governments in China given the different levels of economic development in different locations. Certain of our PRC operating entities incorporated in various locations in China have not completed necessary registrations, or made adequate contributions to the employee benefit plans, and we have recorded accruals for estimated underpaid amounts in our financial statements. We may be required to make up the contributions for these plans as well as to pay late fees and fines. If we are subject to late fees or fines in relation to the underpaid employee benefits, our financial condition and results of operations may be adversely affected.

Risks Relating to Our ADSs

The trading price of our ADSs has been and may be volatile, which could result in substantial losses to investors.

The trading price of our ADSs has been volatile since our ADSs started to trade on the New York Stock Exchange, and could fluctuate widely due to factors beyond our control. This may happen because of broad market and industry factors, including the performance and fluctuation of the market prices of other companies with business operations located mainly in China that have listed their securities in the United States or Hong Kong. In addition to market and industry factors, the price and trading volume for our ADSs may be highly volatile for factors specific to our own operations, including the following:

- Actual or anticipated variations in our revenues, earnings, cash flow, and changes or revisions of our expected results;
- fluctuations in operating metrics;
- announcements of new investments, acquisitions, strategic partnerships, or joint ventures by us or our competitors;
- announcements of new products and services and expansions by us or our competitors;
- changes in financial estimates by securities analysts;
- announcements of studies and reports relating to the quality of our product and service offerings or those of our competitors;
- changes in the economic performance or market valuations of our peer companies;
- conditions in the online content community market;
- detrimental negative publicity about us, our competitors, or our industry;
- additions or departures of key personnel;
- release of lockup or other transfer restrictions on our outstanding equity securities or sales of additional equity securities;
- regulatory developments affecting us or our industry;
- general economic or political conditions in China or elsewhere in the world;
- fluctuations of exchange rates between the RMB and the U.S. dollar; and
- potential litigation or regulatory investigations.

Any of these factors may result in large and sudden changes in the volume and price at which our ADSs will trade. Furthermore, the stock market in general experiences price and volume fluctuations that are often unrelated or disproportionate to the operating performance of companies like us. These broad market and industry fluctuations may adversely affect the market price of our ADSs. Volatility or a lack of positive performance in our ADS price may also adversely affect our ability to retain key employees, most of whom have been granted equity incentives.

In the past, shareholders of public companies have often brought securities class action suits against companies following periods of instability in the market price of their securities. If we were involved in a class action suit, it could divert a significant amount of our management's attention and other resources from our business and operations and require us to incur significant expenses to defend the suit, which could harm our results of operations. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could materially and adversely affect our financial condition and results of operations.

Our dual-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

Pursuant to our currently effective memorandum and articles of association, our authorized and issued ordinary shares are divided into Class A ordinary shares and Class B ordinary shares (with certain shares remaining undesignated, with power for our directors to designate and issue such classes of shares as they think fit). Holders of Class A ordinary shares are entitled to one vote per share, while holders of Class B ordinary shares are entitled to ten votes per share. Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof, while Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances.

As of the date of this annual report, Mr. Yuan Zhou beneficially owned 17,626,986 Class A ordinary shares and 19,227,592 Class B ordinary shares and own approximately 42.9% of the aggregate voting power of our total issued and outstanding share capital due to the disparate voting powers associated with our dual-class share structure. As a result of the dual-class share structure and the concentration of ownership, holders of Class B ordinary shares have considerable influence over matters such as decisions regarding mergers and consolidations, election of directors, and other significant corporate actions. Such holders may take actions that are not in the best interest of us or our other shareholders. This concentration of ownership may discourage, delay, or prevent a change in control of our company, which could have the effect of depriving our other shareholders of the opportunity to receive a premium for their shares as part of a sale of our company and may reduce the price of our ADSs. This concentrated control will limit your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover, or other change of control transactions that holders of Class A ordinary shares and ADSs may view as beneficial.

If securities or industry analysts cease to publish research or reports about our business, or if they adversely change their recommendations regarding our ADSs, the market price for our ADSs and trading volume could decline.

The trading market for our ADSs will be influenced by research or reports that industry or securities analysts publish about our business. If one or more analysts who cover us downgrade our ADSs, the market price for our ADSs would likely decline. If one or more of these analysts cease to cover us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for our ADSs to decline.

Techniques employed by short sellers may drive down the market price of our ADSs.

Short selling is the practice of selling securities that a seller does not own but rather has borrowed from a third party with the intention of buying identical securities back at a later date to return to the lender. The short seller hopes to profit from a decline in the value of the securities between the sale of the borrowed securities and the purchase of the replacement shares, as the short seller expects to pay less in that purchase than it received in the sale. As it is in the short seller's interest for the price of the security to decline, many short sellers publish, or arrange for the publication of, negative opinions regarding relevant issuers and their business prospects in order to create negative market momentum and generate profits for themselves after selling securities short.

Public companies listed in the United States that have substantially all of their operations in China have been the subject of short selling. Much of the scrutiny and negative publicity has centered on allegations of a lack of effective internal control over financial reporting resulting in financial and accounting irregularities and mistakes, inadequate corporate governance policies or a lack of adherence thereto and, in many cases, allegations of fraud. As a result, many of these companies are now conducting internal and external investigations into the allegations and, in the interim, are subject to shareholder lawsuits or SEC enforcement actions.

It is not clear what effect such negative publicity could have on us. If we were to become the subject of any unfavorable allegations, whether such allegations are proven to be true or untrue, we could have to expend a significant amount of resources to investigate such allegations or defend ourselves. While we would strongly defend against any such short seller attacks, we may be constrained in the manner in which we can proceed against the relevant short seller by principles of freedom of speech, applicable state law, or issues of commercial confidentiality. Such a situation could be costly and time-consuming and could distract our management from growing our business. Even if such allegations are ultimately proven to be groundless, allegations against us could severely impact our business operations and shareholders' equity, and any investment in our ADSs could be greatly reduced or rendered worthless.

We currently do not expect to pay dividends in the foreseeable future and you must rely on price appreciation of our ADSs for return on your investment.

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in our ADSs as a source for any future dividend income.

Our board of directors has complete discretion as to whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to declare and pay dividends, the timing, amount and form of future dividends, if any, will depend on our future results of operations and cash flow, our capital requirements and surplus, the amount of distributions, if any, received by us from our subsidiaries, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in our ADSs will likely depend entirely upon any future price appreciation of our ADSs. There is no guarantee that our ADSs will appreciate in value or even maintain the price at which you purchased the ADSs. You may not realize a return on your investment in our ADSs and you may even lose your entire investment in our ADSs.

Substantial future sales or perceived potential sales of our ADSs in the public market could cause the price of our ADSs to decline.

Sales of our ADSs in the public market, or the perception that these sales could occur, could cause the market price of our ADSs to decline. The Class A ordinary shares held by our existing shareholders may be sold in the public market subject to volume and other restrictions as applicable provided in Rules 144 and 701 under the Securities Act and the applicable lock-up periods.

Certain holders of our Class A ordinary shares may cause us to register under the Securities Act the sale of their shares. Registration of these shares under the Securities Act would result in ADSs representing these Class A ordinary shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of such registration. Sales of these registered shares in the form of ADSs in the public market could cause the price of our ADSs to decline.

Our tenth amended and restated memorandum and articles of association give us power to take certain actions that could discourage a third party from acquiring us, which could limit our shareholders' opportunity to sell their shares, including Class A ordinary shares represented by ADSs, at a premium.

Our tenth amended and restated memorandum and articles of association give us power to take certain actions that could have the effect of depriving our shareholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. Our board of directors has the authority, without further action by our shareholders, to issue preferred shares in one or more series and to fix their designations, powers, preferences, privileges and relative participating, optional or special rights and the qualifications, limitations, or restrictions, including dividend rights, conversion rights, voting rights, terms of redemption, and liquidation preferences, any or all of which may be greater than the rights associated with our ordinary shares, including Class A ordinary shares represented by ADSs. Preferred shares could be issued quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue preferred shares, the price of our ADSs may fall and the voting and other rights of the holders of our Class A ordinary shares and ADSs may be materially and adversely affected.

The voting rights of holders of ADSs are limited by the terms of the deposit agreement, and you may not be able to exercise your right to direct the voting of the underlying ordinary shares represented by your ADSs.

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of ADSs, you will not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You will only be able to exercise the voting rights attached to the ordinary shares underlying your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. Where any matter is to be put to a vote at a general meeting, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying ordinary shares represented by your ADSs in accordance with your instructions. You will not be able to directly exercise your right to vote with respect to the underlying ordinary shares unless you cancel and withdraw the shares and become the registered holder of such shares prior to the record date for the general meeting.

When a general meeting is convened, you may not receive sufficient advance notice of the meeting to withdraw the ordinary shares represented by your ADSs and become the registered holder of such shares to allow you to attend the general meeting and to vote directly with respect to any specific matter or resolution to be considered and voted upon at the general meeting. In addition, under our currently effective memorandum and articles of association, for the purposes of determining those shareholders who are entitled to attend and vote at any general meeting, our directors may close our register of members and/or fix in advance a record date for such meeting, and such closure of our register of members or the setting of such a record date may prevent you from withdrawing the underlying ordinary shares represented by your ADSs and from becoming the registered holder of such shares prior to the record date, so that you would not be able to attend the general meeting or to vote directly. Where any matter is to be put to a vote at a general meeting, upon our instruction the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote the underlying ordinary shares represented by your ADSs.

In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to direct how the underlying ordinary shares represented by your ADSs are voted and you may have no legal remedy if the underlying ordinary shares represented by your ADSs are not voted as you requested. In addition, in your capacity as an ADS holder, you will not be able to call a shareholders' meeting.

Further, under the deposit agreement for the ADSs, if you do not vote, the depositary will give us a discretionary proxy to vote the Class A ordinary shares underlying your ADSs at shareholders' meetings unless:

- we have instructed the depositary that we do not wish a discretionary proxy to be given;
- we have informed the depositary that there is substantial opposition as to a matter to be voted on at the meeting;
- a matter to be voted on at the meeting would have a material adverse impact on shareholders; or
- the voting at the meeting is to be made on a show of hands.

The effect of this discretionary proxy is that you cannot prevent our Class A ordinary shares underlying your ADSs from being voted, except under the circumstances described above. This may adversely affect your interests and make it more difficult for shareholders to influence the management of our company. Holders of our Class A ordinary shares are not subject to this discretionary proxy.

You may not receive cash dividends if the depositary decides it is impractical to make them available to you.

The depositary will pay cash distributions on the ADSs only to the extent that we decide to distribute dividends on our ordinary shares or other deposited securities, and we do not have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. To the extent that there is a distribution, the depositary has agreed to pay you the cash dividends or other distributions it or the custodian receives on our shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of shares your ADSs represent. However, the depositary may, at its discretion, decide that it is inequitable or impractical to make a distribution available to any holders of ADSs. For example, the depositary may determine that it is not practicable to distribute certain property through the mail, or that the value of certain distributions may be less than the cost of mailing them. In these cases, the depositary may decide not to distribute such property to you.

You may be subject to limitations on transfer of your ADSs.

Your ADSs are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may close its books from time to time for a number of reasons, including in connection with corporate events such as a rights offering, during which time the depositary needs to maintain an exact number of ADS holders on its books for a specified period. The depositary may also close its books in emergencies, and on weekends and public holidays. The depositary may refuse to deliver, transfer or register transfers of the ADSs generally when our share register or the books of the depositary are closed, or at any time if we or the depositary thinks it is advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

You may experience dilution of your holdings due to inability to participate in rights offerings.

We may, from time to time, distribute rights to our shareholders, including rights to acquire securities. Under the deposit agreement, the depositary will not distribute rights to holders of ADSs unless the distribution and sale of rights and the securities to which these rights relate are either exempt from registration under the Securities Act with respect to all holders of ADSs, or are registered under the provisions of the Securities Act. The depositary may, but is not required to, attempt to sell these undistributed rights to third parties, and may allow the rights to lapse. We may be unable to establish an exemption from registration under the Securities Act, and we are under no obligation to file a registration statement with respect to these rights or underlying securities or to endeavor to have a registration statement declared effective. Accordingly, holders of ADSs may be unable to participate in our rights offerings and may experience dilution of their holdings as a result.

You may face difficulties in protecting your interests, and your ability to protect your rights through Hong Kong or U.S. courts may be limited, because we are incorporated under Cayman Islands law.

We are an exempted company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our tenth amended and restated memorandum and articles of association, the Companies Act (As Revised) of the Cayman Islands, and the common law of the Cayman Islands. The rights of shareholders to take action against our directors, actions by our minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in Hong Kong or some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than Hong Kong or the United States. Some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, Cayman Islands companies may not have the standing to initiate a shareholder derivative action in a Hong Kong court or a federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records (other than the memorandum and articles of association and any special resolutions passed by such companies, and the registers of mortgages and charges of such companies) or to obtain copies of lists of shareholders of these companies. Under Cayman Islands law, the names of our current directors can be obtained from a search conducted at the Registrar of Companies. Our directors have discretion under our currently effective memorandum and articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder motion or to solicit proxies from other shareholders in connection with a proxy contest.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests in the face of actions taken by management, members of our board of directors or controlling shareholders than they would as public shareholders of a company incorporated in Hong Kong or the United States.

Certain judgments obtained against us by our shareholders may not be enforceable.

We are a Cayman Islands company and substantially all of our assets are located outside of Hong Kong or the United States. Substantially all of our current operations are conducted in China. In addition, many of our current directors and officers are nationals and residents of countries other than Hong Kong or the United States. As a result, it may be difficult or impossible for you to bring an action against us or against these individuals in Hong Kong or the United States in the event that you believe that your rights have been infringed under Hong Kong laws, the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers.

Forum selection provisions in our currently effective memorandum and articles of association and our deposit agreement with the depositary bank could limit the ability of holders of our Class A ordinary shares, ADSs, or other securities to obtain a favorable judicial forum for disputes with us, our directors and officers, the depositary bank, and potentially others.

Our currently effective memorandum and articles of association provide that the federal district courts of the United States are the exclusive forum within the United States (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) for the resolution of any complaint asserting a cause of action arising out of or relating in any way to the federal securities laws of the United States, regardless of whether such legal suit, action, or proceeding also involves parties other than us. Our deposit agreement with the depositary bank also provides that the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts in New York County, New York) will have jurisdiction to hear and determine any suit, action, or proceeding and to settle any dispute between the depositary bank and us that does not involve any other person or party that may arise out of or relate in any way to the deposit agreement, including claims under the Securities Act or the Exchange Act. Holders and beneficial owners of our ADSs, by holding an ADS or an interest therein, understand and irrevocably agree that any legal suit, action, or proceeding against or involving us or the depositary bank arising out of or related in any way to the deposit agreement, ADSs, or the transactions contemplated thereby or by virtue of ownership thereof, including without limitation claims under the Securities Act or the Exchange Act, may only be instituted in the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks jurisdiction or such designation of the exclusive forum is, or becomes, invalid, illegal, or unenforceable, in the state courts of New York County, New York). However, the enforceability of similar federal court choice of forum provisions has been challenged in legal proceedings in the United States, and it is possible that a court could find this type of provision to be inapplicable, unenforceable, or inconsistent with other documents that are relevant to the filing of such lawsuits. If a court were to find the federal choice of forum provision contained in our currently effective memorandum and articles of association or our deposit agreement with the depositary bank to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. If upheld, the forum selection clause in our currently effective memorandum and articles of association, as well as the forum selection provisions in the deposit agreement, may limit a security-holder's ability to bring a claim against us, our directors and officers, the depositary bank, and potentially others in his or her preferred judicial forum, and this limitation may discourage such lawsuits. In addition, the Securities Act provides that both federal and state courts have jurisdiction over suits brought to enforce any duty or liability under the Securities Act or the rules and regulations thereunder. Accepting or consent to this forum selection provision does not constitute a waiver by you of compliance with federal securities laws and the rules and regulations thereunder. You may not waive compliance with federal securities laws and the rules and regulations thereunder. The exclusive forum provision in our currently effective memorandum and articles of association will not operate so as to deprive the courts of the Cayman Islands from having jurisdiction over matters relating to our internal affairs.

ADSs holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by a federal or state court in the City of New York, which has nonexclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waive the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us or the depositary, lead to increased costs to bring a claim, limited access to information and other imbalances of resources between such holder and us, or limit such holder's ability to bring a claim in a judicial forum that such holder finds favorable. If a lawsuit is brought against us or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs shall relieve us or the depositary from our respective obligations to comply with the Securities Act and the Exchange Act nor serve as a waiver by any holder or beneficial owner of ADSs of compliance with the U.S. federal securities laws and the rules and regulations promulgated thereunder.

An ADS holder's right to pursue claims against the depositary is limited by the terms of the deposit agreement.

Under the deposit agreement, the United States District Court of the Southern District of New York (or, if the United States District Court of the Southern District of New York lacks subject matter jurisdiction over a particular dispute, the state courts of New York County, New York) will have jurisdiction to hear and determine any suit, action, or proceeding and to settle any dispute between the depositary bank and us that does not involve any other person or party that may arise out of or relate in any way to the deposit agreement, including claims under the Securities Act or the Exchange Act. Holders and beneficial owners of our ADSs, by holding an ADS or an interest therein, understand and irrevocably agree that any legal suit, action, or proceeding against or involving us or the depositary, arising out of or related in any way to the deposit agreement, ADSs, or the transactions contemplated thereby or by virtue of ownership thereof, including without limitation claims under the Securities Act or the Exchange Act, may only be instituted in the United States District Court for the Southern District of New York (or, if the Southern District of New York lacks jurisdiction or such designation of the exclusive forum is, or becomes, invalid, illegal, or unenforceable, in the state courts of New York County, New York), and a holder of our ADSs will have irrevocably waived any objection which such holder may have to the laying of venue of any such proceeding, and irrevocably submitted to the exclusive jurisdiction of such courts in any such suit, action, or proceeding. However, the enforceability of similar federal court choice of forum provisions in other companies' organizational documents has been challenged in legal proceedings in the United States, and it is possible that a court could find this type of provision to be inapplicable or unenforceable. Accepting or consenting to this forum selection provision does not represent you are waiving compliance with the U.S. federal securities laws and the rules and regulations promulgated thereunder. Furthermore, investors cannot waive compliance with the U.S. federal securities laws and rules and regulations promulgated thereunder.

The depositary may, in its sole discretion, require that any dispute or difference arising from the relationship created by the deposit agreement, our shares, the ADSs, or the transactions contemplated thereby be referred to and finally settled by an arbitration conducted under the terms described in the deposit agreement, while to the extent there are specific federal securities law violation aspects to any claims against us and/or the depositary brought by any holder or beneficial owner of ADSs, the federal securities law violation aspects of such claims may, at the option of such holders or beneficial owners, remain in the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute or such designation of the exclusive forum is, or becomes, invalid, illegal, or unenforceable, in the state courts of New York County in New York). We believe that a contractual arbitration provision, especially when excluding matters relating to federal securities law violation, is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement.

We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements.

As a company with less than US$1.07 billion in revenues for our last fiscal year, we qualify as an "emerging growth company" pursuant to the JOBS Act. Therefore, we may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include exemption from the auditor attestation requirement under Section 404 in the assessment of the emerging growth company's internal control over financial reporting. As a result, if we elect not to comply with such reporting and other requirements, in particular the auditor attestation requirements, our investors may not have access to certain information they may deem important.

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. We are currently not taking advantage of any exemption or the extended transition period for complying with new or revised accounting standards. If we elect to take advantage of such exemption or extended transition period in the future, our results of operations and financial statements may not be comparable to the results of operations and financial statements of other companies that have adopted the new or revised accounting standards. If we cease to be an emerging growth company, we will no longer be able to take advantage of these exemptions or the extended transition period for complying with new or revised accounting standards.

As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the New York Stock Exchange listing standards.

As a Cayman Islands company listed on the New York Stock Exchange, we are subject to the New York Stock Exchange listing standards, which requires listed companies to have, among other things, a majority of their board members to be independent and independent director oversight of executive compensation and nomination of directors. However, New York Stock Exchange rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the New York Stock Exchange listing standards.

We are permitted to elect to rely on home country practice to be exempted from the corporate governance requirements. If we choose to follow home country practice in the future, our shareholders may be afforded less protection than they would otherwise enjoy if we complied fully with the New York Stock Exchange listing standards.

We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies.

Because we qualify as a foreign private issuer under the Exchange Act, we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers, including:

- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K;
- the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to publish our results on a quarterly basis as press releases, distributed pursuant to the rules and regulations of the New York Stock Exchange. Press releases relating to financial results and material events will also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC is less extensive and less timely compared to that required to be filed with the SEC by U.S. domestic issuers. As a result, you may not be afforded the same protections or information that would be made available to you were you investing in a U.S. domestic issuer.

There can be no assurance that we will not be a passive foreign investment company, or PFIC, for United States federal income tax purposes for any taxable year, which could subject United States investors in our ADSs or Class A ordinary shares to significant adverse United States income tax consequences.

We will be classified as a passive foreign investment company for United States federal income tax purposes for any taxable year if either (a) 75% or more of our gross income for such year consists of certain types of "passive" income or (b) 50% or more of the value of our assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income, or the "asset test." Although the law in this regard is unclear, we intend to treat our VIE (including its subsidiaries) as being owned by us for United States federal income tax purposes, not only because we exercise effective control over the operation of such entities but also because we are entitled to substantially all of their economic benefits and, as a result, we consolidate their results of operations in our consolidated financial statements. Assuming that we are the owner of our VIE (including its subsidiaries) for United States federal income tax purposes, and based upon our income and assets, including goodwill and other unbooked intangibles, we do not believe that we were a PFIC for the taxable year ended December 31, 2021 and we do not expect to be a PFIC for the current taxable year or the foreseeable future.

While we do not expect to be or become a PFIC, because the value of our assets for purposes of the asset test may be determined by reference to the market price of our ADSs, fluctuations in the market price of our ADSs may cause us to become a PFIC for the current or subsequent taxable years. In particular, recent decline in the market price of our ADSs significantly increased our risk of becoming a PFIC. The market price of our ADSs may continue to decline and, consequently, we cannot assure you of our PFIC status for any taxable year. The determination of whether we will be or become a PFIC will also depend, in part, on the composition of our income and assets, which will be affected by how, and how quickly, we use our liquid assets. If we determine not to deploy significant amounts of cash for active purposes or if it were determined that we do not own the stock of our VIE for United States federal income tax purposes, our risk of being a PFIC may substantially increase. Because PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the current taxable year or any future taxable year.

If we are a PFIC in any taxable year, a U.S. Holder (as defined in "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations") may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the ADSs or Class A ordinary shares and on the receipt of distributions on the ADSs or Class A ordinary shares to the extent such gain or distribution is treated as an "excess distribution" under the United States federal income tax rules, and such U.S. Holder may be subject to burdensome reporting requirements. Further, if we are a PFIC for any year during which a U.S. Holder holds our ADSs or Class A ordinary shares, we will generally continue to be treated as a PFIC for all succeeding years during which such U.S. Holder holds our ADSs or Class A ordinary shares. For more information see "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Considerations" and "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Rules."

We may incur increased costs as a result of being a public company, particularly after we cease to qualify as an "emerging growth company."

We are a public company and incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, as well as rules subsequently implemented by the SEC and New York Stock Exchange, impose various requirements on the corporate governance practices of public companies. We expect these rules and regulations to increase our legal and financial compliance costs and to make some corporate activities more time-consuming and costly.

As a result of becoming a public company, we increased the number of independent directors and have adopted policies regarding internal controls and disclosure controls and procedures. Operating as a public company also makes it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. In addition, we will incur additional costs associated with our public company reporting requirements. It may also be more difficult for us to find qualified persons to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate with any degree of certainty the amount of additional costs we may incur or the timing of such costs.

In addition, after we are no longer an "emerging growth company," we expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and the other rules and regulations of the SEC.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

In late 2010, our founder, Mr. Yuan Zhou, founded Zhihu. Between 2010 and 2012, Zhihu was a by-invitation-only, Q&A community. Zhihu opened up registration to the general public in 2013 and has since grown into one of the largest comprehensive online content communities in China. We started to offer online advertising in 2016, introduced paid content in 2018, started our paid Yan Selection membership program in the first half of 2019, and formally launched our content-commerce solutions in early 2020. We have continued to expand our content-centric monetization channels since 2020, including offering vocational training and e-commerce initiatives.

We established Zhihu Technology Limited under the laws of the Cayman Islands as our offshore holding company in May 2011, which later changed its name to Zhihu Inc. in October 2020.

In June 2011, we established Zhihu Technology (HK) Limited, a wholly-owned subsidiary of our Cayman Islands holding company, in Hong Kong as our intermediary holding company. In the same month, we established Zhizhe Tianxia in China. In January 2012, Zhihu Technology (HK) Limited established Zhizhe Sihai, a wholly-owned subsidiary in China. In January 2018, we established Beijing Zhihu Network Technology Co., Ltd., a wholly-owned subsidiary of Zhihu Technology (HK) Limited, in China.

In July 2018, we gained control over Zhizhe Tianxia through Zhizhe Sihai by entering into a series of contractual arrangements with Zhizhe Tianxia and its shareholders. We replaced such contractual arrangements with the contractual arrangements currently in effect in December 2021.

In September 2021, we gained control over Shanghai Pinzhi by entering into a series of contractual arrangements through Shanghai Zhishi with Shanghai Pinzhi and its shareholders. In November 2021, we gained control over Shanghai Biban and its subsidiaries by entering into a series of contractual arrangements through Shanghai Paya with Shanghai Biban and its shareholders.

On March 26, 2021, our ADSs commenced trading on the New York Stock Exchange under the symbol "ZH." Concurrently with our initial public offering, we also entered into private placement transactions with certain investors. Net proceeds from our initial public offering, including the exercise of the underwriters' option to purchase additional ADSs, and the concurrent private placements, after deducting the underwriting discounts and offering expenses, were approximately US$739.4 million.

We have filed an application with the Stock Exchange of Hong Kong Limited, or the Hong Kong Stock Exchange, in connection with a proposed dual primary listing of our Class A ordinary shares on the Main Board of the Hong Kong Stock Exchange.

Our principal executive offices are located at A5 Xueyuan Road, Haidian District, Beijing 100083, People's Republic of China. Our telephone number at this address is +86 (10) 8271-6605. Our registered office in the Cayman Islands is located at offices of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands. Our agent for service of process in the United States is Cogency Global Inc., located at 122 East 42nd Street, 18th Floor, New York, NY 10168. Our website is *http://www.zhihu.com*. The information on our websites should not be deemed to be part of this annual report. The SEC also maintains a website at *http://www.sec.gov* that contains reports, proxy, and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system.

B. Business Overview

Overview

"*Do you know?*"

The question is embedded in Zhihu(知乎)'s Chinese meaning.

A question is not only a yearning for the undiscovered, but also the strat of a journey to learn, engage, and share. Zhihu is an iconic online content community where people come to find solutions, make decisions, seek inspiration, and have fun.

On Zhihu, our users explore and enjoy content that broadens horizons, provides solutions, and resonates with minds, which we refer to as "fulfilling content" (有获得感的内容), ranging from daily life choices such as the television or mobile phone, an inspirational holiday hide-away, a puzzle book, or a reality show, to sophisticated knowledge or unique experience such as learning about the Tiangong space station or visiting a 2022 Winter Olympics venue, and to bigger decisions such as a college or a good exam preparation program, career choices, or managing a relationship or expecting a baby. A full spectrum of high-quality content on Zhihu appeals to an ever growing user base and content creators, who have come to Zhihu to share their knowledge, experience, and insights. Zhihu goes beyond that first question, and brings people together through their commonality.

What is Our Mission?

We believe that everyone can share and contribute with their own wealth of knowledge, experience, and insights, and we aim to empower everyone to do so and find their own answers.

What Have We Accomplished?

Today, Zhihu is one of the top five comprehensive online content communities and the largest Q&A-inspired online community in China, both in terms of average mobile MAUs and revenue in 2019, 2020, and 2021, according to CIC. Zhihu is a leading online content community widely regarded as offering high-quality content in China, according to the CIC Survey conducted in September 2021. In the fourth quarter of 2021, Zhihu had 99.6 million average mobile MAUs, 500 million average monthly viewers, and 390 million average monthly engagements. As of December 31, 2021, Zhihu had 55 million cumulative content creators, who had contributed 420 million cumulative Q&As covering over 1,000 verticals. Our revenue increased from RMB670.5 million in 2019 to RMB1.4 billion in 2020, and further to RMB3.0 billion (US$464.4 million) in 2021, representing a CAGR of 110.1% from 2019.

Launched in 2010, we have been dedicated to expanding our content and service offerings to meet the diverse needs of our users, content creators, and business partners. A content-centric business model has been formed during our development and continues to evolve. We have grown from a Q&A community into one of the largest comprehensive online content communities in China. We are among the first several industry players to offer paid memberships and developed content-commerce solutions for merchants and brands, according to CIC. We continue to leverage our content-centric business model and launch new monetization channels such as offering vocational training and e-commerce related services. However, we believe that we are still at an early stage of monetization with significant runway for growth across a span of monetization channels.

What Makes Zhihu Great?

The Zhihu model is centered around a virtuous cycle that seeks to achieve a content equilibrium between what our content creators contribute and what our users consume. We continually reinforce Zhihu with its technological foundation and we seek to achieve optimal monetization and deliver value to our shareholders and other stakeholders.

Our users and content creators actively interact with each other and share knowledge, experience, and insights, forming a content ecosystem spanning a wide range of verticals and topics across diverse content forms. Our deep content and user insights play an essential role in optimizing user experience and maintaining robust community governance, which reinforces our community culture of sincerity, expertise, and respect (认真、专业、友善). Our community culture and trustworthy brand further strengthen our content ecosystem, which attracts and retains more users and content creators to our community. Our superior technology infrastructure supports our business in various aspects, from understanding our users and content quality, promoting fulfilling content and user engagement, nurturing our community, to enhancing our content and service offerings and forging a trustworthy brand. As we continue to enhance user experience and serve our users, content creators, and business partners, we have established diverse and expanding content-centric monetization channels. This self-reinforcing cycle has been emerging with our growth and solidify our leaderships.

- ***Our Content.*** We believe that the quality of Zhihu content is vital to our business. We relentlessly strive to enhance the quality of the Zhihu content through better understanding of our content creators and deeper comprehension of the Zhihu content. Leveraging our years of accumulation of the Zhihu content, we consider content that broadens horizons, provides solutions, and resonates with minds to be exemplary high-quality content, which we refer to as "fulfilling content." We strive to understand why such content is fulfilling through our evolving and developing technological capabilities so that we can maintain and further enhance the fulfillness of the Zhihu content. We believe that this "fulfillness" approach that helps us better comprehend our content, combined with our TopicRank algorithms that help us better comprehend content through the understanding of content creators, could deepen our capability to manage our content operations. As of December 31, 2021, our community had 490 million cumulative pieces of content, including 420 million cumulative Q&As, covering over 1,000 verticals and 1.8 million topics. From time to time, we launch various initiatives and campaigns to further enhance the depth, breadth, and quality of the Zhihu content. For example, we seek to become a popular destination for timely content inviting in-depth discussion of trending events, which further encourages a high level of content creation and user engagement.

- ***Our Users.*** We have amassed a fast growing, diverse, and highly engaged user base. Zhihu had 99.6 million average mobile MAUs in the fourth quarter of 2021, representing a 38.1% year-over-year increase. Our high-quality content has enabled us to expand our user base rapidly at low cost, while maintaining high user engagement and loyalty. In the fourth quarter of 2021, our daily active users opened the Zhihu app an average of approximately 6 times per day and generated 390 million average monthly engagements. For our YanPlus users, the average 12th-month retention rate in 2020 was 73%.

- ***Our Content Creators.*** The trustworthy Zhihu brand has inspired our users to contribute and become content creators. We provide multiple tools and utilities for content creators to contribute high-quality content to our community. In return, content creators can have fulfilling experience in their creative works, receive recognition in our community and beyond, and be rewarded financially through multiple channels. Our cumulative content creators reached 55 million as of December 31, 2021. In the fourth quarter of 2021, Zhihu had 2.7 million average monthly active content creators, and 13 million average monthly pieces of content were created. Our users and content creators complement each other, sharing their collective intelligence to create a marketplace of answers

- ***Our Community.*** Through years of content operations, we have cultivated a community culture of sincerity, expertise, and respect (认真、专业、友善). We have established and been iterating a set of community governance system overseen and implemented by our experienced community management team. Equipped with our proprietary know-how and AI-powered content assessment algorithms, our community management team promptly and effectively identifies and responds to inappropriate content to enhance user experience and maintain community culture. In addition, we enable users to safeguard an open and inclusive environment through content quality improvement process and dispute review process. By optimizing user experience, our community fosters a healthy environment for vibrant content creation, which in turn strengthens our community culture.

- ***Our Brand.*** The Zhihu brand is increasingly associated with trustworthiness in the Chinese internet community. The strong brand fosters a vibrant online community where fast-growing users and content creators are eager to contribute and engage while respecting diversity and valuing constructiveness, which further optimizes our user and content creator experience. We also believe that our brand strength can help with the monetization through branded merchandise and IP monetization on the Zhihu platform. The Zhihu brand is proven instrumental in further enhancing our user growth, content quality, and monetization.

- ***Our Monetization.*** The ever-growing Zhihu content provides us with an avenue for monetization. Over time, our content-centric monetization channels have expanded to include online advertising, paid membership, content-commerce solutions, vocational training, and other services such as e-commerce related services. We are the first to have launched integrated content-commerce solutions at scale, and the largest among online content communities in terms of revenue generated from integrated content commerce solutions in 2020 and 2021, according to CIC. In addition, we are the first and remains as of the date of this prospectus the only Q&A-inspired online community to have launched a subscription-based paid membership program, and the largest in terms of paid membership revenue among Q&A-inspired online communities in 2020 and 2021, according to CIC. As we are still at an early stage of monetization, we incurred operating losses and net operating cash outflows during 2019, 2020, and 2021. We plan to further improve the capabilities of our current monetization channels by improving the effectiveness of online advertising based on more accurate distribution to appropriate users and more diverse content products, expanding our high-quality premium content library for paid membership services, and providing merchants and brands with better content-centric marketing solutions and higher marketing effectiveness. We also plan to diversify our revenue streams by identifying opportunities and implementing new initiatives in content space to fulfill the needs of our users while generating commercial value for content creators and business partners. As we continue to expand the Zhihu product offerings and enhance content quality to satisfy the diverse user needs, we deepen our monetization and will continue to launch more monetization channels, enabling us to create and deliver value to our shareholders and other stakeholders.

- ***Our Technology.*** Our superior technological infrastructure supports our content operations. We are the only online Q&A community in China to adopt topic ranking algorithms to assess the quality of content based on analysis of users' credentials and community engagements, according to CIC. Our AI-powered TopicRank algorithms assess a user's credentials and engagement through, and to the extent of, all relevant information about the user available to Zhihu, including the user information voluntarily and lawfully provided to Zhihu, the content created by the user, the engagement by the user in the Zhihu community, the engagement by other users with the user in the Zhihu community, and whether the user has been recognized by Zhihu as a reputable expert in a particular field already. All users' credentials and engagements thus will be assessed and continually updated. We believe that our TopicRank algorithms and our "fulfillness" approach, which we are currently developing, could enhance our capability to manage content operations. Our feed recommendation and search systems are continually optimized to prioritize distribution of high-quality content to enhance user experience, allowing us to recommend the most desirable content to appropriate users. Our question routing system accurately distributes questions to relevant users to encourage content creation. Our low-quality content filtering system and anti-spamming system help ensure content appropriateness and a healthy community environment.

During 2019, 2020, and 2021, we achieved significant business growth yet incurred net loss and net operating cash outflow, primarily attributable to our content-related cost that helped build our rich content library, sales and marketing expenses for promotional and advertising activities, and research and development expenses to enhance technological infrastructure. Our revenue increased from RMB670.5 million in 2019 to RMB1.4 billion in 2020, and further to RMB3.0 billion (US$464.4 million) in 2021, representing a CAGR of110.1% from 2019. Our gross profit increased from RMB312.3 million in 2019 to RMB757.8 million in 2020, and further to RMB1.6 billion (US$243.8 million) in 2021. Our net loss was RMB1.0 billion in 2019, RMB517.6 million in 2020, and RMB1.3 billion (US$203.8 million) in 2021. We had net operating cash outflows of RMB715.5 million, RMB244.4 million, and RMB440.2 million (US$69.1 million) in 2019, 2020, and 2021, respectively. We expect to continue incurring net loss and net operating cash outflow in the near future as we continue to strategically incurred expenditures to build up and expand our content ecosystem to further enhance Zhihu's content quality and content portfolio, promote community culture and user engagement, and solidify organic growth.

Zhihu Content

The comprehensive, high-quality Zhihu content is continually enriched by our content creators with systematic support from our content operations, reinforcing Zhihu's reputation as a trustworthy online content community.

Content Offerings

We are a UGC-based online content community, where content creators contribute a wealth of knowledge, experience, and insights. The Zhihu content is presented in various forms and features such as Q&As, articles, videos, live streaming, and groups. Our community had 490 million cumulative pieces of content as of December 31, 2021, including 420 million Q&As. The comprehensive Zhihu content encompasses over 1,000 verticals and covers 1.8 million topics. Popular categories include consumer digital, movies and videos, lifestyle and fashion, mother and baby care, arts and science, education, sports and games, business and finance, and automobiles, among others. Various distribution channels are available for users to effectively and efficiently explore the Zhihu content, such as feeds, searches, trending topics, and follows. As a comprehensive online content community, we seek to maintain a diverse content portfolio. In 2019, consumer goods, popular science, entertainment, education, technology and internet, and business and finance accounted for 34%, 21%, 21%, 6%, 4%, and 6% of our total page views. In 2020, consumer goods, popular science, entertainment, education, technology and internet, and business and finance accounted for 32%, 22%, 23%, 8%, 5%, and 4% of our total page views. In 2021, consumer goods, popular science, entertainment, education, technology and internet, and business and finance accounted for 31%, 22%, 21%, 8%, 5%, and 5% of our total page views.

The Zhihu content is primarily organized in the Q&A form, as we believe that Q&A is an intuitive and efficient way to inspire and facilitate discovery, learning, discussion, and engagement. A question may become trending immediately attracting a string of answers of different lengths, styles, and perspectives. A question may also remain relevant over a long period of time, with answers accumulating, reflecting timeless value of such content. As we accumulate experience in comprehending content through our "fulfillness" approach and understanding users and content creators through TopicRank algorithms, we are able to effectively facilitate creation of high-quality content and its distribution to users for consumption. In addition to Q&As, the Zhihu content can be contributed in the form of articles to facilitate more focused discussions in particular fields and to build systematic knowledge graphs. Users can also form and join groups to explore their commonality.

Video content is an extension to our text- and image-based content portfolio as evidenced by an 32% year-over-year increase of average monthly active video content creators and a 69% year-over-year increase of daily active users who have watched videos on Zhihu in the fourth quarter of 2021. As of December 31, 2021, Zhihu had 22.8 million pieces of video content.

Aside from the Zhihu content available to all users, we offer a paid Yan Selection (盐选) membership program where we curate premium content for our subscribing members. The premium content primarily consists of works contributed by professional or experienced content creators and high-quality works licensed by third parties. As of December 31, 2021, the Yan Selection membership program provides access to 3.9 million pieces of premium content, such as fictions and novels, other books and magazines, live and recorded lectures, and audio books, serving a wide range of users who view for pleasure, look to acquire knowledges and skills, and search for credible references. We diligently expand and curate premium content offerings to satisfy the demand of our increasing subscribing members, which incentivizes the growth of our subscribing members and strengthens our trustworthy brand image.

Content Operations

We relentlessly strive to enhance the quality of the Zhihu content through our efforts in comprehending the Zhihu content and understanding our content creators. We strive to understand why the "fulfilling content" is fulfilling through our evolving and developing technological capabilities so that we can maintain and further enhance the fulfillness of the Zhihu content. We believe that this "fulfillness" approach, which we are currently developing, combined with our TopicRank algorithms, could deepen our comprehension of the Zhihu content, which fuels all aspects of our business.

We continually iterate TopicRank algorithms over time to enhance our understanding of content creators to help us comprehend our content ecosystem. As content creators continue to contribute content on Zhihu, our TopicRank algorithms continually assess content through the understanding of content creators based on their contributions and engagements as well as other users' engagements with their contributions. A content creator can be perceived as an expert by our TopicRank algorithms in a field, large or small, and generally receives more weight in that field for future assessment. The content quality is not merely determined by the popularity or the number of upvotes of the contents. The TopicRank algorithms assess the quality of content based on all relevant information available to Zhihu, and regularly updates such assessment. The TopicRank algorithms would not consider a piece of content to be of higher quality merely because such content receives a higher number of upvotes, and vice versa. The high-quality content portfolio and accumulated user engagement data optimize TopicRank through iterations. These continuing iterations create a virtuous cycle to enhance the quality of Zhihu content through our continually refined understanding of content creators, which contributes to the effective creation, distribution, and consumption of content on Zhihu.

In addition, we have been further deepening our comprehension of the content ecosystem by revealing the intrinsic value of the Zhihu content through what we refer to as the "fulfillness" approach. Through our years' of relentless work to enhance user experience, we become aware that users love the Zhihu content because such content broadens horizons, provides solutions, and resonates with minds and is exemplary high-quality content. This deepened comprehension is continually iterated through input from our operations and technology teams. We leverage a technology-driven approach to optimize the operation of such content and follow up to re-assess such content. We will continue to apply our technological capabilities, including artificial intelligence, natural language processing, and machine learning to further develop our "fulfillness" approach.

As the foundation of the Zhihu model is a content equilibrium between what our content creators contribute and what our users consume, our content operations rely on our overall comprehension of content through our "fulfillness" approach and the understanding of content creators leveraging TopicRank algorithms.

From time to time, we launch various initiatives and campaigns to further enhance the depth, breadth, and quality of the Zhihu content. We currently focus on promoting timely content, which covers a wide spectrum of trending events to satisfy our diverse user base. We have a dedicated content operations team facilitating the content creation and distribution relating to the most notable events from time to time. We also utilize AI-powered technologies to produce and supplement relevant questions, allowing users to easily explore trending events of interest. We collaborate with various media to ensure our content covers popular events to the interest of the general public from time to time.

As questions can stimulate discussions among users and inspire content creators, we have years of experience in identifying and promoting worthwhile questions and then using an AI-powered question routing system to invite users to answer questions that correspond to their interests and expertise. This not only incites users' desire to create, but also helps new users quickly get on track with answering questions. We also offer productivity tools to help content creators efficiently produce high-quality content.

We use a feed recommendation system and a search system to efficiently distribute content of interest to users. Users can browse their personalized home feeds on the Zhihu app and website based on their profiles and prior behaviors, and search keywords to quickly access relevant content. As our search functions become more popular, we are increasingly recognized by Chinese netizens as a go-to destination to find trustworthy answers to their questions. Our users generated 32 million average daily searches in the fourth quarter of 2021, representing a 23.2% year-over-year increase. Zhihu is recognized as the first choice among all online content communities in China for people to look for information to make decisions or find answers, according to the CIC Survey. In addition, users can see updates from content creators and topics that they have followed, read trending topics, watch videos, and browse channels to discover content.

Content Creators

As a UGC-based online content community, we pride ourselves on the 55 million cumulative content creators who had contributed 490 million cumulative pieces of content, including 420 million cumulative Q&As, to our community as of December 31, 2021. We strive to continually empower them to generate high-quality content and encourage content diversity. Our efforts in discovering, developing, and supporting content creators help realize and enhance the potential of each content creator regardless of one's background or field of specialty, allowing us to continually convert more users into content creators.

We understand and support the different needs of content creators at different stages. Leveraging the Q&A form that sparks creativity, we encourage users to contribute their first piece of content and thereby become content creators in the Zhihu community. Our technology can help content creators select the right topics for them. For example, our AI-powered question routing system distributes questions suitable for entry-level content creators, and will gradually increase the sophistication of questions as content creators become more experienced.

We provide ongoing support and guidance to content creators to increase the frequency of content creation. We offer creative workshops focusing on specific subjects for content creators as they develop their skills towards prolific content creation. In addition, we organize online roundtable series on special topics and other events to enhance the frequency and relevance of the content created.

Content creators can be rewarded financially from their creative works through various channels, such as income for creation of quality commercial and premium content, commission from Recommended Goodies (好物推荐), among other things.

Our content creators also enjoy their Zhihu experience through recognition from fellow users. For example, our annual Zhihu Content Creators Ceremony promotes and strengthens our community culture through enhancing engagements between content creators and users. We invite leading content creators in various fields to share their Zhihu experience to users through award giving speeches, round table forums, and other activities. This fosters a win-win situation for us as content creators not only receive better recognition within our community, but also inspire our users to become content creators.

Zhihu Users

We have a large, vibrant, and rapidly growing user base. We had average mobile MAUs of 44.3 million, 64.2 million, and 92.4 million in 2019, 2020, and 2021, respectively. Our users are highly engaged. Our 99.6 million average mobile MAUs in the fourth quarter of 2021 generated 390 million average monthly engagements within our vibrant community during the same period. Our users are also highly sticky. For our YanPlus users, the average 12th-month retention rate in 2020 was 73%. We have a balanced user base. For example, for our active users in December 2021, 47% are female; 48%, 21%, and 31% are in tier 1 and new tier 1 cities, tier 2 cities, and other cities; and 75% are aged below 30. We will continue to expand and further diversify our user base, and aim to serve a broader set of internet users.

Our users can leverage a series of features to engage actively within the Zhihu community. Users can upvote and downvote answers and comments, which serve an instrumental role in our community engagements. Users can also identify and invite other users to answer any question in our community. Other engagement features include comments, likes, follows, favorites, and shares.

We organize a variety of online and offline user activities. Our roundtable series provide an online venue for discussions on a wide range of topics. Our themed online creativity events offer opportunities for users to share and learn from creative experience of other users.

Our users are instrumental in building and maintaining our community culture of sincerity, expertise, and respect. Users in our vibrant online community contribute through various engagement activities, respect diversity, and value constructive discussions. In addition to contributing to our content ecosystem through various engagement activities, certain experienced users can assign tags and participate in community reviews to collectively resolve disputes. We have rolled out a set of comprehensive community identity and recognition systems to strengthen users' sense of community belonging.

We adopt a systematic approach in regard to our user growth management. In particular, we seamlessly integrate our growth management strategies with all aspects of our operations, including our brand building efforts. Our product, content, community governance, technology, and sales and marketing teams collaborate closely with our growth management team to align and execute our user growth strategies and ensure optimized user acquisition.

We strategically deploy multi-dimensional user growth strategies to complement our word-of-mouth referrals, such as brand marketing, targeted campaigns, and pre-installations on mobile devices. To keep up with the dynamic market conditions and competitive landscape, we continually review and refine our user growth strategy. For example, to attract users of a broader and more diverse background, we focus on promoting ourselves as an online community where everyone can find their own answers, and we highlight our strength as the go-to online community for content coverage on trending topics (热榜) with significant social impact.

We also combine our user growth efforts with various scenario-oriented campaigns leveraging our rich and deep content portfolio as well as our trustworthy brand image. For example, each year during the national college matriculation exam (GaoKao) period in China, we prominently distribute content most relevant to GaoKao in an effort to attract new high school seniors as users, whom we consider to be an active user base with high growth potential.

Our content-centric approach to boost our brand recognition and marketing also includes cooperation with celebrities, targeted event campaigns, and fans events, as well as collaboration with major TV stations and online video platforms in China. Because the Zhihu brand itself imparts strong recognition of content quality and trustworthiness, our marketing strategy to combine brand building with user growth enables us to benefit from a low customer acquisition cost and achieve a fast rate of user growth.

Our Monetization

We have adopted a content-centric monetization approach. We derive revenues from online advertising, paid membership, content-commerce solutions, vocational training, and other services such as e-commerce.

The following table sets forth certain of our operating data for the periods indicated.

	For the Year Ended December 31,			2019-2021
	2019	2020	2021	CAGR
Average MAUs (in millions)	48.0	68.5	95.9	41.4 %
Advertising revenue per MAU (in RMB)	12.0	12.3	12.1	0.4 %
Average monthly subscribing members (in thousands)	574.2	2,362.6	5,076.0	197.3 %
Content-commerce solutions revenue per MAU (in RMB)	—	2.0	10.2	—

The following table sets forth our unaudited quarterly revenue, quarterly average MAUs, and quarterly revenue per MAU for the periods indicated. The quarterly revenue per MAU is calculated based on our selected unaudited quarterly revenue derived from our management accounts and have not been audited. Our historical results are not necessarily indicative of the results to be expected for any future period. The following information should be read in conjunction with the our consolidated financial statements included elsewhere in this annual report, including the related notes, as well as "Item 5. Operating and Financial Review and Prospects" in this annual report.

	1Q19	2Q19	3Q19	4Q19	1Q20	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
Quarterly revenue (RMB in millions)	118.0	154.6	173.9	224.0	188.2	261.4	382.8	519.8	478.3	638.4	823.5	1,019.2
Quarterly average MAUs (million)	39.2	44.3	51.7	56.9	61.8	64.5	72.2	75.7	85.0	94.3	101.2	103.3
QoQ growth of quarterly average MAUs	—	13.2 %	16.5 %	10.1 %	8.5 %	4.4 %	12.0 %	4.8 %	12.3 %	10.9 %	7.3 %	2.1 %
YoY growth of quarterly average MAUs	—	—	—	—	57.8 %	45.4 %	39.8 %	33.0 %	37.7 %	46.2 %	40.1 %	36.4 %
Quarterly revenue per MAU (RMB)	3.0	3.5	3.4	3.9	3.0	4.1	5.3	6.9	5.6	6.8	8.1	9.9

Our quarterly revenue, quarterly average MAUs, and quarterly revenue per MAU generally increased during 2019, 2020, and 2021, except for the quarterly revenue and quarterly revenue per MAU in the first quarters of 2020 and 2021 and the quarterly revenue per MAU in the third quarter of 2019. The decrease of our quarterly revenue in the first quarters of 2020 and 2021 compared to the fourth quarters of 2019 and 2020 was primarily due to seasonality, and the decrease in quarterly revenue per MAU in the same periods was affected by the seasonality impact on quarterly revenue and a steadily increasing trend on our quarterly average MAUs. The decrease of our quarterly revenue per MAU in the third quarter of 2019 compared to the second quarter of 2019 was primarily due to faster growth of average MAUs compared to the growth of revenue in the third quarter of 2019.

Due to our increasing spending in special promotion and advertising activities since 2021, such as our ten-year anniversary event, and the positive impact of the temporary recovery of the COVID-19 pandemic on our MAU growth, the quarterly average MAUs had higher quarter-over-quarter growth rate in the first two quarters of 2021. This resulted in a relatively lower quarter-over-quarter growth rate in the third quarter of 2021 while the quarterly average MAUs continue to increase at a 40.1% year-over-year rate. The quarterly average MAUs in the forth quarter of 2021 had have a relatively lower quarter-over-quarter growth rate due to regular quarterly fluctuation as observed in previous years and in line with industry trend, while the quarterly average MAUs increased at a 36.4% year-over-year rate. We believe that the lower quarter-over-quarter growth rate of quarterly average MAUs in third quarter and forth quarter of 2021 will not affect our path to profitability.

The decreasing growth rate in quarterly revenue per MAU since the second quarter of 2021 is due to the higher growth rate in quarterly average MAUs than quarterly revenue resulting from our strategic investments in user acquisition and engagement since 2021, evidenced by higher MAU growth starting from the second quarter of 2021 compared with the same periods in 2020.

Our quarterly average MAUs generally increased on a year-over-year basis during 2019, 2020, and 2021. Although we expect our user base to continue to experience a growing trend in the near future, we may experience fluctuations of quarterly average MAUs on a quarterly basis, particularly during the fourth and first quarter of a year. For instance, on a year-over-year basis, our quarterly average MAUs in the first quarter of 2022 will continue to experience growth, but on a quarter-over-quarter basis, it may stay relatively flat or even experience a decrease compared with the quarterly average MAUs in the previous quarter, primarily attributable to the seasonality and the impact of external environment and market condition. We will continue to enhance our monetization efforts to ensure our overall business growth, and we believe that the quarter-over-quarter fluctuation of our quarterly average MAUs in the first quarter of 2022 will not affect our path to profitability. Meanwhile we will continue to enhance the monetization effectiveness and efficiency on a per-MAU basis. According to CIC, it is common for companies that were experiencing growth trend in user base to record fluctuations in average MAUs on a monthly or quarterly basis, and the general trend of MAUs of such companies had not been materially affected by such individual quarterly fluctuations.

Online Advertising

We offer merchants and brands online advertising services to help them deliver advertisements effectively to their targeted audience. Our online advertising services primarily include launch-screen and feed advertisements. Advertisements can be placed at various parts in our Zhihu app and website in different formats. Merchants and brands can place display-based or performance-based advertisements. We primarily charge display-based advertisements by the cost-per-mille model, and primarily charge performance-based advertisements by the cost-per-click model and cost-per-mille model. The pricing of our advertising is determined based on our internal marked price guidelines that are updated from time to time. The guidelines generally take into consideration factors including, among other things, nature and type of advertisers, products and services to be marketed, prior relationships, level of comparable demands, and scale of orders, and are implemented based on marked price for our advertising services. As we continue to scale up our advertising business, we have maintained a moderately increasing trend on our marked price while narrowing the rebates and discounts offered to advertisers. In particular, while the marked price of our CPM-based services remained relatively stable, our CPD-based services experienced an increase as our user base expanded. These result in a moderately increasing trend on our effective pricing, which excludes rebates and discounts. We seek to maintain a delicate balance between our monetization needs and the necessity of maintaining a positive user experience on Zhihu with a reasonable level of advertising and commercial content presentation. Therefore, our sell-through rate is maintained at a moderate level, enabling room for growth but at the same time yielding a reasonable level of inventory for services offered to businesses and merchants. During 2019, 2020, and 2021, we had a sell-through rate of approximately 50% to 70%.

Our advertisers are generally attracted by, among other things, the expanding user base and user profiles as well as the content generated in our community. They typically select target audience based on user profiles and review performance indices instead of specifying target content category or monitoring other similar metrics. We served 2,539, 3,511, and 3,036 end-customers for our online advertising services, which may be advertisers procuring our services directly or through agents, in 2019, 2020, and 2021, respectively. The number of our end-customers for our online advertising services decreased from 2020 to 2021, primarily as part of our strategy to retain quality advertisers. Our advertising revenue per end-advertiser was approximately RMB227,000, RMB240,000, and RMB382,000 in 2019, 2020, and 2021, respectively. We do not believe that we have concentration in terms of user profiles.

The advertising-related laws and regulations require, among other things, the advertisers to obtain approvals from authorities responsible for advertisement review prior to publishing advertisements relating to areas including, but not limited to, medical care, pharmaceuticals, medical instruments, agrochemicals, veterinary pharmaceuticals, and health food, and specify content that is prohibited from being contained in advertisements of the aforementioned categories. For content on our platforms that constitutes advertisements falling in these categories, we have established and maintained a reviewing team and implemented strict policies to comply with the regulatory requirements, including setting forth detailed reviewing protocols for each relevant industry, requiring counterparties to submit duly-obtained approvals of advertisement review authorities and to covenant on the authenticity of such approval, verifying the authenticity of such approval through the website of the advertisement reviewing authorities, and confining the advertising content strictly to the extent approved. Where such content violates relevant laws and regulations, we take immediate measures to remove them. During 2019, 2020, and 2021, we had been compliant with laws and regulations governing advertisement content of the aforesaid industries and intend to closely monitor and follow regulatory developments regarding advertisements in our daily operation on a continuing basis.

Paid Membership

We offer Yan Selection (盐选) membership program, which provides our subscribing members with access to our premium content library, serving a wide range of users who view for pleasure, look to acquire knowledges and skills, and search for credible references. Compared to content that can be viewed free of charge, premium content under the paid membership subscription program primarily consists of content generated by content creators on our platform, some of which are professional content creators, and user-generated content licensed from third parties on a compensated basis. Specifically, these third parties primarily include professional or experienced content creators that provide us with commissioned works and copyright licensors that license us to use certain copyrighted works, although we are not a reseller of third-party content. Our subscribing members can enjoy 3.9 million pieces of premium content, including fictions and novels, other books and magazines, live and recorded lectures, and audio books, in addition to certain membership privileges and services. We also offer an on-demand access option to our content library to supplement our Yan Selection membership program. Substantially all of our paid membership revenue was derived from Yan Selection membership fees paid by the subscribing members. On-demand access to premium content accounted for 2.1%, 1.2% and 0.7% of our total revenues in 2019, 2020, and 2021, respectively. In the fourth quarter of 2021, we had 6.1 million average monthly subscribing members, representing a paying ratio of 5.9% of our paid membership program, up from 4.0% in the fourth quarter of 2020. We expect to expand our paid membership services by continuing to enhance the quality of our premium content, including professionally generated content and professional user-generated content, and diversifying the spectrum of our premium content library.

We offer subscription plans for the Yan Selection membership, and offer trials to attract more members. Our subscription plans are offered for monthly, quarterly, and annual membership services and the full subscription fees as of the date of this annual report were RMB25 for non-consecutive monthly membership services, RMB68 for non-consecutive quarterly membership services, and RMB238 for non-consecutive annual membership services. In addition, the full subscription fees as of the Last Practicable Date were RMB19 for automatic consecutive monthly membership services, RMB53 for automatic consecutive quarterly membership services, and RMB 198 for automatic consecutive annual membership services. The average monthly renewal rate of our Yan Selection membership program was 56%, 62%, and 65% in 2019, 2020, and 2021, respectively. The average revenue per subscribing member was RMB153, RMB136, and RMB132 in 2019, 2020 and 2021, respectively. The decrease in the average revenue per subscribing member during 2019, 2020, and 2021 was primarily due to the decreasing percentage of on-demand access to premium content in paid membership revenue in 2020 and 2021.

Content-Commerce Solutions

Our innovative content-commerce solutions provide merchants and brands with online marketing solutions that are seamlessly integrated into our online content community. As opposed to traffic-based online marketing, our content-commerce solutions adopt a content- based approach focusing on the content itself and its appeal to targeted audience to help merchants and brands engage with their target consumers in a more direct, accurate, and effective manner. Content-commerce solutions enable merchants and brands to create high-quality commercial content about their products and services, which can be distributed by and remain relevant to our users over a period of time, contributing to a rich content portfolio that can enhance our clients' branding. The typical duration of content relating to our content-commerce solutions ranges from a couple of days to one year. Such content is seamlessly embedded into answers, articles, and videos on Zhihu, to effectively capitalize on users' actionable intent. When high-quality commercial content is consumed in the relevant context, superior marketing effects could be achieved. In addition, through collaborating with us under content-commerce solutions, content creators can serve merchants and brands in their brand building, sales conversion, or other promotional needs. This avenue for monetization delivers value to consumers who want to learn about brands and make informed decisions, to merchants and brands who can seek to strengthen their dialog and improve engagement with consumers, and to content creators who can be rewarded for contributing high-quality commercial content to the online community. We believe that such stakeholders will continue to benefit from the virtuous cycle based on high-quality commercial content on Zhihu. If certain commercial content cannot meet the quality standard of the Zhihu community, such commercial content will be restricted from distribution in, or removed from, the Zhihu community.

We establish our content-commerce solutions based on a highly productive content creation community generating massive opportunities. Depending on the demand of merchants and brands, content can be created primarily through content creators in our community directly or through service agents such as multi-channel network or in-house production by merchants and brands. As we continue to facilitate content creation, enhance user experience, and provide monetization opportunities on Zhihu, an increasing number of content creators currently constitute the content creation force of our content-commerce solutions. Accordingly, we have rolled out the Cheese platform, which is a utility that enhances the effectiveness of content creators to generate commercial content that can be utilized by content-commerce solutions and other monetization channels such as online advertising. The Cheese platform enables us to efficiently identify, incentivize, and organize appropriate content creators to create and distribute high-quality commercial content, essentially promoting UGC-based commercial content on Zhihu. Merchants and brands thus can present high-quality commercial content through suitable topics and Q&As. Furthermore, we provide a suite of marketing utilities to be embedded in various parts of quality content to help merchants and brands realize sales conversion, customer acquisition, or service provision, among others. Merchants and brands thus can either direct the creation of such content or identify proper content to embed actionable utilities offered by content-commerce solutions.

Content-commerce solutions are seamlessly integrated with our content operations. In addition to facilitating creation of high-quality commercial content, our content-commerce solutions leverage our content distribution system to deliver recommended high-quality commercial content to the targeted audience with high precision. We distribute recommended high-quality commercial content just as other regular content on Zhihu in the form of answers, articles, and videos, as part of our regular feed recommendation process with its exposure determined based on its quality. Such content is assessed under the same standard and mechanism so that fulfilling commercial content gets better promotion. In addition, we can set up the recommended high-quality commercial content as a "next answer" to be displayed when relevant users have browsed an answer and click to view the next answer. After the content is published, brands and content creators are allowed to monitor its marketing efficiency and user engagement by accessing visualized and real-time metrics of numbers of followers, likes, and favorites on the content. Through highly accurate and targeted content distribution based on deep understanding of our content and users, our content-commerce solutions assist merchants and brands in realizing the commercial value of the relevant content, enhancing the exposure of its brands or products, and converting content consumption into actions by users.

Leveraging the volume of high-quality content on Zhihu, our content commerce-solutions have proven to be a highly effective marketing approach for merchants and brands, evidenced by an overall click-through rate multiple times higher than that of traditional advertising. According to the CIC Survey, most of our clients consider content-commerce solutions to be effective marketing solutions and help merchants and brands build a cumulative content portfolio for branding.

We had 80, 2,413, and 5,745 end-customers for our content-commerce solutions, which may be companies procuring our services directly or through agents, in 2019, 2020, and 2021, respectively. Our content-commerce solutions revenue per end-customer was approximately RMB8,000, RMB56,000, and RMB 170,000 in 2019, 2020, and 2021, respectively. As no industry accounts for a disproportionate amount of our content-commerce solutions revenue, we do not believe that our content-commerce solutions revenue has any concentration risk.

In addition, certain customers of our services offered to businesses and merchants may receive sales rebates. According to CIC, in China's online advertising industry, rebate rate usually ranges from 5% to 50% of the service fee, depending on different pricing strategies adopted by advertising media. Our rebate rate showed a declining trend during 2019, 2020, and 2021, generally staying at a relatively lower level within the industry range for rebate rates during 2019, 2020, and 2021.

We believe that we are still at a ramp-up stage for building our client base. The next-year churn rate (which refers to the percentage of customers that had business with us in a year and depart from our business in the following year) of our top 100 customers of our services offered to businesses and merchants, who contributed a majority of our total revenue from services offered to businesses and merchants during 2019, 2020, and 2021, was approximately 30% from 2019 to 2020, and decreased further to approximately 15% from 2020 to 2021. We strive to build a broader and more diverse client base, and to engage and select more merchants and brands in the Zhihu community to explore opportunities for long-term relationships.

Vocational Training

As we see significant amount of user engagements and Zhihu content relating to vocational and professional learning reflecting our users' strong demand in that field, we have launched our vocational training service in 2020. We offer a diverse course portfolio with a focus on professional qualification exams and other vocational education, which is a valuable supplement to our content offerings. Our vocational training service experienced rapid growth since launch. In 2021, we generated RMB45.8 million (US$7.2 million) in revenues from our vocational training services.

Our courses include vocational training courses that are self-developed and developed in collaboration with third-party education service providers. We utilize our existing technological infrastructure, including our content distribution engine, customer relationship management, data management platform, and transaction system, to smoothly support the growth of our vocational training services. We attract users by creating and distributing content that stimulate users' interest in topics that relate to the courses and facilitate users to purchase such courses. In addition, we conduct strategic acquisitions to strengthen our content supply. In July 2021, we acquired 55% of equity interest in Prez Limited from an Independent Third Party for a maximum consideration of RMB129.8 million, with exact consideration to be determined based on its performance after acquisition. Prez Limited primarily provides professional qualification exam preparation courses, such as CFA and CPA, under the PZ Academy brand. In November 2021, we acquired 55% equity interest in Yincheng Limited from an Independent Third Party for a maximum consideration of RMB52.3 million, with exact consideration to be determined based on its performance after acquisition. Yincheng Limited primarily provides vocational language exam preparation courses under the Papa brand. We intend to realize synergies following these acquisitions and enrich the content supply for our vocational training services while leveraging our strong content distribution and user growth capabilities. We will continue to develop content that revolve around our courses and teachers and nurture an ecosystem to help users advance their careers.

Other Monetization Channels

As part of our efforts to grow our content portfolio and cater to the evolving trend of our users' content consumption, we continue to identify and introduce additional products and services. We believe that there are significant monetization opportunities in many of our content domains, such as e-commerce, where users are highly engaged and we have accumulated a vast depositary of content.

Our e-commerce operations enable content creators to embed actionable utilities in their content to introduce and recommend products to our users. Recommended Goodies (好物推薦) translates proven community knowledge, experience, and insights with respect to products into a strong sales momentum. We currently direct traffic externally to third-party e-commerce platforms, which pay us commissions based on pre-agreed percentages of the relevant GMV realized on these platforms, and we split the commissions with the content creators. Our e-commerce service currently covers digital consumer products, home appliances, and lifestyle products. We are further expanding the merchandise categories and developing closed-loop e-commerce operations where transactions are completed within Zhihu instead of on third-party platforms.

Our trustworthy brand image makes Zhihu popular in various product categories. We work with third parties to offer book series. For example, we offer the popular title of children's books in China, A Hundred Thousand Whys, which in turn promotes the related content creation on Zhihu. In addition, we offer private label products such as Zhiwu (知物) strip bag coffee to further strengthen our brand equity.

Benefiting from our rich content portfolio, we are exploring opportunities to further develop the related intellectual property in collaboration with third parties, such as Zhihu- branded merchandise.

Zhihu Community Governance

We maintain community culture through our comprehensive community governance system, comprising our users, protocols, and algorithms. These elements interact with one another to build and maintain our culture.

Our community governance team actively identifies and responds to content that contradicts our community guidelines, assisted by our proprietary know-how and AI-powered content assessment algorithms as well as a set of system and protocols built upon years of operations. We analyze content, assess user behaviors and interactions, and ultimately enhance the quality of our content portfolio. As a result, content quality ultimately determines the order by which content is presented. Influential, reputable, and well-recognized users generally have more weight in the content assessment process. Through years of experience, we have accumulated a set of community guidelines in addition to our community by-laws and terms of service to help regulate all major aspects of our community's operations and activities.

People within the Zhihu community value our culture and can help safeguard an environment where everyone is encouraged to share their knowledge, experience, and insights while treating each other with respect. For example, our users can actively participate in community governance by initiating and participating in dispute review process, and certain users can even become "jurors" on Zhihu to decide on fact-finding in community disputes.

Sales and Marketing

Our competitive position benefits significantly from our high-quality content portfolio and our continued efforts to grow this content portfolio to foster better user experience. Leveraging our ever-growing high-quality content portfolio and our continued efforts to foster better user experience, we have built Zhihu into a strong brand. For example, "Zhihu Highly Upvoted" (知乎高赞) is a signature badge used by Chinese netizens to refer to high-quality and trustworthy content within the Chinese internet community. Our unique marketing approach in turn helps us attract and retain users organically and efficiently.

We strategically deploy multi-dimensional marketing strategies to complement our word-of-mouth referrals, such as brand marketing, targeted campaigns, and pre-installations on mobile devices. Currently, a majority of the downloads of the Zhihu app are from the app stores on Android devices, and all pre-installations of the Zhihu app are made on Android devices, which represent an insignificant portion of the Zhihu app installations on Android devices. To keep up with the dynamic market conditions and competitive landscape, we continually review and refine our marketing strategy. For example, to attract users of a broader and more diverse background, we focus on promoting ourselves as an online community where everyone can find their own answers, and we highlight our strength as the go-to online community for content coverage on trending topics (热榜) with significant social impact.

We also combine our marketing efforts with various scenario-oriented campaigns leveraging our rich and deep content portfolio as well as our trustworthy brand image. For example, each year during the national college matriculation exam (GaoKao) period in China, we prominently distribute content most relevant to GaoKao via GaoKao-related discussions in the Zhihu community that we host and organize in an effort to attract new high school seniors as users, whom we consider to be an active user base with high growth potential.

Our content-centric approach to boost our brand recognition and our marketing also includes cooperation with celebrities, targeted event campaigns, and fans events, as well as collaboration with major TV stations and online video platforms in China. Because the Zhihu brand itself imparts strong recognition of content quality and trustworthiness, our marketing strategy to combine brand building with user growth enables us to benefit from a lower customer acquisition cost and achieve a faster rate of user growth.

Data analytics underlie our marketing strategies. We constantly refine our algorithms for accurate identification of trending topics and user demand to better connect the right users with the right content. We also market our community and quality content through popular search engines, social media, trending apps, web navigation portals, and third-party mini-programs. Through these third-party platforms, we are able to further accumulate brand equity, expand content exposure via external channels, and enhance user acquisition capabilities. Moreover, synergies and collaborations between our products, content, technology, governance, and user growth teams enable our community to recommend the most attractive content to users for maximizing user engagement.

Technological Infrastructure

We develop and deploy our technological infrastructure and data capabilities based on and suitable for the nature of our content and our content-centric monetization strategies.

TopicRank sets the technological foundation of Zhihu as a trustworthy online content community from the content creator perspective. Powered by our AI capabilities, TopicRank assesses content through the understanding of content creators by continued iteration: it dynamically assigns a proper weight to any given user in any given field based on such user's knowledge, experience, and insights in such field; it assesses a particular piece of content created by a user from multiple dimensions taking into account the weight assigned to that user and the quality of engagement (such as the number of upvotes and downvotes) with other users and their respective weights in the field, and determines the quality of such content for distribution; and based on the wealth of historical assessment results, it updates the weight previously assigned to any given user on a real-time basis over a long period of time. It is continually refined by machine learning technology and our proprietary know-how and data insights derived from our decade-long operations.

We have been enhancing TopicRank's iterative process by allowing an overlay of our "fulfilling" approach, leveraging our deepened understanding of content. As TopicRank improves algorithmically over time, it increasingly facilitates the trust and confidence of users in our online community. As part of our efforts in developing and implementing our "fulfillness" approach, we are applying various technical means, including AI, machine learning, and natural language processing, in cultivating our technological capability of identifying and promoting "fulfilling content." In particular, to facilitate our experienced content operations team in enhancing the efficiency of machine learning, we continually evaluate and provide feedback of relevant system output to help with the iteration process. We believe that we are uniquely positioned to develop this "fulfillness" approach benefiting from our rich and deep content portfolio as well as our over a decade of operating experience.

We also seek to enhance our technological capability to support content management through an interplay and iteration between the "fulfillness" approach and the TopicRank algorithms. Credentials of content creators identified by TopicRank may be of high reference value, especially in the stage of initial development of the "fulfillness" approach, and this approach will feed TopicRank with accurate data to strengthen its content comprehension capabilities through better profiling of content creators.

We use an intelligent question routing system to accurately invite users to contribute answers. Based on the analysis of a particular question and data insights on users, the question routing system identifies users who have created content (preferably with positive feedback by other users) or shown interest in the relevant field based on user profiles and behaviors, and distributes the question to these users, prompting for a response. The question routing system continues to assess any further engagements by these invited users to further ascertain their level of interest and expertise, which in turn enhances the effectiveness of the question routing. In addition, we also supply content creators with a suite of productivity tools to assist in creating content in various forms and easily editing texts, images, and videos.

We also use a feed recommendation system and a search system to efficiently distribute content of interest to users. The feed recommendation system creates personalized home feeds when users access the Zhihu app and website based on user profiles and behaviors. The feed recommendation system enables us to optimize user experience and improve the signal-to- noise ratio. In addition, we have applied a combination of deep learning and traditional models to our search system, enabling an efficient access to their content of interest. We continue to improve both the feed recommendation and search systems through TopicRank and machine learning technology. We began in the third quarter of 2021 by considering fulfilling content as an additional factor for our feed recommendation system and the search system.

We apply multiple technologies based on natural language processing (NLP) to understand and respond to content, users, and their behaviors and interactions, ultimately to maintain the culture of the Zhihu community. We maintain and develop knowledge graphs to arrange content in a structured system, and, with the accumulation of information over years of operations, to organize and present knowledge, experience, and insights for users. We use graph embedding machine learning models to analyze interactions between users and determine user affinity, which together with other factors help refine our assessment of the appropriateness of any particular content and determine corresponding reactions. We also use AI-powered proprietary systems to defend against inappropriate content. For example, the low-quality content filtering system is able to promptly and accurately identify and fold or remove unfriendly, irrelevant, biased, or other inappropriate content in a matter of milliseconds to reduce interruption to users. The anti-spamming system can accurately identify spam activities such as casting upvotes and downvotes in violation of the community rules, thereby protecting the quality of discussion and interaction in our community. In addition, we have implemented AI-powered systems to enhance our ability to understand and manage video content. We believe that we are one of the few online content market players that are capable of managing content by recognizing tones and attitudes expressed by users under complex context and circumstances.

Our research and development team is comprised of highly qualified employees, substantially all of whom held bachelor's or higher degrees as of December 31, 2021. Our research and development expenses consist primarily of payroll and related expenses for research and development professionals. We plan to continue to invest in technology and innovation to enhance user and customer experience.

User Privacy and Data Security

Data security is crucial to our business operations. We have internal rules and policy to govern how we may use and share personal information, as well as protocols, technologies and systems in place to ensure that such information will not be accessed or disclosed improperly. Users must acknowledge the terms and conditions of the user agreement before accessing our products and services, under which they consent to our collection, use, and disclosure of their data in compliance with applicable laws and regulations.

When our users access and interact on Zhihu, certain personal information is directly collected by us, primarily including name, email address, mobile number, ID number, behavioral data, and other personal information. We would first obtain consent from our users to collect, store, and transmit data for providing services to them on Zhihu. Our data privacy policy agreed by our users describes our data practices in our operations, and we do not use any data for any purpose other than those specified in the data privacy policy with our users.

We store in-house all the data accumulated in our operations. Neither do we currently have any data sharing arrangement with external parties, nor does our business involve any cross-border data transfer. From an internal policy perspective, we limit access to our servers that store our user and internal data on a "need-to-know" basis. Our employees are granted access to the minimum extent that is necessary to fulfill their job responsibilities and are required to go through strict internal approval procedure before operating on such data. We also have entered into confidentiality agreements with relevant employees and organized trainings to strengthen their awareness for data privacy and protection. In addition, we adopt a data encryption system intended to ensure the secured storage and transmission of data, and prevent any unauthorized member of the public or third parties from accessing or using our data in any unauthorized manner. We have implemented relevant internal controls to ensure that user data is protected and that leakage and loss of such data is avoided. Furthermore, we have appointed a team of dedicated data protection professionals who are responsible for designing and monitoring data security management and emergency response. Data access attempts by any third party are subject to our evaluation and approval procedure based on the necessity and scope of the attempts and appropriate consent from our users. We typically provide third parties with anonymous and desensitized personal information and require such third parties to undertake equivalent data protection measures.

To date, we had not been subject to any material fines or other material penalties due to non-compliance with data privacy and security laws or regulations. Our PRC legal counsel is of the view that we had complied in all material aspects with all applicable PRC data privacy and cybersecurity laws and regulations during 2019, 2020, 2021 and up to the date of this annual report.

As of the date of this annual report, we were not subject to any claims or allegations relating to intellectual property that were material to our business operations.

Intellectual Property

We rely on a combination of patent, copyright, trademark, domain name, and trade secret laws and restrictions on disclosure to protect our intellectual property rights. As of December 31, 2021, we had 46 registered patents, 28 pending patent registration applications, 913 registered trademarks, 125 pending trademark registration applications, registered copyrights to 39 pieces of software, and 8 domain names (including zhihu.com). As of the date of this annual report, we were not subject to any claims or allegations relating to intellectual property that were material to our business operations.

Competition

We are one of the top five comprehensive online content communities and the largest Q&A-inspired online community in China, both in terms of average mobile MAUs and revenue in 2019, 2020, and 2021, according to CIC. We operate along other online content communities, including Q&A-inspired online communities. Our competitors mainly include (i) comprehensive online content communities and (ii) other online content communities that specialize in certain content verticals, such as certain lifestyle sharing platforms, live streaming platforms, knowledge sharing platforms, and hobby communities.

China's online content communities industry is highly competitive and rapidly changing with the evolving market demand and user preferences. We compete to attract, engage, and retain users, content creators, and merchants and brands. Our competitors may compete with us in a variety of ways, including by providing better content, fulfilling evolving user needs, providing content creation utilities, and conducting brand promotions and other marketing activities. Our content creators are generally free to post their content on our competitors' platforms, which may divert user traffic or attention from our platform.

We face competition for advertising and marketing spending of merchants and brands. We compete against other online content communities that offer services similar to our online advertising and content-commerce solutions. We also compete with internet companies that offer similar services, including but not limited to PGC-focused online content market players, search service providers, e-commerce platforms, and social networking platforms. We also compete against traditional media outlets, such as television, radio, and print for advertising and marketing budget.

Our paid membership service offerings compete with platforms that provide similar services to paying users, including other online content communities and PGC-focused online content market players that offer subscription programs or on-demand access to content library.

Besides advertising, paid membership, and content-commerce solutions, we also generate revenue through other services, including vocational training and e-commerce services. For our vocational training business, we may face competition for consumer spending with online or offline training players that focus on professional qualification exams and other vocational education. For our e-commerce business, we may face competition for consumer spending with other online content communities and e-commerce platforms.

We will continue to compete effectively with our competitors based on the community culture, content quality and richness, and governance mechanism that we have cultivated and precipitated for a decade, the strength and reputation of our Zhihu brand of trustworthiness, our ability to provide high-quality content, our ability to develop new products and services and enhancements to existing products and services to keep up with user preferences and demands, and our ability to continue to grow our user base.

As we introduce new products and services on our platform, as our existing products and services continue to evolve, or as other companies introduce new products and services, we may become subject to additional competition.

Regulations

Regulations on Value-Added Telecommunications Services

Licenses for Value-added Telecommunications Services

The PRC Telecommunications Regulations, promulgated by the State Council on September 25, 2000 and last amended with immediate effect on February 6, 2016, provides the regulatory framework for telecommunications service providers in China. The PRC Telecommunications Regulations classify telecommunications services into basic telecommunications services and value-added telecommunications services. Providers of value-added telecommunications services are required to obtain a license for value-added telecommunications services. According to the Catalog of Telecommunications Services, attached to the PRC Telecommunications Regulations and last amended by the PRC Ministry of Industry and Information Technology, or the MIIT, on June 6, 2019, information services provided via public communication network or the internet are value- added telecommunications services.

As a subcategory of the value-added telecommunications services, internet information services are regulated by the Administrative Measures on Internet Information Services, or the Internet Measures, which was promulgated by the State Council on September 25, 2000 and last amended with immediate effect on January 8, 2011. Internet information services are defined as "services that provide information to online users through the internet." The Internet Measures classifies internet information services into non-commercial internet information services and commercial internet information services. Commercial internet information service providers must obtain an ICP License from appropriate telecommunications authorities. An ICP License has a term of five years and can be renewed within 90 days prior to its expiration, according to the Administrative Measures for Telecommunications Businesses Operating Licensing, which was promulgated by the MIIT on March 1, 2009, last amended on July 3, 2017, and became effective on September 1, 2017.

Restrictions on Foreign Investment in Value-Added Telecommunications Services

The Regulations for the Administration of Foreign-Invested Telecommunications Enterprises, promulgated by the State Council on December 11, 2001 and last amended with immediate effect on February 6, 2016, requires foreign- invested value-added telecommunications enterprises in China to be established as Sino- foreign joint ventures, and foreign investors shall not acquire more than 50% of the equity interest of such an enterprise. In addition, the main foreign investor who invests in such an enterprise shall demonstrate a good track record and experience in such industry. Moreover, the joint ventures must obtain approvals from the MIIT and the Ministry of Commerce or their authorized local counterparts, before launching the value-added telecommunications business in China.

The Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Edition), or the 2021 Negative List, was promulgated by the NDRC and the Ministry of Commerce jointly on December 27, 2021 and effective on January 1, 2022. According to the 2021 Negative List, the proportion of foreign investments in an entity engaging in value-added telecommunications business (except for e-commerce, domestic multi-party communications, storage-forwarding, and call centers) shall not exceed 50%.

Pursuant to the Ministry of Information Industry's Notice on Strengthening the Administration of Foreign Investment in and Operation of Value-added Telecommunications Services, issued by the Ministry of Information Industry, the predecessor of the MIIT, on July 13, 2006, domestic value-added telecommunications enterprises were prohibited to rent, transfer, or sell licenses for value-added telecommunications services to foreign investors in any form, or provide any resources, premises, facilities, or other assistance in any form to foreign investors for their illegal operation of any value-added telecommunications business in China.

Regulations on Internet Content Services

The PRC government authorities have adopted regulations governing illegal content and information over the internet. The PRC government authorities strengthen the regulations on internet content from time to time to, among others, maintain the security of internet operations and internet content (see "– Regulations Relating to Information Security") and manage specific categories of internet content such as internet audio-visual programs (see "– Regulations Relating to Internet Audio-Visual Program Services").

On August 25, 2017, the CAC promulgated the Administrative Provisions on Internet Follow-up Comment Services, which took effect on October 1, 2017. It requires internet follow-up comment service providers to, among others, verify the identity information of the registered users, establish and improve a user information protection system, and establish and improve an internet follow-up comment review and administration system, a real-time inspection system, and emergency responses.

On August 25, 2017, the CAC promulgated the Administrative Provisions on Internet Forum and Community Services, which took effect on October 1, 2017. It requires internet forum and community service providers to, among others, assume principal responsibility to establish and improve an information review system, a real-time inspection system on public information, emergency responses, and personal information protection system as well as other information security administration systems, institute preventative measures, and be equipped with professionals suitable for the scale of its services.

On September 7, 2017, the CAC promulgated the Administrative Provisions on the Information Services Provided Through Public Accounts of Internet Users, which was last amended on January 22, 2021 and took effect on February 22, 2021. It requires information service platforms for public accounts to, among others, establish and improve a management system for user registration, information content security, content ecology, data security, personal information protection, intellectual property protection, and credit assessment, and establish a monitoring and evaluation mechanism for public accounts to prevent data falsification on account subscriptions and interaction counts.

On December 15, 2019, the CAC promulgated the Provisions on the Ecological Governance of Internet Information Content, which took effect on March 1, 2020 and specifies the content scopes that are encouraged, prohibited, or prevented from producing, reproducing, and publishing. The internet information content producers must take measures to prevent and resist the production of content that, among others, uses exaggerated titles that are inconsistent with the content, may incite racism or discrimination against geographic region, and propagates scandals. The internet information content service platforms must fulfill the main responsibility of content management, establish an ecological governance mechanism of the internet information, and improve system for user registration, account management, information publishing review, and emergency response. The internet information content service users, internet information content producers, and internet information content service platforms cannot, through manual or technical means, conduct acts that destroy the internet ecosystem.

Regulations Relating to Mobile Internet Applications Information Services

In addition to the PRC Telecommunications Regulations and other regulations above, mobile internet applications, or Apps, are specially regulated by the Administrative Provisions on Mobile Internet Applications Information Services, which was promulgated by the CAC on June 28, 2016, and became effective on August 1, 2016. The provisions set forth the relevant requirements on the App information service providers and the App Store service providers. The CAC and its local branches shall be responsible for the supervision and administration of nationwide and local App information respectively.

App providers shall strictly fulfill their responsibilities of information security management, and perform the following duties: (i) in accordance with the principles of "real name at background, any name at foreground," verify identities with the registered users through mobile phone numbers and other measures; (ii) establish and improve the mechanism for user information security protection, follow the principles of "legality, appropriateness, and necessity" in collection and use of personal information, expressly state the purpose, methods, and scope of information collection, and obtain the users' consent; (iii) establish and improve the verification and management mechanism for the information content; adopt proper penalties and measures such as warning, limiting functions, suspending updates, and closing accounts, for releasing illegal information content, as appropriate; keep records and report to the competent department; (iv) according to the law, protect and safeguard users' "rights to know and rights to choose" during installation or use; do not turn on the functions of collecting geographic location, reading address books, or using cameras or recordings, without expressing statement to the users and the consent of the users; do not turn on functions irrelevant to the services; and do not tie up and install irrelevant Apps; (v) respect and protect intellectual property rights; do not produce or release Apps which violate others' intellectual property rights; and (vi) keep records of user log information for 60 days.

Regulations Relating to Internet Culture Activities

Internet audio-visual program services are categorized as internet culture business. The Interim Administrative Provisions on Internet Culture, or the Internet Culture Provisions, promulgated by the Ministry of Culture on May 10, 2003, and last amended with immediate effect on December 15, 2017, provides that internet culture activities are classified into non-commercial internet cultural activities and commercial internet cultural entities. Under the Internet Culture Provisions, internet culture activities include: (i) the production, reproduction, importation, distribution, or streaming of internet culture products (such as online music, online game, online program, online series, online performance, online cartoon, etc.); (ii) the dissemination of culture products via internet; and (iii) the exhibitions, competitions, and other similar activities concerning internet culture products. To conduct commercial internet culture activities, the ICB License is a prerequisite.

On April 13, 2005, the State Council promulgated Decisions on the Entry of the Non-state-owned Capital into the Cultural Industry. On July 6, 2005, five PRC regulatory agencies, namely, the Ministry of Culture, State Administration of Radio, Film and Television, or the SARFT, the General Administration of Press and Publications, or the GAPP, the NDRC, and the Ministry of Commerce, jointly adopted Opinions on Introducing Foreign Investments to the Cultural Sector. According to these regulations, non-state-owned capital and foreign investors are generally not allowed to conduct the business of transmitting audio-visual programs via information network. In addition, internet cultural business (except for music) remains a prohibited area for foreign investment on the 2021 Negative List.

The Administrative Measures for Content Self-review by Internet Culture Business Entities, which were promulgated by the Ministry of Culture on August 12, 2013, and took effect on December 1, 2013, require internet culture business entities to review the content of culture products and services before providing them to the public. The content management system required to be established by an internet culture business entity shall specify the responsibilities, standards and processes for content review as well as accountability measures, and be filed with the local provincial branch of the Ministry of Culture.

Regulations Relating to Internet Audio-Visual Program Services

According to the Administrative Regulations on Internet Audio-Visual Program Service, or the Audio-Visual Regulations, promulgated by the SARFT and the Ministry of Information Industry on December 20, 2007, as amended on August 28, 2015, internet audio-visual program service refers to activities of making, editing, and integrating audio-visual programs, providing them to the general public via internet, and providing such services to other people by uploading. An internet audio-visual program service provider must obtain an Audio-Visual Permit issued by the SARFT or complete certain registration procedures with the SARFT. On March 30, 2009, the SARFT promulgated the Notice on Strengthening the Administration of the Content of Internet Audio-Visual Programs, which reiterates the pre-approval requirements for the internet audio-visual programs, including those on mobile network (if applicable), and prohibits internet audio-visual programs containing violence, pornography, gambling, terrorism, superstition, or other prohibited elements. The State Administration of Press, Publication, Radio, Film and Television, or the SAPPRFT, issued the Supplemental Notice on Improving the Administration of Online Audio-visual Content Including Internet Drama and Micro Films on January 2, 2014. This notice emphasizes that entities producing online audio-visual content, such as internet drama and micro films, must obtain a Radio and Television Program Production and Operation License, and that online audio-visual content service providers cannot release any internet drama or micro films that were produced by any entity lacking such license. For internet drama or micro films produced and uploaded by individual users, the online audio-visual service providers transmitting such content will be deemed responsible as a producer. Further, under this notice, online audio-visual service providers can only transmit content uploaded by individuals whose identity has been verified and such content shall comply with the relevant content management rules. This notice also requires that online audio-visual content, including internet drama and micro films, to be filed with the relevant authorities before release.

Pursuant to the Audio-Visual Regulations, providers of internet audio-visual program services are generally required to be either state-owned or state-controlled. According to the Official Answers to Press Questions Regarding the Audio-Visual Regulations published on the SARFT's website on February 3, 2008, the SARFT and Ministry of Information Industry clarified that providers of internet audio-visual program services who had legally engaged in such services prior to the adoption of the Audio-visual Regulations are eligible to re-register their businesses and continue their operations of internet audio-visual program services so long as those providers have not been in violation of the laws and regulations. This exemption will not be granted to internet audio-visual program service providers established after the adoption of the Audio-Visual Regulations.

These policies have later been reflected in the Notice on Relevant Issues Concerning Application and Approval of Audio-Visual Permit, issued by SARFT on April 8, 2008 and amended on August 28, 2015.

In March 2018, the SAPPRFT issued the Notice on Further Regulating the Transmission Order of Internet Audio-visual Programs, which requires that, among others, audio-visual platforms shall: (i) not produce or transmit programs intended to parody or denigrate classic works, (ii) not re-edit, re-dub, re-caption or otherwise ridicule classic works, radio and television programs, or original internet audio- visual programs without authorization, (iii) not transmit re-edited programs which unfairly distort the original content, (iv) strictly monitor the adapted content uploaded by platform users and not provide transmission channels for illicit content, (v) immediately take down unauthorized content upon receipt of complaints from copyright owners, radio and television stations, or film and television production institutions, (vi) strengthen the administration of movie trailers and prevent improper broadcasting of movie clips and trailers prior to authorized release, and (vii) strengthen the administration of sponsorship and endorsement for internet audio-visual programs. Pursuant to this notice, the provincial branches of SAPPRFT shall have the authority to supervise radio and television stations and websites that offer audio-visual programs within its jurisdiction and require them to further improve their content management systems and implement relevant management requirements.

According to the Administrative Provisions on Online Audio-Visual Information Services, promulgated jointly by the CAC, the PRC Ministry of Culture and Tourism, or the MCT, and the NRTA on November 18, 2019, and came into effect on January 1, 2020, online audio-visual information service providers shall authenticate user's real identity information based on organization code, identity card number, mobile phone number, etc. Online audio-visual information service providers shall not serve users who fail to provide their real identity information. Online audio-visual information service providers are the principals responsible for information content security management, and should, among other things, establish and improve their internal policies in relation to user registration, scrutiny of information publication, and information safety management. Organizations and individuals are prohibited from using online audio-visual information services and related information technology to carry out illegal activities and infringe legal rights and interests of others. Online audio-visual information service providers shall strengthen the management of the audio-visual information posted by users, deploy and apply identification technologies for illegal and non-real audio and video; if any user is found to produce, post or disseminate content prohibited by laws or regulations, the transmission of such information shall be ceased, and disposal measures such as deletion shall be taken to prevent the information from spreading, and such service providers shall save relevant records, and report to the CAC, the MCT, the NRTA, etc.

Under the Regulations on the Administration of Production of Radio and Television Programs, promulgated by the SARFT on July 19, 2004, and amended on October 29, 2020, any entities that engage in the production of radio and television programs are required to apply for a license from the SARFT or its local level counterparts. Entities with the Radio and Television Program Production and Operation License must conduct their operations strictly within the approved scope of production and operation. Except for radio and television broadcasting institutions, the above-mentioned permit holders shall not produce radio and television programs concerning current political news or special topics, columns and other programs of the same kind.

On January 9, 2019, the China Net-casting Services Association, or the CNSA, issued the Regulations on Administration of Network Short Video Platforms, pursuant to which a network platform is required to obtain the Audio-Visual Permit and relevant qualifications to provide short video services, and to strictly operate within the scope of such permit. The network short video platform is required to establish a chief-editor content management and responsibility system, and all content of a short video, including but not limited to its title, description, bullet-chats and comments shall be reviewed in advance before the content is broadcasted. Furthermore, the number of content reviewers a platform is required to host should, in principle, be more than one-thousandth of the number of short videos newly broadcasted on the platform per day. The content reviewers are expected to have high political awareness and professionality. On the same day, CNSA issued the Censoring Criteria for Network Short Video Content, which set forth certain details of content prohibited to be broadcasted, such as violence, pornography, gambling, terrorism, and other illegal or immoral content.

Regulations Relating to Publication

Restriction on Internet Publication

According to the Opinions on Introducing Foreign Investments to the Cultural Sector, foreign investors are prohibited from engaging in businesses such as internet publication and offline publication.

Pursuant to the Internet Measures, any engagement in internet information services related to publication, prior to applying for an operation permit or going through the record-filing formalities, are subject to the examination and consent of the relevant competent authorities as required by the laws, administrative regulations, and other relevant provisions. Pursuant to the Administrative Measures for Internet Publication Services, which were jointly promulgated by the SAPPRFT and the MIIT on February 4, 2016 and became effective on March 10, 2016, the entities providing internet publication services shall adopt a system of responsibility for examination of the content of publications, an editor responsibility system, a proofreader responsibility system, and other management systems to ensure the quality of its web publications. The SAPPRFT and its local branches are responsible for the prior approval, supervision, and administration of the internet publication services nationwide, and any internet publication service and internet publication item, or publication of internet publication item is required to obtain an internet publishing service license. Pursuant to the Administrative Measures for Internet Publication Services, Sino-foreign equity joint ventures, Sino-foreign cooperative ventures, and foreign-invested entities cannot engage in internet publication services.

The Administrative Measures for Internet Publication Services stipulate precise conditions for entities (except book, audio-visual, electronic, newspaper, and periodical publishers) engaging in internet publication services to meet, including: (i) have definite website domains, intelligent terminal applications and other publishing platforms for engaging in online publishing business; (ii) have a definite scope of internet publication services; (iii) have technical equipment necessary for engaging in internet publication services, provided that the relevant servers and storage devices must be located within the PRC territory; (iv) have the name and the articles of association for the online publishing service provider, and the name is definite and different from any of those of other publishers; (v) have a legal representative and main responsible person in compliance with the relevant requirements, which means that the legal representative must be a Chinese citizen with full civil capacity and permanently residing in the PRC territory, and that either the legal representative or the main responsible person should have vocational qualifications for technicians engaged in the profession of publishing at or above the intermediate level; (vi) in addition to the legal representative and the main responsible person, have at least eight full-time editorial and publishing employees having technical and vocational qualifications for the profession of publishing and other related professions as approved by the SAPPRFT that can meet the needs within the scope of online publishing services, of which there are at least three employees with professional qualifications at or above the intermediate level; (vii) have a content review system required for engaging in online publishing services; (viii) have a fixed work place; and (ix) other conditions as provided by laws, administrative regulations, and the SAPPRFT. The entities providing internet publication services implement a system of special management shares.

If any entity arbitrarily engages in internet publication services or arbitrarily launches online games (including online games authorized by foreign copyright owners) without approval, it might be banned by the competent publication administrative department and the administrative department for industry and commerce with statutory authority and a fine up to ten times the illegal operating income may be imposed.

In addition, based on the Administrative Measures for Internet Publication Services, an annual verification system shall apply to internet publishing service providers and shall be carried out once every year. The competent administrative departments for SAPPRFT should carry out the annual verification of internet publishing service providers within their respective administrative regions and report relevant information to the SAPPRFT.

Pursuant to the Administrative Regulations on Publishing (2020 Revised) promulgated by the State Council on November 29, 2020, organizations and individually owned businesses engaging in distribution of publications through information network such as the internet shall obtain a Publication Operation License pursuant to the provisions of these regulations.

Restriction on Offline Distribution

The Administrative Provisions on the Publication Market were jointly issued by the SAPPRFT and Ministry of Commerce on May 31, 2016 and became effective on June 1, 2016. The provisions regulate the activities of publication distribution, including publication wholesale or retail activities, which shall be carried with the Publication Operation License. Without licensing, such entity or individual may be ordered to cease illegal acts by the competent administrative department of publication, be given a warning, and be concurrently subject to a fine.

On June 28, 2012, the GAPP promulgated the Implementing Rules of the General Administration of Press and Publication for Supporting Private Capital's Participation in Publishing Operation Activities, pursuant to which, the GAPP, among other things, (i) continuously supports private capital to invest in the establishment of enterprises of publication issuance, wholesale, retailing, and chain operation to engage in the issuance and operation activities of publication products, such as books, newspaper, periodicals, video and audio products, and electronic publications; and (ii) continuously supports private capital to invest in the establishment of internet digital publishing enterprises, including online game publishing, mobile publishing, e-book publishing, and content software development to engage in publishing and operation activities.

Regulations Relating to Private Education

The PRC Education Law

The PRC Education Law, which was promulgated by the PRC National People's Congress on March 18, 1995, last amended on April 29, 2021 and effective on April 30, 2021, sets forth provisions relating to the fundamental education systems of the PRC, including a school education system comprising pre-school education, elementary education, secondary education and higher education, a system of nine-year compulsory education, a national education examination system, and a system of education certificates. The PRC Education Law stipulates that the state formulates plans for education development, establishes and operates schools and other educational institutions, and in principle, enterprises, institutions, social organizations and individuals are encouraged to operate schools and other educational institutions in accordance with PRC laws and regulations. Other than those sponsored wholly or partially by governmental funds or donated assets, schools or other educational institutions may be established for profit-making purposes.

The Law for Promoting Private Education of the PRC and Its Implementation Rules

The principal laws and regulations governing the private education industry in China are the Law for Promoting Private Education of the PRC, promulgated by the Standing Committee of the National People's Congress, or the SCNPC, on December 28, 2002, last amended and became effective on December 29, 2018, and the Implementation Rules for the Law for Promoting Private Education of the PRC, promulgated by the State Council on March 5, 2004, last amended on April 7 and became effective on September 1, 2021, or collectively, the Private Education Law and Implementation Rules. Under the Private Education Law and Implementation Rules, "private schools" are schools established by non-governmental organizations or individuals using non-government funds. Private schools providing certifications, pre-school education, self-study aid and other academic education are subject to approval by the education authorities, while private schools engaging in vocational qualification training and vocational skill training are subject to approval by the authorities in charge of labor and social welfare. Private schools have the same status as public schools, though private schools are prohibited from providing military, police, political and other kinds of education that are of a special nature. In addition, online education activities using internet technology are encouraged by the regulatory authorities and shall comply with laws and regulations related to internet management. A private school engaging in online education activities using internet technology shall obtain the relevant operating permit. It shall also establish and implement internet security management systems and take technical security measures. Upon discovery of any information whose release or transmission is prohibited by applicable laws or regulations, the private school shall immediately cease the transmission of that information and take further remedial actions, such as deleting that information, to prevent it from spreading. Records pertaining to the situation shall be kept and reported to the appropriate authorities.

On December 29, 2016, the State Council issued the Several Opinions of the State Council on Encouraging the Operation of Education by Social Forces and Promoting the Healthy Development of Private Education, which calls for the ease of access to the operation of private schools and encourage social forces to enter into the education industry. The opinions also provide that each level of the government shall increase their support to the private schools in terms of financial investment, financial support, autonomy policies, preferential tax treatments, land policies, fee policies, autonomy operation, protection of the rights of teachers and students etc. Further, the opinions require each level of the government to improve local policies on government support to for-profit and non-profit private schools by such means as preferential tax treatments.

Regulations on Online Education

On September 19, 2019, the Ministry of Education jointly with certain other PRC government authorities issued the Guidance Opinions on Promoting the Healthy Development of Online Education, which provides, among others, that (i) social forces are encouraged to establish online education institutions, develop online education resources, and provide high quality educational services; and (ii) an online education negative list shall be promulgated and industries not included in the negative list are open for all types of entities to enter into. Moreover, the Ministry of Education jointly with certain other PRC government authorities promulgated the Opinions on Guiding and Regulating the Orderly and Healthy Development of Educational Mobile Apps on August 10, 2019, which requires, among others, mobile apps that provide services for school teaching and management, student learning and student life, or home-school interactions, with school faculty, students or parents as the main users, and with education or learning as the main application scenarios, be filed with competent provincial regulatory authorities for education.

Regulations on Vocational Education

The Vocational Education Law of the PRC, promulgated by the SCNPC on May 15, 1996 and became effective on September 1, 1996, applies to vocational schools of all types and levels and vocational training of to all forms. According to the Vocational Education Law of the PRC, the State encourages institutional organizations, social organizations and other social groups and individuals to operate vocational schools and vocational training institutions according to relevant provisions of the State. The law divides vocational school education into elementary, secondary and higher vocational education. The elementary and secondary vocational school education shall be conducted respectively by elementary and secondary vocational schools. Higher vocational school education shall be conducted by higher vocational schools or by common institutions of higher learning in accordance with the actual needs and conditions. Other schools may implement vocational school education at corresponding levels in accordance with overall planning by the education administrative department. Vocational training includes pre- employment training, training to facilitate change of occupations, apprenticeship training, on-the-job training, job-transfer training and other vocational training. All these categories of training may be divided into elementary, secondary and higher level of vocational training in light of actual conditions. Vocational training is carried out by the corresponding vocational training institutions and/or vocational schools. Other schools or educational institutions may, depending on their own capabilities, carry out various forms of vocational training to meet social needs.

The government authorities have issued various rules and regulations in recent years regarding the reform and promotion of vocational education. For example, the Opinions of the State Council on the Implementation of Lifetime Vocational Skills Training System issued on May 3, 2018 proposes, among others, to improve the policy of lifelong vocational skills training for all workers in urban and rural areas from the beginning of labor preparation to the realization of employment and entrepreneurship and throughout the whole process of learning and career. The Notice of the State Council on Promulgation of the Implementation Plan for National Vocational Education Reform issued on January 24, 2019 provides, among others, that vocational education is as important as general education, and shall be put in a more prominent position in the reform and innovation of education and economic and social development of China. All sectors of the society, especially enterprises, are encouraged and supported to actively support vocational education and focus on cultivating high-quality workers and technical and skilled personnel. The Notice on the Implementation of Vocational skills-Upgrading Action “Internet + Vocational Skills Training Plan” issued on February 17, 2020 proposes, among others, to vigorously carry out online vocational skills training by innovating training methods, making full use of channels such as websites and mobile applications, and expanding the coverage of online vocational skills training, as well as to enrich the resources of online training courses by actively procuring technical colleges, enterprises and social training institutions to develop online training courses, grant access to online training resources, and cooperate with online training platforms to carry out online training. The Draft Revision of the Vocational Education Law of the PRC (Second Review Draft) published on December 24, 2021 for public comments requires, among others, that the departments in charge of industries, industry organizations and enterprises to participate in, support and carry on vocational education, and stipulates, among others, that the State encourages the development of vocational education in various levels and types, and support social forces to participate in vocational education extensively and equally. The Opinions on Promoting the High-quality Development of Modern Vocational Education issued on October 12, 2021, targets, among others, fundamental establishment of modern vocational education system, and significant improvement in the appeal and training quality of vocational education by 2025.

Regulations Relating to Internet Advertisement

The PRC Advertisement Law, which was promulgated by the SCNPC on October 27, 1994, and last amended on April 29, 2021, requires advertisers to ensure that the contents of the advertisements are true. The content of advertisements shall not contain prohibited information, including but not limited to: (i) information that harms the dignity or interests of the State or divulges the secrets of the State, (ii) information that contains wordings such as "national level," "highest level," and "best," and (iii) information that contains ethnic, racial, religious, or sexual discrimination. Advertisements posted or published through the internet shall not affect normal usage of network by users. Advertisements published in the form of pop-up window on the internet shall display the close button clearly to make sure that the viewers can close the advertisement by one-click.

On July 4, 2016, the PRC State Administration for Industry and Commerce, promulgated the Internet Advertisement Measures, which became effective on September 1, 2016. The Internet Advertisement Measures regulates any advertisement published on the internet, including but not limited to, those on websites, webpage, and Apps, those in the forms of word, picture, audio and video. According to the Internet Advertisement Measures, internet information service providers must stop any person from using their information services to publish illegal advertisements if they are aware of, or should reasonably be aware of, such illegal advertisements even though the internet information service provider merely provides information services and is not involved in the internet advertisement businesses. The following activities are prohibited under the Internet Advertisement Measures: (i) providing or using applications and hardware to block, filter, skip over, tamper with, or cover up lawful advertisements provided by others; (ii) using network access, network equipment, and applications to disrupt the normal transmission of lawful advertisements provided by others or adding or uploading advertisements without permission; or (iii) harming the interests of others by using false statistics or traffic data.

Regulations Relating to Information Security

Internet content in the PRC is also regulated and restricted from a state security point of view. The Decision Regarding the Safeguarding of Internet Security, enacted by the SCNPC on December 28, 2000, and amended with immediate effect on August 27, 2009, makes it unlawful to: (i) gain improper entry into a computer or system of strategic importance; (ii) disseminate politically disruptive information; (iii) leak state secrets; (iv) spread false commercial information; or (v) infringe intellectual property rights.

The Administrative Measures for the Security Protection of International Connections to Computer Information Network, issued by the Ministry of Public Security on December 16, 1997, and amended on January 8, 2011, prohibits the use of the internet in ways that, among other things, result in a leakage of state secrets or the distribution of socially destabilizing content. Socially destabilizing content includes any content that incites defiance or violations of PRC laws or regulations or subversion of the PRC government or its political system, spreads socially disruptive rumors or involves cult activities, superstition, obscenities, pornography, gambling or violence. State secrets are defined broadly to include information concerning PRC's national defense affairs, state affairs and other matters as determined by the PRC authorities.

In addition, the State Secrecy Bureau is authorized for the blocking of access to any website it deems to be leaking state secrets or failing to comply with the relevant legislation regarding the protection of state secrets.

On July 1, 2015, the SCNPC issued the National Security Law, which came into effect on the same day. The National Security Law provides that the state shall safeguard the sovereignty, security and cybersecurity development interests of the state, and that the state shall establish a national security review and supervision system to review, among other things, foreign investment, key technologies, internet, and information technology products and services, and other important activities that are likely to impact the national security of the PRC.

On November 7, 2016, the SCNPC issued the PRC Cybersecurity Law, which came into effect on June 1, 2017. This is the first Chinese law that focuses exclusively on cybersecurity. The PRC Cybersecurity Law provides that network operators must set up internal security management systems that meet the requirements of a classified protection system for cybersecurity, including appointing dedicated cybersecurity personnel, taking technical measures to prevent computer viruses, network attacks and intrusions, taking technical measures to monitor and record network operation status and cybersecurity incidents, and taking data security measures such as data classification, backups and encryption. The PRC Cybersecurity Law also imposes a relatively vague but broad obligation to provide technical support and assistance to the public and state security authorities in connection with criminal investigations or for reasons of national security. The PRC Cybersecurity Law also requires network operators that provide network access or domain name registration services, landline or mobile phone network access, or that provide users with information publication or instant messaging services, to require users to provide a real identity when they sign up. The PRC Cybersecurity Law sets high requirements for the operational security of facilities deemed to be part of the PRC's "critical information infrastructure." These requirements include data localization, i.e., storing personal information and important business data in China, and national security review requirements for any network products or services that may impact national security. Among other factors, "critical information infrastructure" is defined as critical information infrastructure, that will, in the event of destruction, loss of function or data leak, result in serious damage to national security, the national economy and people's livelihoods, or the public interest. Specific reference is made to key sectors such as public communication and information services, energy, transportation, water-resources, finance, public services, and e-government.

The Provisions on Technological Measures for Internet Security Protection, promulgated by the Ministry of Public Security on December 13, 2005, and became effective on March 1, 2006, requires internet service providers to keep records of certain information about their users (including user registration information, log-in and log-out times, IP addresses, content and time of posts by users) for at least 60 days. Under the PRC Cybersecurity Law, network operators must also report any instances of public dissemination of prohibited content. If a network operator fails to comply with such requirements, the PRC government may revoke its ICP License and shut down its websites.

On March 13, 2019, the Office of the Central Cyberspace Affairs Commission and the SAMR jointly issued the Notice on App Security Certification and the Implementation Rules on Security Certification of Mobile Internet Application, which encourages mobile application operators to voluntarily obtain app security certification, and search engines and app stores are encouraged to recommend certified applications to users.

On July 22, 2020, the Ministry of Public Security published the Guiding Opinions on the Implementation of Cybersecurity Hierarchical Protection System and Critical Information Infrastructure Security Protection System, which require, among others, to determine the cybersecurity protection level in a scientific manner based on the importance of network (including network facilities, information system, and data resources) in national security, economic construction, and social life, as well as factors such as the degree of harm after its destruction, to implement hierarchical protection and supervision, with emphasis on ensuring the security of critical information infrastructure and networks at or above the third level.

On June 10, 2021, the SCNPC issued the PRC Data Security Law, which has taken effect on September 1, 2021. The PRC Data Security Law provides a national data security review system, under which data processing activities that affect or may affect national security shall be reviewed. In addition, it clarifies the data security protection obligations of organizations and individuals carrying out data activities and implementing data security protection responsibility, data processors shall establish and improve the whole-process data security management rules, organize and implement data security trainings as well as take appropriate technical measures and other necessary measures to protect data security. Any organizational or individual data processing activities that violate the PRC Data Security Law shall bear the corresponding civil, administrative or criminal liabilities depending on specific circumstances.

The Opinions on Lawfully and Strictly Cracking Down Illegal Securities Activities, promulgated by the General Office of the CPC Central Committee and the General Office of the State Council on July 6, 2021, called for the enhanced administration and supervision of overseas-listed China-based companies, proposed to revise the relevant regulation governing the overseas issuance and listing of shares by such companies and clarified the responsibilities of competent domestic industry regulators and government authorities. The aforesaid Opinions also called for the improvement of the relevant laws and regulations on data security, cross-border data flow and confidential information management, and proposed to revise the provisions on strengthening confidentiality and archive administration of overseas issuance and listing of securities, to consolidate responsibility for information security of overseas listed companies, and to strengthen the standardized management of the cross-border information provision mechanism and process.

On July 30, 2021, the State Council promulgated the Regulations for the Security Protection of Critical Information Infrastructure, which became effective on September 1, 2021, referring "critical information infrastructures" as important network facilities and information systems in important industries including public communications and information services, as well as those that may seriously endanger national security, national economy, people's livelihood, or public interests in the event of damage, loss of function, or data leakage. On November 14, 2021, the CAC published a draft of the Administrative Regulations for Internet Data Security, providing that data processors conducting the following activities shall apply for cybersecurity review: (i) merger, reorganization or division of internet platform operators that have acquired a large number of data resources related to national security, economic development or public interests affects or may affect national security; (ii) listing in a foreign country of data processors processing over one million users' personal information; (iii) listing in Hong Kong which affects or may affect national security; or (iv) other data processing activities that affect or may affect national security. The CAC solicited comments until December 13, 2021, but there is no timetable as to when it will be enacted. On December 28, 2021, the CAC, the NDRC, the MIIT, and several other PRC governmental authorities jointly promulgated the Cybersecurity Review Measures, which took effect on February 15, 2022 and replaced the Measures for Cybersecurity Review promulgated in April 2020 and effective in June 2020. According to the Cybersecurity Review Measures, critical information infrastructure operators that intend to purchase internet products and services and internet platform operators engaging in data processing activities that affect or may affect national security must be subject to the cybersecurity review, and an internet platform operator possessing personal information of over one million users and intending to be listed on a foreign stock exchange must be subject to the cybersecurity review.

Regulations Relating to Internet Privacy

In recent years, PRC government authorities have enacted legislation on internet use to protect personal information from any unauthorized disclosure. PRC law does not prohibit internet content provision operators from collecting and analyzing personal information from their users. However, the Internet Measures prohibits an internet content provision operator from insulting or slandering a third party or infringing the lawful rights and interests of a third party.

The Several Provisions on Regulating the Market Order of Internet Information Services, promulgated by the MIIT on December 29, 2011 and became effective on March 15, 2012, stipulates that internet content provision operators must not, without user consent, collect user personal information, which is defined as user information that can be used alone or in combination with other information to identify the user, and may not provide any such information to third parties without prior user consent. Internet content provision operators may only collect user personal information necessary to provide their services and must expressly inform the users of the method, content and purpose of the collection and processing of such user personal information. In addition, an internet content provision operator may only use such user personal information for the stated purposes under the internet content provision operator's scope of service. Internet content provision operators are also required to ensure the proper security of user personal information and take immediate remedial measures if user personal information is suspected to have been disclosed. If the consequences of any such disclosure are expected to be serious, ICP operators must immediately report the incident to the telecommunications regulatory authority and cooperate with the authorities in their investigations.

On December 28, 2012, the SCNPC promulgated the Decision of the Standing Committee of the National People's Congress on Strengthening Online Information Protection (with immediate effect. The Decision provides that, among others, internet service providers shall abide by the principles of legality, legitimacy and necessity, clearly state the purpose, method and scope of the collection and use of information, obtain the consent of the person whose information is being collected when collecting and using a citizen's personal information during business activities, and shall not violate the provisions of laws and regulations or the agreement between the parties when collecting and using information.

On July 16, 2013, the MIIT issued the Order for the Protection of Telecommunication and Internet User Personal Information, which came into effect on September 1, 2013. Most requirements under the order that are relevant to internet content provision operators are consistent with pre-existing requirements but the requirements under the order are often more stringent and have a wider scope. If an internet content provision operator wishes to collect or use personal information, it may do so only if such collection is necessary for the services it provides. Further, it must disclose to its users the purpose, method and scope of any such collection or use, and must obtain consent from its users whose information is being collected or used. Internet content provision operators are also required to establish and publish their rules relating to personal information collection or use, keep any collected information strictly confidential, and take technological and other measures to maintain the security of such information. Internet content provision operators are required to cease any collection or use of the user personal information, and de-register the relevant user account, when a given user stops using the relevant internet service. Internet content provision operators are further prohibited from divulging, distorting or destroying any such personal information, or selling or providing such information unlawfully to other parties.

The PRC Cybersecurity Law imposes certain data protection obligations on network operators, including that network operators may not disclose, tamper with, or damage users' personal information that they have collected, and are obligated to delete unlawfully collected information and to amend incorrect information. Moreover, internet operators may not provide users' personal information to others without consent. Exempted from these rules is information irreversibly processed to preclude identification of specific individuals. Also, the PRC Cybersecurity Law imposes breach notification requirements that will apply to breaches involving personal information.

On February 4, 2015, the CAC promulgated the Provisions on the Administrative of Account Names of Internet Users, which became effective as of March 1, 2015, setting forth the authentication requirement for the real identity of internet users by requiring users to provide their real names during the registration process. In addition, these provisions specify that internet information service providers are required by these provisions to accept public supervision, and promptly remove illegal and malicious information in account names, profile photos, introductions and other registration-related information reported by the public in a timely manner. On October 26, 2021, the CAC published the Provisions on the Administrative of Account Names Information of Internet Users (Draft for Comments) for public comments. Pursuant to these provisions, internet user account service platforms shall, among others, establish, improve and strictly implement account name information management system, information content security system, and personal information protection system, and establish an account name information dynamic check patrol system for the verification of real identity information, improve their technical measures for purposes of account information legal compliance, and support account name authenticity checks.

On January 23, 2019, the Office of the Central Cyberspace Affairs Commission, the MIIT, the Ministry of Public Security, and the SAMR jointly issued the Notice on Special Governance of Illegal Collection and Use of Personal Information via Apps, which restates the requirement of legal collection and use of personal information, encourages app operators to conduct security certifications, and encourages search engines and APP stores to clearly mark and recommend those certified Apps.

On August 22, 2019, the CAC issued the Regulation on Cyber Protection of Children's Personal Information, effective on October 1, 2019. Network operators are required to establish special policies and user agreements to protect children's personal information, and to appoint special personnel in charge of protecting children's personal information. Network operators who collect, use, transfer or disclose personal information of children are required to, in a prominent and clear way, notify and obtain consent from children's guardians.

On November 28, 2019, the CAC, MIIT, the Ministry of Public Security and SAMR jointly issued the Measures to Identify Illegal Collection and Usage of Personal Information by Apps, which lists six types of illegal collection and usage of personal information, including "not publishing rules on the collection and usage of personal information" and "not providing privacy rules."

Pursuant to the Ninth Amendment to the PRC Criminal Law, issued by the SCNPC on August 29, 2015, and became effective on November 1, 2015, any internet service provider that fails to fulfill its obligations related to internet information security administration as required under applicable laws and refuses to rectify upon orders shall be subject to criminal penalty. In addition, Interpretations of the Supreme People's Court and the Supreme People's Procuratorate on Several Issues Concerning the Application of Law in the Handling of Criminal Cases Involving Infringement of Personal Information, issued on May 8, 2017, and effective as of June 1, 2017, clarified certain standards for the conviction and sentencing of the criminals in relation to personal information infringement. In addition, on May 28, 2020, the National People's Congress adopted the PRC Civil Code, which came into effect on January 1, 2021. Pursuant to the PRC Civil Code, the personal information of a natural person shall be protected by the law. Any organization or individual shall legally obtain such personal information of others when necessary and ensure the safety of such information, and shall not illegally collect, use, process or transmit personal information of others, or illegally purchase or sell, provide or make public personal information of others.

The MIIT issued the Notice on the Further Special Rectification of App Infringing upon Users' Personal Rights and Interests on July 22, 2020, which requires that certain conducts of app service providers should be inspected, including, among others, (i) collecting or using personal information without the user's consent, collecting or using personal information beyond the necessary scope of providing services, and forcing users to receive advertisements; (ii) requesting user's permission in a compulsory and frequent manner, or frequently launching third- parties apps; and (iii) deceiving and misleading users into downloading apps or providing personal information. It also sets forth that the period for the regulatory specific inspection on apps and that the MIIT will order the non-compliant entities to modify their business within five business days, or otherwise the MIIT will make public announcement, remove the apps from the app stores or impose other administrative penalties.

On June 1, 2021, the Law of the PRC on the Protection of Minors (Revised in 2020), promulgated by the SCNPC, has come into effect, which specifies stringent requirements for the protection of minors' information.

On August 20, 2021, the SCNPC promulgated the PRC Personal Information Protection Law, which became effective on November 1, 2021. The PRC Personal Information Protection Law specifically specifies the rules for handling sensitive personal information, i.e., personal information that, once leaked or illegally used, may easily cause harm to the dignity of natural persons or grave harm to personal or property security, including information on biometric characteristics, financial accounts, individual location tracking, etc., as well as the personal information of minors under the age of 14. Personal information handlers shall bear responsibility for their personal information handling activities and adopt the necessary measures to safeguard the security of the personal information they handle. Otherwise, the personal information handlers will be ordered to correct or suspend or terminate the provision of services, confiscation of illegal income, fines or other penalties.

On September 17, 2021, the CAC, together with eight other government authorities, jointly issued the Guidelines on Strengthening the Comprehensive Regulation of Algorithms for Internet Information Services. The guidelines provide that daily monitoring of data use, application scenarios, and effects of algorithms must be carried out by the relevant regulators, and relevant regulators should conduct security assessments of algorithms. The guidelines also provide that an algorithm filing system should be established, and classified security management of algorithms should be promoted.

On December 31, 2021, the CAC, the MIIT, the Ministry of Public Security, and the SAMR jointly promulgated the Administrative Provisions on Internet Information Service Algorithm Recommendation, which took effect on March 1, 2022. The Administrative Provisions on Internet Information Service Algorithm Recommendation, among others, implements classification and hierarchical management for algorithm recommendation service providers based on various criteria, requires algorithm recommendation service providers to inform users of their provision of algorithm recommendation services in a conspicuous manner, and publicize the basic principles, purpose intentions, and main operating mechanisms of algorithm recommendation services in an appropriate manner, and requires such service providers to provide users with options that are not specific to their personal profiles, or convenient options to cancel algorithmic recommendation services.

Regulations Relating to Online Live Streaming Services

On November 4, 2016, the CAC issued the Administrative Regulations on Online Live Streaming Services, which came into effect on December 1, 2016, pursuant to which all online livestreaming service providers must take various measures during operation of live streaming services, including but not limited to: (i) establish platforms for reviewing live streaming content, conducting classification, and grading management according to the online live streaming content categories, user scale, and others, and adding tags to graphics, video, audio, or broadcast tag information for platforms; (ii) conduct verification on online live streaming users with valid identification information (e.g., authentic mobile phone numbers) and validate the registration of online live streaming publishers based on their identification documents (such as identity documents, business licenses, and organization code certificates); (iii) examine and verify the authenticity of the identification information of online live streaming service publishers, classify and file such identification information records with the internet information offices at the provincial level where they are located and provide such information to relevant law enforcement departments upon legal request; (iv) enter into a service agreement with the users of online live streaming services of which the essential clauses should be under guidance of internet information offices at the provincial level, to clarify the rights and obligations of the parties and require them to comply with the laws, regulations, and platform conventions; and (v) establish a credit-rating system and a blacklist system, to provide management and services according to such credit rating, prohibit re-registration of accounts by online live streaming service users on the black list, and promptly report such users to relevant internet information offices.

According to the Administrative Regulations on Online Live Streaming Services, online live streaming service providers and online live streaming publishers that provide internet news information services without licenses, or exceed the scope of their licenses, shall subject to punishment by the CAC and its provincial counterparts which may include an order to cease such services and a fine of RMB10,000 to RMB30,000. Other violations of the Administrative Regulations on Online Live Streaming Services are subject to punishment by the national and local internet information offices; if such violations constitute criminal offenses, criminal investigations or penalties may be imposed.

On September 2, 2016, the SAPPRFT issued the Circular of the State Administration of Press, Publication, Radio, Film and Television on Issues Concerning Strengthening the Administration of Online Live Streaming of Audio-Visual Programs. According to the circular, appropriate Audio-Visual Permit is a prerequisite for online audio-visual live streaming of general cultural events of social communities, sports events, important political, military, economic, social, and cultural events. Relevant information about specific activities to be streamed shall be filled in advance to the provincial counterparts of the SAPPRFT. Online audio-visual live streaming service providers shall censor and tape such programs and retain them for at least 60 days for future check by the administrative departments; and they shall have an established emergency reaction plan in place to replace programs in violation of laws and regulations. Bullet-screen comments shall be forbidden in the live streaming of important political, military, economic, social, sports, and cultural events. Special censor shall be appointed for bullet-screen comments in the live streaming of general cultural events of social communities and sports events. Hosts, guests, and targets hired or invited by online audio-visual live streaming programs shall meet the following requirements: (i) patriotic and law-abiding; (ii) good public reputation and social image, no scandals and no misdeeds; (iii) dress, hairstyle, language, and actions are consistent with public order and good morals, and not drawing topics with vulgar contents or contents inappropriate to discuss in public.

According to the Measures for the Administration of Cyber Performance Business Operations, promulgated by the Ministry of Culture on December 2, 2016 and became effective on January 1, 2017, a cyber-performance business entity engaging in cyber performance business operations shall, in accordance with the Internet Culture Provisions, apply to the cultural administrative department at the provincial level for an ICB License, and the license shall specify the scope of its cyber performance. A cyber-performance business entity shall indicate the number of its ICB License in a conspicuous position on its homepage. According to the 2021 Negative List, foreign investors are prohibited from investing in an entity holding an ICB License (except for music). Consequently, foreign investors are prohibited from investing in businesses that carry out and operate the short video and live streaming and online game via platform(s), as these businesses are deemed as businesses subject to foreign-investment prohibition by virtue of the platform's need to obtain an ICB License (except for music).

According to the Notice on Strengthening the Management of Internet Live Streaming Service issued by Office of the National "Anti- pornography and Anti-illegal" Working Group, MIIT, the Ministry of Public Security, MCT, NRTA and CAC on August 1, 2018, live streaming service providers shall perform website ICP filing procedures with the competent telecommunication department according to law, and live streaming service providers involved in operating telecommunication business and internet news information, network performance, live streaming of audio-visual programs and other businesses shall apply to the relevant departments to obtain licenses for telecommunication business operation, internet news information services, network culture operation, and Audio-Visual Permit, etc., and within 30 days of the live streaming service going online, shall carry out public security registration procedures in accordance with relevant regulations with the public security authorities.

According to the Notice on Strengthening the Administration of the Online Show Live Streaming and E-commerce Live Streaming issued by the NRTA on November 12, 2020, with respect to platforms providing online show live streaming services or e-commerce live streaming services, the overall ratio of front-line content reviewers to online live streaming rooms shall be 1:50 or higher. A platform shall report the number of its live streaming rooms, streamers and content reviewers to the provincial branch of the NRTA on a quarterly basis. Online show live streaming platforms shall tag content and streamers by category. A streamer cannot change the category of the programs offered in his or her live streaming room without prior approval from the platform. Users that are minors or without real-name registration are forbidden from virtual gifting, and platforms shall limit the maximum amount of virtual gifting per time, per day, and per month. When the virtual gifting by a user reaches half of the daily/monthly limit, a consumption reminder from the platform and a confirmation from the user by text messages or other means are required before the next transaction. When the amount of virtual gifting by a user reaches the daily/monthly limit, the platform shall suspend the virtual gifting function for such user for that day or month.

According to the Guiding Opinions on Strengthening the Standardized Management of Network Live Broadcasting issued by CAC, Office of the National "Anti-pornography and Anti-illegal" Working Group, MIIT, the Ministry of Public Security, MCT, the State Administration for Market Regulation, or the SAMR and NRTA on February 9, 2021, live streaming platforms that carry out business-oriented network performance activities must hold the ICB License and carry out an ICP filing; live streaming platforms that carry out internet audio-visual program services must hold the Audio-Visual Permit (or complete the registration in the national internet audio-visual platforms information registration and management system) and carry out an ICP filing; live streaming platforms that carry internet news information service must hold internet news information service license. Live streaming platforms shall file with local cyberspace administration office in a timely manner and shall cancel its filing immediately after it ceases to provide live streaming services.

The Law of the PRC on the Protection of Minors (Revised in 2020) promulgated on October 17, 2020 and effective on June 1, 2021, provide that, among others, internet live streaming service providers shall not provide minors under age 16 with online live streaming publisher account registration service, and must obtain the consent from parents or guardians and verify the identity of the minors before allowing minors aged 16 or above to register live streaming publisher accounts.

Regulations Relating to Companies

The establishment, operation and management of corporate entities in China are governed by the PRC Company Law, which was promulgated on December 29, 1993, last amended with immediate effect on October 26, 2018. Under the PRC Company Law, companies are generally classified into two categories: limited liability companies and limited companies by shares. The PRC Company Law also applies to foreign-invested limited liability companies but where other relevant laws regarding foreign investment have provided otherwise, such other laws shall prevail.

The latest major amendment to the PRC Company Law took effect on March 1, 2014, pursuant to which there is no longer a prescribed timeframe for shareholders of a company to make full capital contribution to a company, except as otherwise provided in other relevant laws, administrative regulations and State Council decisions. Instead, shareholders are only required to state the capital amount that they commit to subscribe to in the articles of association of the company. Furthermore, the initial payment of a company's registered capital is no longer subject to a minimum capital requirement, and the business license of a company will not show its paid-up capital. In addition, shareholders' contribution of the registered capital is no longer required to be verified by capital verification agencies.

Regulations Relating to Foreign Investment

Investment activities in the PRC by foreign investors are principally governed by the Catalog of Industries for Encouraging Foreign Investment, or the Encouraging Catalog, and the Special Administrative Measures (Negative List) for Foreign Investment Access, or the Negative List, which were promulgated and are amended from time to time by the Ministry of Commerce and the NDRC, and together with the Foreign Investment Law, and their respective implementation rules and ancillary regulations. The Encouraging Catalog and the Negative List lay out the basic framework for foreign investment in China, classifying businesses into three categories with regard to foreign investment: "encouraged," "restricted," and "prohibited." Industries not listed in the Catalog are generally deemed as falling into a fourth category "permitted" unless specifically restricted by other PRC laws.

On December 27, 2020, the Ministry of Commerce and the NDRC released the Catalog of Industries for Encouraging Foreign Investment (2020 Version), which became effective on January 27, 2021, to replace the previous Encouraging Catalog. On December 27, 2021, the Ministry of Commerce and the NDRC released the 2021 Negative List, which became effective on January 1, 2022, to replace the previous Negative List.

On March 15, 2019, the National People's Congress promulgated the Foreign Investment Law, or the FIL, which became effective on January 1, 2020, and replaced the major laws and regulations governing foreign investment in China. Pursuant to the FIL, "foreign investments" refer to investment activities conducted by foreign investors directly or indirectly in China, which include any of the following circumstances: (i) foreign investors setting up foreign-invested enterprises in China solely or jointly with other investors, (ii) foreign investors obtaining shares, equity interests, property portions or other similar rights and interests of enterprises within China, (iii) foreign investors investing in new projects in China solely or jointly with other investors, and (iv) investment of other methods as specified in laws, administrative regulations, or as stipulated by the State Council.

According to the FIL, foreign investment shall enjoy pre-entry national treatment, except for foreign invested entities that operate in industries deemed to be either "restricted" or "prohibited" in the Negative List. The FIL provides that foreign invested entities operating in foreign "restricted" or "prohibited" industries will require entry clearance and other approvals. The FIL does not comment on the concept of "de facto control" or contractual arrangements with variable interest entities, however, it has a catch-all provision under definition of "foreign investment" to include investments made by foreign investors in China through means stipulated by laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions to provide for contractual arrangements as a form of foreign investment.

The FIL also provides several protective rules and principles for foreign investors and their investments in China, including, among others, that local governments shall abide by their commitments to the foreign investors; foreign-invested enterprises are allowed to issue stocks and corporate bonds; except for special circumstances, in which case statutory procedures shall be followed and fair and reasonable compensation shall be made in a timely manner, expropriate or requisition the investment of foreign investors is prohibited; mandatory technology transfer is prohibited, allows foreign investors' funds to be freely transferred out and into the PRC territory, which run through the entire lifecycle from the entry to the exit of foreign investment, and provide an all-around and multi-angle system to guarantee fair competition of foreign-invested enterprises in the market economy. In addition, foreign investors or the foreign investment enterprise should be imposed legal liabilities for failing to report investment information in accordance with the requirements. Furthermore, the FIL provides that foreign invested enterprises established according to the existing laws regulating foreign investment may maintain their structure and corporate governance within five years after the implementing of the FIL, which means that foreign invested enterprises may be required to adjust the structure and corporate governance in accordance with the current PRC Company Law and other laws and regulations governing the corporate governance.

Along with the FIL, the Implementing Rules of Foreign Investment Law promulgated by the State Council and the Interpretation of the Supreme People's Court on Several Issues Concerning the Application of the Foreign Investment Law promulgated by the Supreme People's Court became effective on January 1, 2020. The Implementing Rules of Foreign Investment Law further clarified that the state encourages and promotes foreign investment, protects the lawful rights and interests of foreign investors, regulates foreign investment administration, continues to optimize foreign investment environment, and advances a higher-level opening.

On December 30, 2019, the Ministry of Commerce and the SAMR, jointly promulgated the Measures for Information Reporting on Foreign Investment, which became effective on January 1, 2020. Pursuant to the Measures for Information Reporting on Foreign Investment, where a foreign investor carries out investment activities in China directly or indirectly, the foreign investor or the foreign-invested enterprise shall submit the investment information to the competent commerce department.

Regulations Relating to Dividend Distribution

The principal laws and regulations regulating the dividend distribution of dividends by foreign-invested enterprises in China include the PRC Company Law and the FIL. Under the current regulatory regime in the PRC, foreign-invested enterprises in China may pay dividends only out of their accumulated profit, if any, determined in accordance with PRC accounting standards and regulations. A PRC company is required to set aside as general reserves at least 10% of its after-tax profit, until the cumulative amount of such reserves reaches 50% of its registered capital. A PRC company shall not distribute any profits until any losses from prior fiscal years have been offset.

Regulations Relating to Intellectual Property

Copyright

The PRC has enacted various laws and regulations relating to the protection of copyright. China is a signatory to some major international conventions on protection of copyright and became a member of the Berne Convention for the Protection of Literary and Artistic Works in October 1992, the Universal Copyright Convention in October 1992, and the Agreement on Trade-Related Aspects of Intellectual Property Rights upon its accession to the World Trade Organization in December 2001.

The PRC Copyright Law promulgated by the SCNPC on September 7, 1990, last amended on November 11, 2020 and became effective on June 1, 2021, and its related Implementing Regulations issued by the State Council on August 2, 2002 and last amended on January 30, 2013 and became effective on March 1, 2013, provides that Chinese citizens, legal persons, or other organizations shall, whether published or not, enjoy copyright in their works, which include, among others, works of literature, art, natural science, social science, engineering technology and computer software. The purpose of the PRC Copyright Law aims to encourage the creation and dissemination of works which is beneficial for the construction of socialist spiritual civilization and material civilization and promote the development and prosperity of Chinese culture.

Under the Regulations on Protection of the Right to Network Dissemination of Information that took effect on July 1, 2006 and was amended on January 30, 2013, it is further provided that an internet information service provider may be held liable under various situations, including if it knows or should reasonably have known a copyright infringement through the internet and the service provider fails to take measures to remove or block or disconnects links to the relevant content, or, although not aware of the infringement, the internet information service provider fails to take such measures upon receipt of the copyright holder's notice of infringement. The internet information service provider may be exempted from indemnification liabilities under the following circumstances:

(i) any internet information service provider that provides automatic internet access service upon instructions from its users or provides automatic transmission service for works, performances and audio/visual products provided by its users is not required to assume indemnification liabilities if (a) it has not chosen or altered the transmitted works, performance and audio/visual products and (b) it provides such works, performances and audio/visual products to the designated users and prevents any person other than such designated users from obtaining access;

(ii) any internet information service provider that, for the sake of improving network transmission efficiency, automatically stores and provides to its own users the relevant works, performances and audio/visual products obtained from any other internet information service providers, is not required to assume the indemnification liabilities if (a) it has not altered any of the works, performances or audio/visual products that are automatically stored; (b) it has not affected such original internet information service provider in holding the information about where the users obtain the relevant works, performances and audio/visual products; and (c) when the original internet information service provider revises, deletes or shields the works, performances and audio/visual products, it will automatically revise, delete or shield the same;

(iii) any internet information service provider that provides its users with information memory space for such users to provide the works, performances and audio/visual products to the general public via an informational network is not required to assume the indemnification liabilities if (a) it clearly indicates that the information memory space is provided to the users and publicizes its own name, contact person and web address; (b) it has not altered the works, performances and audio/visual products that are provided by the users; (c) it is not aware of or has no justified reason to know that the works, performances and audio/visual products provided by the users infringe upon the copyrights of others; (d) it has not directly derived any economic benefit from the providing of the works, performances and audio/visual products by its users; and (e) after receiving a notice from the copyright holder, it promptly deletes the allegedly infringing works, performances and audio/visual products pursuant to the regulation;

(iv) an internet information service provider that provides its users with search engine or link services should not be required to assume the indemnification liabilities if, after receiving a notice from the copyright holder, it disconnects the link to the allegedly infringing works, performances and audio/visual products pursuant to the regulation, unless it is aware of or should reasonably have known the infringement.

The Measures on Administrative Protection of Internet Copyright, that were promulgated by the Ministry of Information Industry and National Copyright Administration, or the NCA on April 29, 2005, and became effective on May 30, 2005, provided that an internet information service provider shall take measures to remove the relevant contents, record relevant information after receiving the notice from the copyright owner that some content communicated through internet infringes upon his/its copyright and preserve the copyright owner's notice for 6 months. Where an internet information service provider clearly knows an internet content provider's tortuous act of infringing upon another's copyright through internet, or fails to take measures to remove relevant contents after receipt of the copyright owner's notice although it does not know it clearly, and meanwhile damages public benefits, the infringer shall be ordered to stop the tortious act, and may be imposed of confiscation of the illegal proceeds and a fine of not more than 3 times the illegal business amount; if the illegal business amount is difficult to be calculated, a fine of not more than RMB100,000 may be imposed.

The Notice on Regulating Copyright Order of Internet Reproduction issued by the NCA on April 17, 2015 includes the following four major points: (i) clarify certain important issues related to internet copyrights in existing laws and regulations, including the definition of news, clarify statutory licenses that are not applicable to internet copyrights and prohibit the distortion of title and work intent; (ii) guide the press and media to further improve the internal management of copyrights, especially requesting the press to clarify the copyright sources of their content; (iii) encourage the press and internet media to actively carry out copyright cooperation; and (iv) ask the copyright administrations at all levels to strictly implement copyright supervision.

The Computer Software Copyright Registration Measures, promulgated by the NCA on February 20, 2002, regulate registrations of software copyright, exclusive licensing contracts for software copyright and transfer contracts. The NCA shall be the competent authority for the nationwide administration of software copyright registration and the PRC Copyright Protection Center, is designated as the software registration authority. The PRC Copyright Protection Center shall grant registration certificates to the Computer Software Copyrights applicants which conforms to the provisions of both the Computer Software Copyright Registration Measures and the Computer Software Protection Regulations (Revised in 2013).

The Provisions of the Supreme People's Court on Certain Issues Related to the Application of Law in the Trial of Civil Cases Involving Disputes over Infringement of the Right of Dissemination through Information Networks, promulgated by the Supreme People's Court on December 17, 2012, last amended on December 29, 2020 and came into effect on January 1, 2021, provide that web users or web service providers who create works, performances or audio-video products, for which others have the right of dissemination through information networks or are available on any information network without authorization shall be deemed to have infringed upon the right of dissemination through information networks.

The Notice on Launching "Jian Wang 2020" Special Actions Against Internet Piracy and Copyright Infringement, jointly issued by NCA, MIIT, the Ministry of Public Security, and CAC in 2020 includes carrying out special rectification of audio-visual works copyright and social platform copyright, and consolidating the achievements of copyright management in key areas, including strengthening the rectification of the infringements such as plagiarism, adaptation and database copying in the knowledge sharing field and the copyright supervision over large-scale knowledge sharing platforms.

Trademark

Trademarks are protected by the PRC Trademark Law which was promulgated on August 23, 1982, and last amended on April 23, 2019 as well as the Implementation Regulation of the PRC Trademark Law which was adopted by the State Council on August 3, 2002 and amended on April 29, 2014. In the PRC, registered trademarks include commodity trademarks, service trademarks, collective marks and certification marks.

The PRC Trademark Office of National Intellectual Property Administration is responsible for the registration and administration of trademarks throughout the PRC and grants a term of ten years to registered trademarks. Trademarks are renewable every ten years where a registered trademark needs to be used after the expiration of its validity term. A registration renewal application shall be filed within twelve months prior to the expiration of the term. A trademark registrant may license its registered trademark to another party by entering into a trademark license contract. Trademark license agreements must be filed with the trademark office to be recorded. The licensor shall supervise the quality of the commodities on which the trademark is used, and the licensee shall guarantee the quality of such commodities. As with trademarks, the PRC Trademark Law has adopted a "first come, first file" principle with respect to trademark registration. Where trademark for which a registration application has been made is identical or similar to another trademark which has already been registered or been subject to a preliminary examination and approval for use on the same kind of or similar commodities or services, the application for registration of such trademark may be rejected. Any person applying for the registration of a trademark may not prejudice the existing right first obtained by others, nor may any person register in advance a trademark that has already been used by another party and has already gained a "sufficient degree of reputation" through such party's use.

Patent

Patents are protected by the PRC Patent Law which was promulgated on March 12, 1984, last amended on October 17, 2020, and effective on June 1, 2021, and its Implementation Rules promulgated on January 19, 1985 and last amended on January 9, 2010 by the State Council. A patentable invention or utility model must meet three conditions: novelty, inventiveness and practical applicability. Patents cannot be granted for scientific discoveries, rules and methods for intellectual activities, methods used to diagnose or treat diseases, animal and plant breeds or substances obtained by means of nuclear transformation. The Patent Office under the National Intellectual Property Administration is responsible for receiving, examining and approving patent applications. A patent is valid for a twenty-year term for an invention, a ten-year term for a utility model, and a fifteen-year term for a design. Except under certain specific circumstances provided by law, any third-party user must obtain consent or a proper license from the patent owner to use the patent, or else the use will constitute an infringement of the rights of the patent holder.

Domain Names

Domain names are protected under the Administrative Measures on the Internet Domain Names promulgated by the MIIT on August 24, 2017. The MIIT is the major regulatory body responsible for the administration of the PRC internet domain names, under supervision of which the China Internet Network Information Center is responsible for the daily administration of .cn domain names and Chinese domain names. China Internet Network Information Center adopts the "first to file" principle with respect to the registration of domain names. In November 2017, the MIIT promulgated the Notice of the Ministry of Industry and Information Technology on Regulating the Use of Domain Names in Providing Internet-based Information Services, which became effective on January 1, 2018. Pursuant to the notice, the domain names used by an internet-based information service provider in providing internet- based information services must be registered and owned by such provider in accordance with the law. If the internet-based information service provider is an entity, the domain name registrant must be the entity (or any of the entity's shareholders), or the entity's principal or senior manager.

Regulations Relating to Foreign Exchange

General Administration of Foreign Exchange

Under the PRC Foreign Currency Administration Rules promulgated by the State Council on January 29, 1996, and last amended on August 5, 2008 and various regulations issued by the SAFE and other relevant PRC government authorities, Renminbi is convertible into other currencies for the purpose of current account items, such as trade related receipts and payments, payment of interest and dividends. The conversion of Renminbi into other currencies and remittance of the converted foreign currency outside China for the purpose of capital account items, such as direct equity investments, loans and repatriation of investment, requires the prior approval from the SAFE or its local branches. Payments for transactions that take place within China must be made in Renminbi. Unless otherwise provided by laws and regulations, PRC companies may repatriate foreign currency payments received from abroad or retain the same abroad. Foreign exchange proceeds under the current accounts may be either retained or sold to a financial institution engaging in settlement and sale of foreign exchange pursuant to relevant PRC rules and regulations. For foreign exchange proceeds under the capital accounts, approval from the SAFE is required for its retention or sale to a financial institution engaging in settlement and sale of foreign exchange, except where such approval is not required under the relevant PRC rules and regulations.

Regulations Relating to Offshore Investment

On July 4, 2014, the SAFE promulgated the Notice of the State Administration of Foreign Exchange on Relevant Issues Concerning Foreign Exchange Administration for Domestic Residents to Engage in Overseas Investment, Financing and Round-Trip Investment via Special Purpose Vehicles, or SAFE Circular 37, which regulates the relevant matters involving foreign exchange registration for round-trip investment. Under SAFE Circular 37, a PRC resident must register with the local SAFE counterpart before contributing assets or equity interests in an offshore special purpose vehicle, that is directly established or indirectly controlled by such PRC resident for the purpose of conducting investment or financing. In addition, following the initial registration, in the event of any major change in respect of the offshore special purpose vehicle, including, among other things, a change of offshore special purpose vehicle's PRC resident shareholder(s), the name of the offshore special purpose vehicle, terms of operation, or any increase or reduction of the offshore special purpose vehicle's capital, share transfer or swap, and merger or division, the PRC resident shall complete the change of foreign exchange registration procedures for offshore investment with the local SAFE counterpart. According to the procedural guideline as attached to SAFE Circular 37, the principle of review has been changed to "the domestic individual resident shall only register the offshore special purpose vehicle directly established or controlled (first level)." At the same time, the SAFE has issued the Operation Guidance for the Issues Concerning Foreign Exchange Administration over Round-trip Investment with respect to the procedures for SAFE registration under SAFE Circular 37, which became effective on July 4, 2014, as an attachment to SAFE Circular 37. Under the relevant rules, failure to comply with the registration procedures set out in SAFE Circular 37 may result in restrictions being imposed on the foreign exchange activities of the relevant onshore company, including the payment of dividends and other distributions to its offshore parent or affiliate, and may also subject relevant PRC residents to penalties under PRC foreign exchange administration regulations. PRC residents who hold any shares in the company from time to time are required to register with the SAFE in connection with their investments in the company.

On February 13, 2015, the SAFE promulgated the Notice of the State Administration of Foreign Exchange on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, effective on June 1, 2015, which further amended SAFE Circular 37 by requiring domestic residents to register with qualified banks rather than SAFE or its local counterpart in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing.

On March 30, 2015, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Reforming the Administration Measures on Conversion of Foreign Exchange Registered Capital of Foreign-invested Enterprises, or SAFE Circular 19, effective on June 1, 2015, according to which the foreign exchange capital of foreign-invested enterprises must be subject to the Discretional Foreign Exchange Settlement, which refers to the foreign exchange capital in the capital account of a foreign-invested enterprise for which the rights and interests of monetary contribution has been confirmed by the local foreign exchange bureau (or the book-entry registration of monetary contribution by the banks) can be settled at the banks based on the actual operational needs of the foreign-invested enterprise. The proportion of Discretional Foreign Exchange Settlement of the foreign exchange capital of a foreign-invested enterprise is temporarily determined to be 100%. The Renminbi converted from the foreign exchange capital will be kept in a designated account, and if a foreign-invested enterprise needs to make further payment from such account, it still needs to provide supporting documents and go through the review process with the banks.

SAFE issued the Circular of the State Administration of Foreign Exchange on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular 16, on June 9, 2016, which became effective on the same day. Pursuant to SAFE Circular 16, enterprises registered in China may also convert their foreign debts from foreign currency to Renminbi on a discretionary basis. SAFE Circular 16 provides an integrated standard for conversion of foreign exchange under capital account items (including but not limited to foreign currency capital and foreign debts) on a discretionary basis which applies to all enterprises registered in China. SAFE Circular 16 reiterates the principle that Renminbi converted from foreign currency-denominated capital of a company may not be directly or indirectly used for purposes beyond its business scope or prohibited by PRC laws or regulations, while such converted Renminbi shall not be provided as loans to its non-affiliated entities. On October 23, 2019, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Further Promoting the Facilitation of Cross-Border Trade and Investment, or SAFE Circular 28, which became effective on the same day. SAFE Circular 28 allows non-investment foreign-invested enterprises to use their capital funds to make equity investments in China as long as such investments do not violate the currently effective Negative List and the target investment projects are genuine and in compliance with laws. In addition, SAFE Circular 28 stipulates that qualified enterprises in certain pilot areas may use their capital income from registered capital, foreign debt, and overseas listing for the purpose of domestic payments without providing authenticity certifications to the relevant banks in advance for those domestic payments.

Regulations Relating to Stock Incentive Plans

In February 2012, SAFE promulgated the Notices of the State Administration of Foreign Exchange on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly-Listed Company, individuals participating in any stock incentive plan of any overseas publicly listed company who are PRC citizens or non-PRC citizens who reside in China for a continuous period of not less than one year, subject to a few exceptions are required to register with SAFE or its local branches and complete certain other procedures through a domestic qualified agent, which could be a PRC subsidiary of such overseas listed company, and complete certain other procedures. The participants must also retain an overseas entrusted institution to handle matters in connection with their exercise of stock options, the purchase and sale of corresponding stocks or interests and fund transfers. In addition, the PRC agent is required to amend the SAFE registration with respect to the stock incentive plan if there is any material change to the stock incentive plan, the PRC agent or the overseas entrusted institution or other material changes. The PRC agents must, on behalf of the PRC residents who have the right to exercise the employee share options, apply to SAFE or its local branches for an annual quota for the payment of foreign currencies in connection with the PRC residents' exercise of the employee share options. The foreign exchange proceeds received by the PRC residents from the sale of shares under the stock incentive plans granted and dividends distributed by the overseas listed companies must be remitted into the bank accounts in China opened by the PRC agents before distribution to such PRC residents. Under the Circular of the State Taxation Administration on Issues Concerning Individual Income Tax in Relation to Equity Incentives promulgated by the STA and effective from August 24, 2009, listed companies and their domestic organizations shall, according to the individual income tax calculation methods for "wage and salary income" and stock option income, lawfully withhold and pay individual income tax on such income.

Regulations Relating to Tax

Enterprise Income Tax

The PRC Enterprise Income Tax Law and the Regulations for the Implementation of the Law on Enterprise Income Tax, or collectively, the EIT Laws, were promulgated on March 16, 2007, and December 6, 2007, respectively and were most recently amended on December 29, 2018 and April 23, 2019, respectively. According to the EIT Laws, taxpayers consist of resident enterprises and non-resident enterprises. Resident enterprises are defined as enterprises that are established in China in accordance with PRC laws, or that are established in accordance with the laws of foreign countries but whose actual or de facto control is administered from within China. Non-resident enterprises are defined as enterprises that are set up in accordance with the laws of foreign countries and whose actual administration is conducted outside China, but have established institutions or premises in China, or have no such established institutions or premises but have income generated from inside China. Under the EIT Laws and relevant implementing regulations, a uniform EIT rate of 25% is applicable. However, if non-resident enterprises have not formed permanent establishments or premises in China, or if they have formed permanent establishment institutions or premises in China but there is no actual relationship between the relevant income derived in China and the established institutions or premises set up by them, the enterprise income tax is, in that case, set at the rate of 10% for their income sourced from inside China.

The Notice of the State Taxation Administration Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as People's Republic of China Tax Resident Enterprises on the Basis of De Facto Management Bodies, or STA Circular 82, promulgated on April 22, 2009 and amended on January 29, 2014 and December 29, 2017, sets out the standards and procedures for determining whether the "de facto management body" of an enterprise registered outside of China and controlled by PRC enterprises or PRC enterprise groups is located within China. The Administrative Measures for Enterprise Income Tax of Chinese-Controlled Offshore Incorporated Resident Enterprises (Trial), or STA Bulletin 45, which was promulgated on July 27, 2011, amended on June 15, 2018, and effective on September 1, 2011, further provides guidance on the implementation of STA Circular 82 and clarifies certain issues in the areas of resident status determination, post-determination administration and competent tax authorities' procedures.

According to STA Circular 82, a Chinese-controlled offshore incorporated enterprise will be regarded as a PRC tax resident by virtue of having a "de facto management body" in China and will be subject to PRC EIT on its worldwide income only if all of the following criteria are met: (i) the primary location of the day-to-day operational management is in China; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in China; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholders meeting minutes are located or maintained in China; and (iv) 50% or more of voting board members or senior executives habitually reside in China. According to STA Bulletin 45, when provided with a copy of Chinese tax resident determination certificate from a resident Chinese controlled offshore incorporated enterprise, the payer should not withhold income tax when paying the Chinese-sourced dividends, interest, royalties, etc. to the PRC controlled offshore incorporated enterprise.

The EIT Laws permit certain High and New Technology Enterprises, or HNTEs, to enjoy a reduced 15% EIT rate subject to these HNTEs meeting certain qualification criteria and permit certain small low-profit enterprises to enjoy a reduced 20% EIT rate subject to certain conditions. In addition, the relevant EIT laws and regulations also provide that entities recognized as software enterprises are able to enjoy a tax holiday consisting of a two-year- exemption commencing from their first profitable calendar year and a 50% reduction in ordinary tax rate for the following three calendar years, while entities qualified as key software enterprises can enjoy a preferential EIT rate of 10%.

The Bulletin of the State Taxation Administration on Issues of Enterprise Income Tax on Indirect Transfers of Assets by Non-PRC Resident Enterprises, or STA Bulletin 7, was issued on February 3, 2015 and most recently amended pursuant to the Announcement of the State Taxation Administration on Issues Concerning the Withholding of Enterprise Income Tax at Source on Non-PRC Resident Enterprises, which was issued on October 17, 2017, amended on June 15, 2018 and effective as of December 1, 2017. Pursuant to STA Bulletin 7, an "indirect transfer" of assets, including equity interests in a PRC resident enterprise, by non-PRC resident enterprises may be recharacterized and treated as a direct transfer of PRC taxable assets, if the arrangement does not have a reasonable commercial purpose and was established for the purpose of avoiding payment of PRC EIT. As a result, gains derived from an indirect transfer may be subject to PRC EIT. According to STA Bulletin 7, "PRC taxable assets" include assets attributed to an establishment or a place of business in China, immoveable properties in China, and equity investments in PRC resident enterprises. In respect of an indirect offshore transfer of assets of a PRC establishment or place of business, the relevant gain is to be regarded as effectively connected with the PRC establishment or a place of business and therefore included in its EIT filing and would consequently be subject to PRC EIT at a rate of 25%. Where the underlying transfer relates to the immoveable properties in China or to equity investments in a PRC resident enterprise, which is not effectively connected to a PRC establishment or a place of business of a non-resident enterprise, a PRC EIT at 10% would apply, subject to available preferential tax treatment under applicable tax treaties or similar arrangements, and the party who is obligated to make the transfer payments has the withholding obligation. There is uncertainty as to the implementation details of STA Bulletin 7.

VAT and Business Tax

Before August 2013 and pursuant to applicable PRC tax regulations, any entity or individual conducting business in the service industry is generally required to pay a business tax at the rate of 5% on the revenue generated from providing services. However, if the services provided are related to technology development and transfer, the business tax may be exempted subject to approval by the relevant tax authorities.

In November 2011, the Ministry of Finance and the STA promulgated the Pilot Plan for Imposition of Value-Added Tax to Replace Business Tax. In May and December 2013, April 2014, March 2016 and July 2017, the Ministry of Finance and the STA promulgated five circulars to further expand the scope of services that are to be subject to VAT instead of business tax. Pursuant to these tax rules, from August 1, 2013, a VAT was imposed to replace the business tax in certain service industries, including technology services and advertising services, and from May 1, 2016, VAT replaced business tax in all industries, on a nationwide basis. On November 19, 2017, the State Council further amended the Interim Regulation of the People's Republic of China on Value Added Tax to reflect the normalization of the pilot program. The VAT rates generally applicable are simplified as 17%, 11%, 6% and 0%, and the VAT rate applicable to the small-scale taxpayers is 3%. Unlike business tax, a taxpayer is allowed to offset the qualified input VAT paid on taxable purchases against the output VAT chargeable on the revenue from services provided.

On April 4, 2018, the Ministry of Finance and the STA issued the Notice on Adjustment of VAT Rates, which came into effect on May 1, 2018. According to the above-mentioned notice, the taxable goods previously subject to VAT rates of 17% and 11% respectively become subject to lower VAT rates of 16% and 10%, respectively starting from May 1, 2018.

On March 20, 2019, the Ministry of Finance, the STA and the General Administration of Customs issued the Announcement on Policies for Deepening the VAT Reform, which came into effect on April 1, 2019, to further slash VAT rates. According to the announcement, (i) for general VAT payers' sales activities or imports previously subject to VAT at an existing applicable rate of 16% or 10%, the applicable VAT rate is adjusted to 13% or 9% respectively; (ii) for the agricultural products purchased by taxpayers to which an existing 10% deduction rate is applicable, the deduction rate is adjusted to 9%; (iii) for the agricultural products purchased by taxpayers for production or commissioned processing, which are subject to VAT at 13%, the input VAT will be calculated at a 10% deduction rate; (iv) for the exportation of goods or labor services that are subject to VAT at

16%, with the applicable export refund at the same rate, the export refund rate is adjusted to 13%; and (v) for the exportation of goods or cross-border taxable activities that are subject to VAT at 10%, with the export refund at the same rate, the export refund rate is adjusted to 9%.

Dividend Withholding Tax

The PRC Enterprise Income Tax Law provides that since January 1, 2008, an enterprise income tax rate of 10% will normally be applicable to dividends declared to non-PRC resident investors which do not have an establishment or place of business in the PRC, or which have such establishment or place of business, but the relevant income is not effectively connected with the establishment or place of business, to the extent such dividends are derived from sources within the PRC.

Pursuant to the Arrangement Between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Incomes, and other applicable PRC laws, if a Hong Kong resident enterprise is determined by the competent PRC tax authority to have satisfied the relevant conditions and requirements under this arrangement and other applicable laws, the 10% withholding tax on the dividends the Hong Kong resident enterprise receives from a PRC resident enterprise may be reduced to 5%. However, based on the Notice of the State Taxation Administration on Issues Relating to the Implementation of Dividend Clauses in Tax Treaties issued on February 20, 2009, if the relevant PRC tax authorities determine, in their discretion, that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such PRC tax authorities may adjust the preferential tax treatment. According to the Announcement of the State Taxation Administration on Issues Relating to "Beneficial Owner" in Tax Treaties, which was issued on February 3, 2018 by the STA, effective as of April 1, 2018, when determining the applicant's status of the "beneficial owner" regarding tax treatments in connection with dividends, interests or royalties in the tax treaties, several factors, including without limitation, whether the applicant is obligated to pay more than 50% of its income in twelve months to residents in third country or region, whether the business operated by the applicant constitutes the actual business activities, and whether the counterparty country or region to the tax treaties does not levy any tax or grant tax exemption on relevant incomes or levy tax at an extremely low rate, will be taken into account, and it will be analyzed according to the actual circumstances of the specific cases. This notice further provides that applicants who intend to prove his or her status of the "beneficial owner" shall submit the relevant documents to the relevant tax bureau according to the Announcement of State Taxation Administration on Promulgation of the Administrative Measures on Non-resident Taxpayers Enjoying Treaty Benefits.

Regulations Relating to Employment and Social Welfare

The Labor Contract Law

According to the PRC Labor Law promulgated on July 5, 1994, and last amended on December 29, 2018, enterprises and institutions shall establish and improve their system of workplace safety and sanitation, strictly abide by state rules and standards on workplace safety, educate laborers in labor safety and sanitation in China. Labor safety and sanitation facilities shall comply with state-fixed standards. Enterprises and institutions shall provide laborers with a safe workplace and sanitation conditions which are in compliance with state stipulations and the relevant articles of labor protection. The PRC Labor Contract Law, which was implemented on January 1, 2008, and amended on December 28, 2012, is primarily aimed at regulating employee/employer rights and obligations, including matters with respect to the establishment, performance and termination of labor contracts. Pursuant to the PRC Labor Contract Law, labor contracts shall be concluded in writing if labor relationships are to be or have been established between enterprises or institutions and the laborers. Enterprises and institutions are forbidden to force laborers to work beyond the time limit and employers shall pay laborers for overtime work in accordance with the laws and regulations. In addition, labor wages shall not be lower than local standards on minimum wages and shall be paid to laborers in a timely manner.

Social Insurance and Housing Fund

As required under the Regulation of Insurance for Labor Injury implemented on January 1, 2004 and amended on December 20, 2010, the Provisional Measures for Maternity Insurance of Employees of Corporations implemented on January 1, 1995, the Decisions on the Establishment of a Unified Program for Basic Old-Aged Pension Insurance for Employees of Corporations of the State Council issued on July 16, 1997, the Decisions on the Establishment of the Medical Insurance Program for Urban Workers of the State Council promulgated on December 14, 1998, the Unemployment Insurance Measures promulgated on January 22, 1999 and the Social Insurance Law of the PRC implemented on July 1, 2011 and amended on December 29, 2018, enterprises are obliged to provide their employees in China with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, labor injury insurance and medical insurance. These payments are made to local administrative authorities and any employer that fails to contribute may be fined and ordered to make up within a prescribed time limit.

In accordance with the Regulations on the Management of Housing Funds which was promulgated by the State Council on April 3, 1999 and last amended on March 24, 2019, enterprises must register at the competent managing center for housing funds and upon the examination by such managing center of housing funds, these enterprises shall complete procedures for opening an account at the relevant bank for the deposit of employees' housing funds. Enterprises are also required to pay and deposit housing funds on behalf of their employees in full and in a timely manner.

Regulations Relating to Unfair Competition and Anti-Monopoly

According to the Anti-unfair Competition Law of the PRC, promulgated by the SCNPC on September 2, 1993, and last amended with immediate effect on April 23, 2019, unfair competition refers to that the operator disrupts the market competition order and damages the legitimate rights and interests of other operators or consumers in violation of the provisions set forth therein in its production and operating activities. Operators shall abide by the principle of voluntariness, equality, impartiality, integrity, as well as laws and business ethics during production and operating activities.

On August 17, 2021, the SAMR issued a draft of the Provisions on the Prohibition of Internet Unfair Competition for public comments, which, among others, prohibit operators from carrying out or assisting in carrying out acts of internet unfair competition, disrupt the market competition order, affect market fair trade, or harm the legitimate rights and interests of other business operators or consumers directly or indirectly.

The Anti-Monopoly Law of the PRC promulgated by the SCNPC, which became effective on August 1, 2008, and the Rules of the State Council on Declaration Threshold for Concentration of Undertakings promulgated by the State Council on August 3, 2008, and latest amended on September 18, 2018, require that where a concentration reaches one of the following thresholds, a declaration must be lodged in advance with the anti-monopoly law enforcement agency under the State Council, or otherwise the concentration shall not be implemented: (i) during the previous fiscal year, the total global turnover of all undertakings participating in the concentration exceeded RMB10 billion, and at least two of these undertakings each had a turnover of more than RMB400 million within China; or (ii) during the previous fiscal year, the total turnover within China of all the undertakings participating in the concentration exceeded RMB2 billion, and at least two of these undertakings each had a turnover of more than RMB400 million within China.

On October 23, 2020, the SAMR further issued the Measures for Examination and Approval of Concentration of Business Operators, effective on December 1, 2020, which refers concentration as (i) a merger of undertakings; (ii) acquiring control over other undertakings by acquiring equities or assets; or (iii) acquisition of control over, or the possibility of exercising decisive influence on, an undertaking by contract or by any other means.

In early February 2021, the Anti-Monopoly Commission of the State Council published the Anti-Monopoly Guidelines for the Internet Platform Economy Sector, which provides that the calculation of turnover in the field of platform economy may be different depending on the business model of the operators: for platform operators who only provide information matchings and collect commissions, their turnovers should be calculated including the service fee charged by the platform and other platform income; for the platform operators who participate in the market competition on the platform side, their turnovers shall be calculated including the transaction amount involved in the platform and other platforms. The concentration of undertakings involving the agreement control (VIE) structure falls within the scope of the antitrust review of concentration of undertakings. Where the concentration of undertakings meets the declaration standards set by the State Council, the operators shall declare to the Anti-Monopoly Law Enforcement Agency of the State Council in advance, and the concentration shall not be implemented if the concentration is not declared. According to the Anti-Monopoly Law of the PRC, if business operators fail to comply with the mandatory declaration requirement, the anti-monopoly authority is empowered to terminate and/or unwind the transaction, dispose of relevant assets, shares or businesses within certain periods and impose fines of up to RMB500,000.

M&A Rules and Overseas Listing

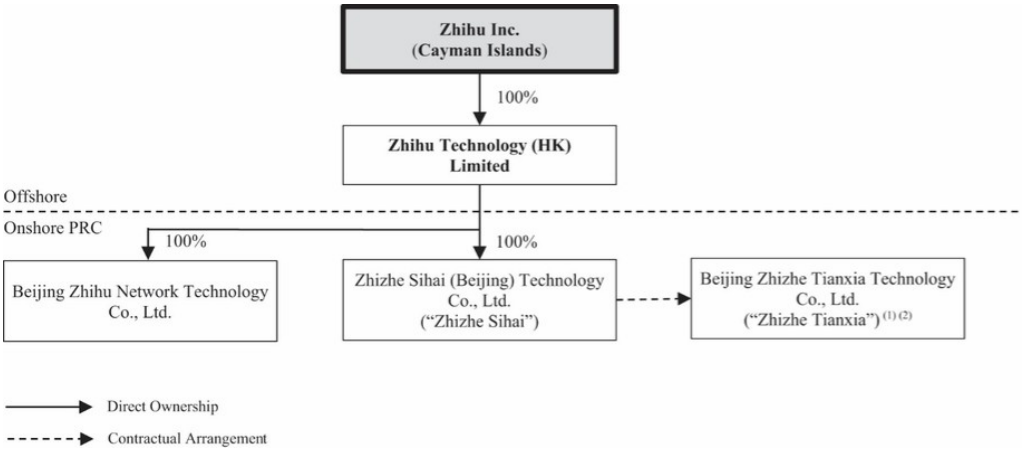
On August 8, 2006, six PRC governmental and regulatory agencies, including the Ministry of Commerce and the CSRC, promulgated the M&A Rules, which became effective on September 8, 2006, and was revised on June 22, 2009, governing the mergers and acquisitions of domestic enterprises by foreign investors. The M&A Rules, among other things, requires that a special purpose vehicle, formed for overseas listing purposes and controlled directly or indirectly by PRC companies or individuals through acquisitions of shares of or equity interests in PRC domestic companies, shall obtain the approval of the CSRC prior to the listing and trading of such special purpose vehicle’s securities on an overseas stock exchange.

In addition, in 2011, the General Office of the State Council promulgated the Notice on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the Circular 6, which officially established a security review system for mergers and acquisitions of domestic enterprises by foreign investors. Further, the Ministry of Commerce promulgated the Rules of the Ministry of Commerce on Implementation of Security Review System of Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the Security Review Rules, effective in September 2011, to implement Circular 6. Under Circular 6, security review is required for mergers and acquisitions by foreign investors having "national defense and security" concerns and mergers and acquisitions by which foreign investors may acquire the "de facto control" of domestic enterprises with "national security" concerns. Under the foregoing the Ministry of Commerce regulations, the Ministry of Commerce will focus on the substance and actual impact of the transaction when deciding whether a specific merger or acquisition is subject to security review. If the Ministry of Commerce decides that a specific merger or acquisition is subject to a security review, it will submit it to the Inter-Ministerial Panel, an authority established under Circular 6 led by the NDRC, and the Ministry of Commerce under the leadership of the State Council, to carry out security review. The Rules prohibit foreign investors from bypassing the security review by structuring transactions through trusts, indirect investments, leases, loans, control through contractual arrangements or offshore transactions. There is no explicit provision or official interpretation stating that the merging or acquisition of a company engaged in the internet content business requires security review, and there is no requirement that acquisitions completed prior to the promulgation of the Security Review Circular are subject to the Ministry of Commerce's review. On December 19, 2020, the NDRC and the Ministry of Commerce jointly promulgated the Measures for the Security Review for Foreign Investment, effective on January 18, 2021, setting forth provisions concerning the security review mechanism on foreign investment, including the types of investments subject to review, review scopes and procedures, among others. The Office of the Working Mechanism of the Security Review of Foreign Investment, who will lead the task together with the Ministry of Commerce. Foreign investor or relevant parties in China must declare the security review to the aforesaid office prior to the investments in, among other industries, important cultural products and services, important information technology and internet products and services, important financial services, key technologies, and other important fields relating to national security and obtain control in the target enterprise.

On December 24, 2021, the CSRC released the Provisions of the State Council on the Administration of Overseas Securities Offering and Listing by Domestic Companies (Draft for Comments), which require that, among other things, domestic companies that seek to offer or list securities overseas, both directly and indirectly, should fulfill the filing procedure and report relevant information with the CSRC. If a domestic company fails to complete the filing procedure or conceals any material fact or falsifies any major content in its filing documents, such domestic company will be subject to administrative penalties such as warnings, fines, suspension of relevant business or operations, and revocation of licenses and permits, and its controlling shareholders, actual controllers, directors, supervisors, and senior executives may also be subject to administrative penalties such as warnings and fines. On the same day, the CSRC also issued the Administrative Measures for the Filing of Overseas Securities Offering and Listing by Domestic Companies (Draft for comments) which, among others, set forth the standards in determination of an indirect overseas listing by a domestic company, the responsible filing persons, and the procedures for the filing. The period for which the CSRC solicits comments on these two drafts ended on January 23, 2022.

C. Organizational Structure

The following diagram illustrates our corporate structure, including our principal subsidiaries and our VIEs.



Notes:

(1) Yuan Zhou and Dahai Li each holds 99.31% and 0.69% of the equity interests in Zhizhe Tianxia, respectively.

(2) Zhizhe Tianxia owns, through its wholly-owned subsidiaries, 55% equity interests in each of Shanghai Pinzhi Education Technology Co., Ltd., or Shanghai Pinzhi, and Shanghai Biban Network Technology Co., Ltd., or Shanghai Biban. Shanghai Pinzhi and its shareholders entered into a series of contractual arrangements with Shanghai Zhishi Commercial Consulting Co., Ltd., our subsidiary in China, and Shanghai Biban and its shareholders entered into a series of contractual arrangements with Shanghai Paya Information Technology co., Ltd, or Shanghai Paya, our subsidiary in China.

Contractual Arrangements with Our VIEs and Their Shareholders

Current PRC laws and regulations impose certain restrictions or prohibitions on foreign ownership of companies that engage in value-added telecommunication services and certain other businesses. Zhihu Inc. is an exempted company with limited liability established in the Cayman Islands. To comply with PRC laws and regulations, we conduct certain of our businesses in China through Zhizhe Tianxia, Shanghai Pinzhi and Shanghai Biban, our VIEs, based on a series of contractual arrangements by and among our WFOEs, our VIEs, and their shareholders.

Our contractual arrangements with our VIE and their shareholders allow us to (i) exercise effective control over our VIEs, (ii) receive substantially all of the economic benefits of our VIEs, and (iii) have an exclusive option to purchase all or part of the equity interests in our VIEs when and to the extent permitted by the PRC law.

As a result of our direct ownership in our WFOEs and the contractual arrangements with our VIEs, we are regarded as the primary beneficiary of our VIEs, and we treat our VIEs and their subsidiaries as our consolidated entities under U.S. GAAP. We have consolidated the financial results of our VIEs and their subsidiaries in our consolidated financial statements in accordance with U.S. GAAP.

The following is a summary of the currently effective contractual arrangements by and among our WFOEs, our VIEs, and their respective shareholders.

Agreements that provide us with effective control over our VIEs

Exclusive Business Cooperation Agreements

Zhizhe Tianxia entered into an exclusive business cooperation agreement with Zhizhe Sihai on December 21, 2021 (the "Exclusive Business Cooperation Agreement"), pursuant to which Zhizhe Tianxia agrees to engage Zhizhe Sihai as its exclusive provider of business support, technical and consulting services, including without limitation technical services, network support, business consultation, intellectual property licensing, equipment and leasing, market consultancy, system integration, product research and development and system maintenance, and management consulting services relating to Zhizhe Tianxia's operations, in exchange for service fees. Under these arrangements, the service fees, subject to Zhizhe Sihai's adjustment, are equal to all of the net profit of the Zhizhe Tianxia and its subsidiaries. Zhizhe Sihai may adjust the service fees at its sole discretion, after consideration of certain factors, including but not limited to the deduction of necessary costs, expenses, taxes and other statutory contribution in relation to the respective fiscal year, and may also include accumulated losses of Zhizhe Tianxia and its subsidiaries from previous financial periods. If Zhizhe Tianxia runs into financial deficit or suffers severe operation difficulties, Zhizhe Sihai will provide financial support to Zhizhe Tianxia.

Intellectual property rights are developed during the normal course of business of Zhizhe Tianxia and its subsidiaries. Pursuant to the Exclusive Business Cooperation Agreement, Zhizhe Sihai will have the exclusive and proprietary rights to all intellectual properties developed by Zhizhe Tianxia and its subsidiaries, in connection with performance of the Exclusive Business Cooperation Agreement.

Unless otherwise terminated early by Zhizhe Sihai, the Exclusive Business Cooperation Agreement will remain effective unless terminated in the event that (a) the entire equity interests held by the shareholders in Zhizhe Tianxia or the entire assets of Zhizhe Tianxia have been transferred to Zhizhe Sihai; (b) in accordance with the other provisions of the Exclusive Business Cooperation Agreement.

Shanghai Pinzhi entered into an exclusive technology development, consultancy and services agreement with Shanghai Zhishi on September 7, 2021 (the "Pinzhi Exclusive Business Cooperation Agreement"), pursuant to which Shanghai Pinzhi agrees to engage Shanghai Zhishi as its exclusive provider of technology development, consultancy and services in exchange for service fees. The service fees shall be equal to the total consolidated net profit of Shanghai Pinzhi, after deducting the business expenses as confirmed by both parties. Shanghai Zhishi may adjust the service fees at its sole discretion, taking into account the content of the services provided during the year and the business need of Shanghai Pinzhi. Shanghai Zhishi may provide financial support to Shanghai Pinzhi to ensure Shanghai Pinzhi can meet its operational cash flow requirements and/or to support it when it suffers operational losses. Unless otherwise terminated early by mutual agreement or pursuant to provisions set forth therein, the Pinzhi Exclusive Business Cooperation Agreement shall have a term of twenty years from date of signing. The remaining principal terms of the Pinzhi Exclusive Business Cooperation Agreement are substantially similar to those under the Exclusive Business Cooperation Agreement as set out above.

Shanghai Biban entered into an exclusive technology development, consultancy and services agreement with Shanghai Paya on November 9, 2021 (the "Biban Exclusive Business Cooperation Agreement"), the principal terms of which are substantially the same as those under the Pinzhi Exclusive Business Cooperation Agreement.

Shareholders' Rights Entrustment Agreement and Powers of Attorney

Pursuant to the shareholder's rights entrustment agreement entered into among the shareholders of Zhizhe Tianxia, Zhizhe Sihai and Zhizhe Tianxia on December 21, 2021 (the "Shareholders' Rights Entrustment Agreement"), and the irrevocable power of attorney executed by each of the shareholders of Zhizhe Tianxia on the same day (the "Power of Attorney"), whereby the shareholders appointed Zhizhe Sihai or a director of its offshore holding company or his or her successor (including a liquidator replacing such director) as their exclusive agent and attorney to act on their behalf on all matters concerning Zhizhe Tianxia and its subsidiaries and to exercise all of its rights as a registered shareholder of Zhizhe Tianxia; such attorney cannot be the shareholder himself/herself or another shareholder of Zhizhe Tianxia. These rights include (i) the right to propose, convene and attend shareholders' meetings; (ii) the right to sell, transfer, pledge or dispose of shares; (iii) the right to exercise shareholders' voting rights; and (iv) the right to appoint the legal representative (chairperson), the director, supervisor, the chief executive officer (or general manager) and other senior management members of Zhizhe Tianxia. The authorized person is entitled to sign minutes, file documents with the relevant companies registry and exercise voting rights in Zhizhe Tianxia on behalf of the relevant shareholders. As a result of the Shareholders' Rights Entrustment Agreement and the Powers of Attorney, we, through Zhizhe Sihai, are able to exercise management control over the activities that most significantly impact the economic performance of Zhizhe Tianxia. The Shareholders' Rights Entrustment Agreement and the Powers of Attorney shall automatically terminate once Zhizhe Sihai or its designee directly holds the entire equity interests in and/or the entire assets of Zhizhe Tianxia once permitted under the then PRC laws and Zhizhe Sihai or its designee is allowed to conduct the Relevant Businesses of Zhizhe Tianxia.

The shareholders of Shanghai Pinzhi each entered into a power of attorney on September 7, 2021 (the "Pinzhi Power of Attorney") in favor of Shanghai Zhishi, the principal terms of which are substantially similar to those under the Shareholders' Rights Entrustment Agreement as set out above except that the Pinzhi Power of Attorney shall terminate upon the earlier of (a) the relevant shareholder ceasing to be a shareholder of Shanghai Pinzhi and (b) when the attorney terminates such Power of Attorney by written notice to the relevant shareholder. The shareholders of Shanghai Biban each entered into a power of attorney on November 9, 2021 (the "Biban Power of Attorney") in favor of Shanghai Paya, the principal terms of which are substantially the same as those under the Pinzhi Powers of Attorney.

Share Pledge Agreement

Zhizhe Tianxia, the shareholders of Zhizhe Tianxia and Zhizhe Sihai entered into a share pledge agreement on December 21, 2021 (the "Share Pledge Agreement"). Under the Share Pledge Agreement, the shareholders of Zhizhe Tianxia will pledge all of their respective equity interests in Zhizhe Tianxia to Zhizhe Sihai as collateral security for any or all of their payments due to Zhizhe Sihai and to secure performance of their obligations under the Exclusive Business Cooperation Agreement, the Exclusive Option Agreement, Shareholders' Rights Entrustment Agreement and the Powers of Attorney. The Share Pledge Agreement will not terminate until (i) all obligations of Zhizhe Tianxia and its shareholders are satisfied in full; (ii) Zhizhe Sihai exercises its exclusive option to purchase the entire equity interests held by the shareholders in Zhizhe Tianxia and/or the entire assets of Zhizhe Tianxia pursuant to the Exclusive Option Agreement when it is permitted to do so under the applicable PRC laws; (iii) Zhizhe Sihai exercises its unilateral and unconditional right of termination; or (iv) the Share Pledge Agreement is required to be terminated in accordance with applicable PRC laws. Should an event of default (as provided in the Share Pledge Agreement) occur, unless it is successfully resolved to Zhizhe Sihai's satisfaction within 30 days upon being notified by Zhizhe Sihai, Zhizhe Sihai may demand that Zhizhe Tianxia immediately pay all outstanding payments due under the Exclusive Business Cooperation Agreement, repay any loans and make all other payments due to it, and/or dispose of the pledged equity interests and use the proceeds to repay any outstanding payments due to Zhizhe Sihai. The shareholders of Zhizhe Tianxia have pledged their equity interests in Zhizhe Tianxia to Zhizhe Sihai and registered such pledges with the relevant PRC governmental authority pursuant to PRC laws and regulations.

Shanghai Pinzhi, the shareholders of Shanghai Pinzhi and Shanghai Zhishi entered into a share pledge agreement on September 7, 2021 (the "Pinzhi Share Pledge Agreement") which shall terminate upon all obligations of Shanghai Pinzhi and its shareholders under the Pinzhi Exclusive Business Cooperation Agreement, the Pinzhi Exclusive Option Agreement and the Pinzhi Powers of Attorney are satisfied in full. The remaining principal terms of the Pinzhi Share Pledge Agreement are substantially similar to those under the Share Pledge Agreement as set out above. Shanghai Biban, the shareholders of Shanghai Biban and Shanghai Paya entered into a share pledge agreement on November 9, 2021 (the "Biban Share Pledge Agreement"), the principal terms of which are substantially the same as those under the Pinzhi Share Pledge Agreement.

Agreements that provide us with the option to purchase the equity interests in and assets of our VIEs

Exclusive Option Agreements

Zhizhe Tianxia and its shareholders entered into an exclusive option agreement with Zhizhe Sihai dated December 21, 2021 (the "Exclusive Option Agreement"), pursuant to which Zhizhe Sihai or its designee is granted an irrevocable and exclusive right to purchase all of the equity interest in and/or assets of Zhizhe Tianxia for a nominal price, unless the relevant government authorities or the PRC laws request that another amount be used as the purchase price, in which case the purchase price shall be the lowest amount under such request. Subject to relevant PRC laws and regulations, the shareholders of Zhizhe Tianxia and/or Zhizhe Tianxia shall return any amount of purchase price they have received to Zhizhe Sihai or its designee. At Zhizhe Sihai's request, the shareholders of Zhizhe Tianxia will promptly transfer their respective equity interests in and/or the relevant assets of Zhizhe Tianxia to Zhizhe Sihai or its designee after Zhizhe Sihai exercises its purchase right. Unless otherwise terminated early by Zhizhe Sihai through written notice, the Exclusive Option Agreement will remain effective until when all the purchased equity interests and/or the relevant assets are transferred to Zhizhe Sihai and/or the designee and Zhizhe Sihai and its subsidiaries have the right to legally conduct the business of Zhizhe Tianxia according to the PRC law.

During the term of the Exclusive Option Agreement, Zhizhe Tianxia is not allowed to, and shall procure its subsidiaries not to, sell, transfer, mortgage or otherwise dispose of any of its assets (exceeding the value of RMB1 million) without the prior written consent of Zhizhe Sihai. In addition, the shareholders are not allowed to request for any distributions, gains or other form of profits sharing and should forgo such distributions, gains or any other form of profits sharing within the scope permitted by the PRC law. In the event that the shareholders of Zhizhe Tianxia receive any distribution from Zhizhe Tianxia and/or its subsidiaries and subject to the PRC laws, the shareholders must immediately pay or transfer such distribution to Zhizhe Sihai or its designee. If Zhizhe Sihai exercises its purchase right, all or any part of the equity interests in and/or assets of Zhizhe Tianxia acquired would be transferred to Zhizhe Sihai and the benefits of equity ownership and/or assets, as applicable, would flow to us and our Shareholders.

As provided in the Exclusive Option Agreement, without the prior written consent of Zhizhe Sihai, Zhizhe Tianxia shall not, and shall procure its subsidiaries not to, among other things, (i) sell, transfer, pledge or dispose of in any manner any of its assets for a value more than RMB1 million; (ii) execute any material contract for a value more than RMB1 million, except any contracts in the ordinary course of business and any contracts entered into with any members of our Group; (iii) provide any loan, financial support, pledge or guarantees in any form to any third party, or allow any third party create any pledge or other security interest on its assets or equity; (iv) incur, inherit, guarantee or allow any debt that is not incurred in the ordinary course of business of Zhizhe Tianxia or not disclosed and consented to by Zhizhe Sihai; (v) enter into any consolidation or merger with any third party, or acquire or invest in any third party; (vi) increase or reduce its registered capital, or alter the structure of the registered capital in any other way. As such, the potential adverse effect on Zhizhe Sihai and us in the event of any loss suffered from Zhizhe Tianxia and/or its subsidiaries can be limited to a certain extent.

Shanghai Pinzhi entered into an exclusive option agreement with Shanghai Zhishi on September 7, 2021 (the "Pinzhi Exclusive Option Agreement"), pursuant to which Shanghai Zhishi or its designee is granted an irrevocable and exclusive right to purchase all of the equity interest in and/or assets of Shanghai Pinzhi for RMB10 or the lowest amount allowed by PRC laws and regulations. The Pinzhi Exclusive Option Agreement shall take effect from the date of signing and terminate when all the purchased equity interests and/or assets are transferred to Shanghai Zhishi or its designee. The remaining principal terms of the Pinzhi Exclusive Option Agreement are substantially similar to those under the Exclusive Option Agreement, except that the materiality threshold under the Pinzhi Exclusive Option Agreement for the corporate actions that require Shanghai Zhishi's consent is RMB500 thousand or higher (rather than RMB1 million). Shanghai Biban entered into an exclusive option agreement with Shanghai Paya on November 9, 2021 (the "Biban Exclusive Option Agreement"), the principal terms of which are substantially the same as those under the Pinzhi Exclusive Option Agreement.

D. Property, Plants and Equipment

Our principal place of business is located in Beijing, China. As of the date of this annual report, we lease 24 properties in Beijing, Shanghai, Guangzhou, Nanjing, Chengdu, Dalian, and Chongqing in China with an aggregate gross floor area of over 25,000 square meters. These leases vary in duration from approximately 12 to 48.5 months.

Our leased properties in China serve as our offices and data centers. We believe that there is sufficient supply of properties in China, and thus we do not rely on existing leases for our business operations.

As of the date of this annual report, landlords of 7 of our 24 leased properties in China have not provided us with valid title certificates or relevant authorization documents evidencing their rights to lease the properties to us. Consequently, if any of these leases is terminated as a result of challenges by third parties, we may not be able to continue to use such properties. We believe that alternative premises are available at reasonable market rates if we were forced to relocate our premises which lack valid title certificates.

Pursuant to the applicable PRC laws and regulations, property lease contracts must be registered with the relevant local branches of the PRC Ministry of Housing and Urban Development. As of the date of this annual report, we had not completed lease registration of the properties we leased in China, primarily due to the difficulty of procuring the relevant landlords' cooperation to register such leases. The registration of such leases will require cooperation of our landlords. Our PRC legal counsel has advised us that the lack of registration for the lease contracts will not affect the validity of such lease contracts under PRC law, and has also advised us that a maximum penalty of RMB10,000 may be imposed for each incident of noncompliance of lease registration requirements.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included elsewhere in this annual report on Form 20-F. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 3. Key Information—D. Risk Factors" or in other parts of this annual report.

A. Operating Results

Zhihu is one of the top five comprehensive online content communities and the largest Q&A-inspired online community in China, both in terms of average mobile MAUs and revenue in 2019, 2020, and 2021, according to CIC. In the fourth quarter of 2021, Zhihu had 500 million average monthly viewers and 390 million average monthly engagements. As of December 31, 2021, Zhihu had 55 million cumulative content creators, who had contributed 420 million cumulative Q&As covering over 1,000 verticals. Zhihu is a leading online content community widely regarded as offering high-quality content in China, according to the CIC Survey.

Launched in 2010, we have been dedicated to expanding our content and service offerings to meet the diverse needs of our users, content creators, and business partners. We have grown from a Q&A community into one of the largest comprehensive online content communities in China. We are among the first several industry players to offer paid membership program and developed content-commerce solutions for merchants and brands, according to CIC. We continue to leverage our content-centric business model and launch new monetization channels such as offering vocational training and e-commerce services. We believe that we are still in an early stage of monetization with significant runway for growth across a span of monetization channels.

During 2019, 2020, and 2021, we achieved significant business growth yet incurred net loss and net operating cash outflow, primarily attributable to our content-related cost that helped build our rich content library, sales and marketing expenses for promotional and advertising activities, and research and development expenses to enhance technological infrastructure. Our revenue increased from RMB670.5 million in 2019 to RMB1.4 billion in 2020, and further to RMB3.0 billion (US$464.4 million) in 2021, representing a CAGR of 110.1% from 2019. Our gross profit increased from RMB312.3 million in 2019 to RMB757.8 million in 2020, and further to RMB1.6 billion (US$243.8 million) in 2021. Our net loss was RMB1.0 billion in 2019, RMB517.6 million in 2020, and RMB1.3 billion (US$203.8 million) in 2021. We had net operating cash outflows of RMB715.5 million, RMB244.4 million, and RMB440.2 million (US$69.1 million) in 2019, 2020, and 2021, respectively. We expect to continue incurring net loss and net operating cash outflow in the near future as we continue to strategically incurred expenditures to build up and expand our content ecosystem to further enhance Zhihu's content quality and content portfolio, promote community culture and user engagement, and solidify organic growth.

Key Factors Affecting Our Results of Operations

Our results of operations are affected by the following factors.

Our content offerings

As an online content community, the overall scale of our user base, level of user engagement, and content creation all depend on the breadth, depth, richness, and quality of our content offerings. As of December 31, 2021, our community had 490 million cumulative pieces of content, including 420 million cumulative Q&As. The ever-growing Zhihu content has expanded to include timely content covering trending events to satisfy the needs and improve the experience of our increasingly diverse user base. In addition, the increasingly broad content coverage and diverse content formats cater to our users' continually evolving preferences. We have been deepening our exiting content products and adding new product categories to cover a wider spectrum of content consumption scenarios in our users' daily lives. We will continue to motivate and support content creators to create more high-quality content. Furthermore, we have developed and will continue to develop utilities and incentives to facilitate the content creation process.

Our user base

Our business and revenue growth rely on our ability to further grow our user base. We believe that a strong increase in the size of our user base, coupled with a more vibrant community, could deepen our monetization and lead to growth of our business and revenue. Our user base also helps us motivate content creators to produce more high-quality content, which further stimulates user interactions and spending. With the fast-growing user base, more content creators have emerged on Zhihu. We provide multiple channels for content creators to monetize their contribution in our community.

We have experienced rapid user growth since our inception. Our average MAUs increased from 48.0 million in 2019 to 68.5 million in 2020 and further to 95.9 million in 2021. Benefiting from our expanding user base and comprehensive content offerings, we have created a vibrant community with expanding subscribing members and other customers. For example, our average monthly subscribing members increased significantly from 0.6 million in 2019 to 2.4 million in 2020 and to 5.1 million in 2021, and our paying ratio increased from 1.2% in 2019 to 3.4% in 2020 and further to 5.3% in 2021. In addition, the growth of our user base has attracted more merchants and brands to our community and increased their spending to pursue more effective branding and advertising.

Our content-centric monetization

Our revenue and business scale depend on our ability to further enhance our monetization by increasing the effectiveness of diversified monetization model for each revenue stream and expanding our revenue streams.

We have been expanding our service offerings to meet the diverse needs of our users, content creators and business partners. We have been enhancing our content-centric monetization in each of our revenue streams, including advertising, paid membership, content-commerce solutions, vocational training, and other services that we introduce from time to time, such as e-commerce. The willingness of our users to pay for premium content largely depends on the breadth, depth, and quality of our premium content, and thus better premium content could result in higher value for our paid membership services. Our rich content offerings and user base attract more merchants and brands to promote their products and services and achieve other commercial goals through our advertising services and content-commerce solutions. For instance, we formally launched content-commerce solutions in early 2020 and our revenue from content-commerce solutions grew approximately four times year over year in the fourth quarter of 2021. In addition to continuously expanding our customer base via our diversified service offerings, we plan to further improve the effectiveness of our monetization channels and increase the spending of our existing merchants and brands as well as paying users.

We have consistently explored additional content-centric monetization channels and added new revenue streams. For example, we have launched our vocational training and e-commerce services to expand our vertical service coverage and meet user demand. We plan to further expand monetization of our content community and seek to further diversify our revenue streams.

Our operating efficiency

Our efficiency and margin depend on our ability to strategically increase our scale and manage our costs and expenses. As the majority of our content is UGC, we benefit from our organically generated diverse content that stimulate interactions among users and content creators, as well as efficient content acquisition. We also deploy resources to strategically acquire high-quality content to enrich our premium content library. As we continue to expand our revenue streams, our revenue mix and ability to manage the level of revenue sharing to content providers might also affect our gross profit margin.

We seek to continually optimize our expense structure. Our operating efficiency is significantly affected by our user acquisition strategy. We actively engage in selling and marketing efforts to capture marketing opportunities from which we can effectively increase our user base, while focusing on more precise and effective ways of user acquisition. To further drive our sales and marketing effectiveness, we will continue to enhance our brand recognition to achieve organic user acquisition and retention.

Our people and technology

We focus on investing in our people and technology, which are crucial for us to enrich our content offerings, further grow our user base, incentivize content creators, and attract merchants and brands. We recruit, retain, and motivate talented employees to support our growth. Our technology infrastructure supports our business model in various aspects, from understanding our users, optimizing our content offerings, promoting interaction and engagement between our users and content creators, nurturing our community, to enhancing our service offerings. We will continue to develop and apply state-of-the-art technologies to keep pace with the growth of our business, scale our content offerings, and improve operating efficiency. We will continue to invest in people and technology to facilitate our future growth.

Impact of the COVID-19 Pandemic on Our Operations and Financial Performance

The COVID-19 pandemic has had, and, together with any subsequent outbreaks driven by new variants of COVID-19, such as Omicron may continue to have, an adverse impact on our operations and financial performance. For example, some of our merchants and brands reduced their expenditures on advertising in the first half of 2020 due to the COVID-19 pandemic. Our advertising revenue increased by 46.0% from RMB577.4 million in 2019 to RMB843.3 million in 2020. In addition, the outbreak of the COVID-19 pandemic led us to delay the formal launch of our content-commerce solutions. Furthermore, our selling and marketing expenses decreased to RMB734.8 million in 2020 from RMB766.5 million in 2019, as many of the regular or scheduled offline marketing events in China were canceled or delayed in 2020 due to the COVID-19 pandemic.

In China, business activities have largely resumed, government emergency measures have been significantly relaxed, and the general economy is gradually recovering. Recently, there has been an increasing number of COVID-19 cases, including outbreaks driven by variants of COVID-19, such as Omicron in multiple cities in China. The extent to which the COVID-19 pandemic may continue to affect our operations and financial performance will depend on future developments, which are highly uncertain and cannot be predicted. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—We face risks related to natural disasters, health epidemics, and other outbreaks, which could significantly disrupt our operations.”

Key Components of Results of Operations

Revenue

We generate revenue primarily through (i) advertising, (ii) paid membership, (iii) content-commerce solutions, and (iv) other services, including vocational training and e-commerce services. The following table sets forth a breakdown of revenue by type both in absolute amount and as a percentage of our revenue for the periods indicated.

	For the Year Ended December 31,						
	2019		2020		2021		
	RMB	%	RMB	%	RMB	US$	%
	(in thousands, except percentages)						
Revenue							
Advertising	577,424	86.1	843,284	62.4	1,160,886	182,168	39.2
Paid membership	87,997	13.1	320,471	23.7	668,507	104,903	22.6
Content-commerce solutions	641	0.1	135,813	10.0	973,986	152,840	32.9
Others	4,449	0.7	52,628	3.9	155,945	24,471	5.3
Total	**670,511**	**100.0**	**1,352,196**	**100.0**	**2,959,324**	**464,382**	**100.0**

Advertising. We generate revenue from advertising services. Our advertising revenue is primarily driven by our MAUs and advertising revenue per MAU. The following table sets forth average MAUs and advertising revenue per MAU for the periods indicated.

	For the Year Ended December 31,			2019-2021
	2019	2020	2021	CAGR
Average MAUs (in millions)	48.0	68.5	95.9	41.4 %
Advertising revenue per MAU (in RMB)	12.0	12.3	12.1	0.4 %

We still experienced continued growth in our advertising revenue reflecting the significant and continued increase in MAUs and relatively stable advertising revenue per MAU, despite the negative impact that the COVID-19 pandemic had on the expenditure of some of our merchants and brands for advertising services in 2020. We expect that our advertising revenue will continue to increase in the foreseeable future as our advertising services grow.

Our advertisers are generally attracted by, among other things, the expanding user base and user profiles as well as the content generated in our community. They typically select target audience based on user profiles and review performance indices instead of specifying target content category or monitoring other similar metrics. We do not believe that we have concentration in terms of user profiles. The pricing of our advertising is determined based on our internal marked price guidelines that are updated from time to time. The guidelines generally take into consideration factors including, among other things, nature and type of advertisers, products and services to be marketed, prior relationships, level of comparable demands, and scale of orders, and are implemented based on marked price for our advertising services. As we continue to scale up our advertising business, we have maintained a moderately increasing trend on our marked price while narrowing the rebates and discounts offered to advertisers. In particular, while the marked price of our CPM-based services remained relatively stable, our CPD-based services experienced an increase as our user base expanded. These result in a moderately increasing trend on our effective pricing, which excludes rebates and discounts.

Paid Membership. We generate substantially all of our paid membership revenue from Yan Selection (鹽選) membership fees. The following table sets forth our average MAUs, average monthly subscribing members, and paying ratio for the periods indicated.

	For the Year Ended December 31,			2019-2021
	2019	2020	2021	CAGR
Average MAUs (in millions)	48.0	68.5	95.9	41.4 %
Average monthly subscribing members (in thousands)	574.2	2,362.6	5,076.0	197.3 %
Paying ratio	1.2 %	3.4 %	5.3 %	110.2 %

We formally launched our Yan Selection membership program in March 2019, and since then have continued to enhance the volume and quality of our premium content. The increase in paid membership revenue during the periods primarily reflected the increases in our MAUs as well as the paying ratio. In particular, the continued increase in paying ratio reflects the wider acceptance of the paid membership among our community. We expect that our paid membership revenue will continue to increase in absolute amount in the foreseeable future.

Content-Commerce Solutions. We generate content-commerce solutions revenue primarily from service fees from our Zhi+ solutions. We formally launched our content-commerce solutions in early 2020 and booked immaterial amount of revenue in late 2019 for conducting trials of related products and protocols. The content-commerce solutions have demonstrated strong growth momentum since the launch. Our revenue from content- commerce solutions increased from RMB135.8 million in 2020 to RMB974.0 million (US$152.8 million) in 2021, primarily driven by the number of our MAUs and average content-commerce solutions revenue per MAU. The following table sets forth average MAUs and content-commerce solutions revenue per MAU for the periods indicated.

	For the Year Ended December 31,			2019-2021
	2019	2020	2021	CAGR
Average MAUs (in millions)	48.0	68.5	95.9	41.4 %
Content-commerce solutions revenue per MAU (in RMB)	—	2.0	10.2	—

We expect to continue to develop the content-commerce solutions as we further expand our content portfolio. As a result, we expect that our content-commerce solutions revenue will continue to increase in absolute amount and as a percentage of our revenue in the foreseeable future. We also expect that our average content-commerce solutions revenue per MAU will continue to increase.

Others. Other revenue is primarily generated from our vocational training and e-commerce services. We have been strategically identifying opportunities for expanding our revenue streams. For example, we offer self-developed vocational training products and services, in addition to third-party vocational training courses, to further deepen this monetization channel. Our e-commerce service revenue primarily consists of commissions from sale of merchandise. We expect an increase in revenue from vocational training and e-commerce services and we will benefit from continued diversification of our content-centric monetization channels in the foreseeable future.

Cost of Revenue

Our cost of revenue primarily consists of: (i) content and operational costs, (ii) cloud service and bandwidth costs, (iii) staff costs, and (iv) payment processing costs. Content and operational costs primarily include payments for content creators with respect to content included in our premium content library, other content-related costs and other business-related execution costs.

The following table sets forth a breakdown of our cost of revenue by nature both in absolute amount and as a percentage of our revenue for the periods indicated.

	For the Year Ended December 31,						
	2019		2020		2021		
	RMB	%	RMB	%	RMB	US$	%
	(in thousands, except percentages)						
Cost of revenue							
Content and operational costs	76,713	11.4	204,397	15.1	750,554	117,778	25.4
Cloud service and bandwidth costs	178,353	26.6	226,684	16.8	328,346	51,525	11.1
Staff costs	58,296	8.7	75,412	5.6	142,699	22,393	4.8
Payment processing costs	13,118	2.0	39,536	2.9	74,285	11,657	2.5
Others	31,761	4.7	48,370	3.6	109,539	17,189	3.7
Total	**358,241**	**53.4**	**594,399**	**44.0**	**1,405,423**	**220,542**	**47.5**

Gross Profit and Gross Profit Margin

Our gross profit increased from RMB312.3 million in 2019 to RMB757.8 million in 2020 and further to RMB1.6 billion (US$243.8 million) in 2021. Our gross profit margin was 46.6% in 2019, 56.0% in 2020 and 52.5% in 2021.

Operating Expenses

Our operating expenses consist of (i) selling and marketing expenses, (ii) research and development expenses, and (iii) general and administrative expenses. We expect that our operating expenses will continue to increase in absolute amount in the foreseeable future in line with our business growth.

The following table sets forth a breakdown of our operating expenses both in absolute amount and as a percentage of our revenue for the periods indicated.

	For the Year Ended December 31,						
	2019		2020		2021		
	RMB	%	RMB	%	RMB	US$	%
	(in thousands, except percentages)						
Operating expenses							
Selling and marketing expenses	766,465	114.3	734,753	54.3	1,634,733	256,525	55.2
Research and development expenses	351,012	52.3	329,763	24.4	619,585	97,226	20.9
General and administrative expenses	253,268	37.8	296,162	21.9	690,292	108,322	23.4
Total	**1,370,745**	**204.4**	**1,360,678**	**100.6**	**2,944,610**	**462,073**	**99.5**

Selling and Marketing Expenses. Our selling and marketing expenses primarily consist of expenses associated with promotion and advertising and staff costs. We expect to continue to strategically incur selling and marketing expenses in growing our user base and strengthening our branding.

Research and Development Expenses. Our research and development expenses primarily consist of research and development related staff costs. We expect our research and development expenses to increase in the foreseeable future as we continue to invest in technical infrastructure, research and development, as well as developing new products and services to attract users and increase user engagement.

General and Administrative Expenses. General and administrative expenses primarily consist of staff costs, traveling and general expenses, and professional service fees. We expect our general and administrative expenses to increase in the foreseeable future as we grow our business and incur increased staff costs.

Inflation

To date, inflation in China has not materially affected our results of operations. According to the PRC National Bureau of Statistics, the year-over-year percentage changes in the consumer price index for December 2019, 2020, and 2021 were increases of 4.5%,0.2%, and 0.9%, respectively. Although we have not been materially affected by inflation in the past, we may be affected if China experiences higher rates of inflation in the future. For example, certain operating expenses, such as employee, technology, and office related expenses may increase as a result of higher inflation. Additionally, because a substantial portion of our assets consists of cash and cash equivalents and short-term investments, high inflation could significantly reduce the value and purchasing power of these assets. We are not able to hedge our exposure to higher inflation in China.

Results of Operations

The following table sets forth our results of operations with line items in absolute amount and as a percentage of our revenue for the periods indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this annual. The results of operations in any period are not necessarily indicative of our future trends.

	For the Year Ended December 31,						
	2019		2020		2021		
	RMB	%	RMB	%	RMB	US$	%
	(in thousands, except percentages)						
Revenue	670,511	100.0	1,352,196	100.0	**2,959,324**	**464,382**	100.0
Cost of revenue	(358,241)	(53.4)	(594,399)	(44.0)	(1,405,423)	(220,542)	(47.5)
Gross profit	**312,270**	**46.6**	**757,797**	**56.0**	**1,553,901**	**243,840**	**52.5**
Selling and marketing expenses	(766,465)	(114.3)	(734,753)	(54.3)	(1,634,733)	(256,525)	(55.2)
Research and development expenses	(351,012)	(52.3)	(329,763)	(24.4)	(619,585)	(97,226)	(20.9)
General and administrative expenses	(253,268)	(37.8)	(296,162)	(21.9)	(690,292)	(108,322)	(23.4)
Total operating expenses	**(1,370,745)**	**(204.4)**	**(1,360,678)**	**(100.6)**	**(2,944,610)**	**(462,073)**	**(99.5)**
Loss from operations	**(1,058,475)**	**(157.8)**	**(602,881)**	**(44.6)**	**(1,390,709)**	**(218,233)**	**(47.0)**
Investment income	25,035	3.7	56,087	4.2	59,177	9,286	2.0
Interest income	28,669	4.3	24,751	1.8	31,305	4,912	1.1
Fair value change of financial instrument	7,132	1.1	(68,818)	(5.1)	27,846	4,370	0.9
Exchange (losses)/gains	(9,216)	(1.4)	62,663	4.6	(16,665)	(2,615)	(0.6)
Others, net	2,675	0.4	11,728	0.9	(4,391)	(689)	(0.1)
Loss before income tax	**(1,004,180)**	**(149.7)**	**(516,470)**	**(38.2)**	**(1,293,437)**	**(202,969)**	**(43.7)**
Income tax expense	(40)	(0.0)	(1,080)	(0.1)	(5,443)	(854)	(0.2)
Net loss	**(1,004,220)**	**(149.7)**	**(517,550)**	**(38.3)**	**(1,298,880)**	**(203,823)**	**(43.9)**

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue

	For the Year Ended December 31,					
	2020	2021		Change		
	RMB	RMB	US$	RMB	US$	%
	(in thousands, except percentages)					
Revenue						
Advertising	843,284	1,160,886	182,168	317,602	49,839	37.7
Paid membership	320,471	668,507	104,903	348,036	54,614	108.6
Content-commerce solutions	135,813	973,986	152,840	838,173	131,528	617.2
Others	52,628	155,945	24,471	103,317	16,213	196.3
Total	**1,352,196**	**2,959,324**	**464,382**	**1,607,128**	**252,194**	**118.9**

Our revenue increased substantially from RMB1.4 billion in 2020 to RMB3.0 billion (US$464.4 million) in 2021.

Advertising. Advertising revenue increased by 37.7% from RMB843.3 million in 2020 to RMB1.2 billion (US$182.2 million) in 2021. The increase was primarily driven by a 40.0% increase in average MAUs from 68.5 million in 2020 to 95.9 million in 2021 as a result of the continued growth of our user base. Our average advertising revenue generated per MAU remained relatively stable at RMB12.3 in 2020 to RMB12.1 in 2021.

Paid Membership. Paid membership revenue increased significantly from RMB320.5 million in 2020 to RMB668.5 million (US$104.9 million) in 2021, primarily due to the increase in our MAUs as well as the paying ratio. The paying ratio increased from 3.4% in 2020 to 5.3% in 2021, reflecting the wider acceptance of the paid membership business among our users.

Content-Commerce Solutions. Content-commerce solutions revenue increased significantly from RMB135.8 million in 2020 to RMB974.0 million (US$152.8 million) in 2021. The significant increase was primarily driven by the rapid increase of both our user base and average content-commerce solutions revenue per MAU from RMB2.0 in 2020 to RMB10.2 in 2021, which reflected our continued development of this business line.

Others. Other revenue increased substantially from RMB52.6 million in 2020 to RMB155.9 million (US$24.5 million) in 2021, primarily due to the continued growth of our vocational training as we acquired Prez Limited and Yincheng Limited to strengthen our capability in offering and delivering content and programs for vocational training as well as our continued growth in e-commerce services.

Cost of Revenue

	For the Year Ended December 31,					
	2020	2021		Change		
	RMB	RMB	US$	RMB	US$	%
	(Unaudited)	(Unaudited)				
	(in thousands, except percentages)					
Cost of revenue						
Content and operational costs	204,397	750,554	117,778	546,157	85,704	267.2 %
Cloud service and bandwidth costs	226,684	328,346	51,525	101,662	15,953	44.8 %
Staff costs	75,412	142,699	22,393	67,287	10,559	89.2 %
Payment processing costs	39,536	74,285	11,657	34,749	5,453	87.9 %
Others	48,370	109,539	17,189	61,169	9,599	126.5 %
Total	**594,399**	**1,405,423**	**220,542**	**811,024**	**127,268**	**136.4 %**

Our cost of revenue increased by 136.4% from RMB594.4 million in 2020 to RMB1.4 billion (US$220.5 million) in 2021. The increase was primarily attributable to (i) an increase in content and operational costs of RMB546.2 million, which mainly includes the content-related cost and execution cost for advertising service incurred due to our expansion in advertising and paid membership services as well as our content offerings, (ii) an increase in cloud service and bandwidth costs of RMB101.7 million due to our growth in user traffic, and (iii) an increase in staff costs of RMB67.3 million due to our increased headcount.

Gross Profit and Gross Profit Margin

	For the Year Ended December 31,					
	2020	2021		Change		
	RMB	RMB	US$	RMB	US$	%
	(in thousands, except percentages)					
Gross profit	757,797	1,553,901	243,840	796,104	124,926	105.1
Gross profit margin	56.0 %	52.5 %	52.5 %	—	—	—

Our gross profit in 2020 and 2021 was RMB757.8 million and RMB1.6 billion (US$243.8 million), respectively, and our gross profit margin was 56.0% and 52.5%, respectively. The decrease in gross profit margin is primarily due to our content contribution and our continued efforts in broadening and enhancing content offerings for all of our users.

Operating Expenses

	For the Year Ended December 31,					
	2020	2021		Change		
	RMB	RMB	US$	RMB	US$	%
	(in thousands, except percentages)					
Operating expenses						
Selling and marketing expenses	734,753	1,634,733	256,525	899,980	141,227	122.5
Research and development expenses	329,763	619,585	97,226	289,822	45,479	87.9
General and administrative expenses	296,162	690,292	108,322	394,130	61,848	133.1
Total	**1,360,678**	**2,944,610**	**462,073**	**1,583,932**	**248,554**	**116.4**

Selling and Marketing Expenses. Our selling and marketing expenses increased by 122.5% from RMB734.8 million in 2020 to RMB1.6 billion (US$256.5 million) in 2021, primarily due to increased expenses in promotion and advertising activities to attract new users, as well as to strengthen our brand recognition, such as our tenth year anniversary event and Gao Kao event.

Research and Development Expenses. Our research and development expenses increased by 87.9% from RMB329.8 million in 2020 to RMB619.6 million (US$97.2 million) in 2021, primarily due to increased headcount in our research and development personnel from 672 as of December 31, 2020 to 1,141 as of December 31, 2021, as we continued to invest in technical infrastructure, research and development.

General and Administrative Expenses. Our general and administrative expenses increased by 133.1% from RMB296.2 million in 2020 to RMB690.3 million (US$108.3 million) in 2021, primarily due to increased share-based compensation expenses of RMB296.5 million, mainly due to a one-off grant of options to Mr. Zhou pursuant to the 2012 Plan.

Loss from Operations

As a result of the foregoing, we had a loss from operations of RMB1.4 billion (US$218.2 million) in 2021, in comparison with a loss from operations of RMB602.9 million in 2020.

Investment Income

Our investment income increased from RMB56.1 million in 2020 to RMB59.2 million (US$9.3 million)in 2021, primarily due to an increase in income from cash management activities.

Interest Income

Our interest income increased by 26.5% from RMB24.8 million in 2020 to RMB31.3 million (US$4.9 million) in 2021, primarily due to an increase in the principal amount of our term deposits.

Fair Value Change of Financial Instrument

We had a profit of RMB27.8 million (US$4.4 million) from fair value change of financial instrument in 2021, which primarily reflected the fair value change of financial instruments related to foreign exchange options and forward contracts. We recorded a loss of RMB68.8 million from fair value change of financial instrument in 2020, which reflected the effect of foreign exchange fluctuation regarding certain contribution placed onshore by one of our shareholders in connection with our financing activities during the period.

Exchange (Losses)/Gains

We had exchange losses of RMB16.7 million (US$2.6 million) in 2021, in comparison with exchange gains of RMB62.7 million in the same period in 2020, as a result of fluctuations of the exchange rates of Renminbi against U.S. dollars.

Others, Net

We had net other losses of RMB4.4 million (US$0.7 million) in 2021, in comparison with net other gains of RMB11.7 million, primarily due to decrease in non-operating income.

Loss Before Income Tax

Primarily as a result of the foregoing, our loss before income tax in 2021 was RMB1.3 billion (US$203.0 million), increased by 150.4% from RMB516.5 million in 2020.

Income Tax Expenses

Our income tax expense increased from RMB1.1 million in 2020 to RMB5.4 million (US$0.9 million) in 2021.

Net Loss

As a result of the foregoing, our net loss increased by 151.0% from RMB517.6 million in 2020 to RMB1.3 billion (US$203.8 million) in 2021.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Revenue

	For the Year Ended December 31,			
	2019	2020	Change	
	RMB	RMB	RMB	%
	(in thousands, except percentages)			
Revenue				
Advertising	577,424	843,284	265,860	46.0
Paid membership	87,997	320,471	232,474	264.2
Content-commerce solutions	641	135,813	135,172	—
Others	4,449	52,628	48,179	1,082.9
Total	**670,511**	**1,352,196**	**681,685**	**101.7**

Our revenue increased substantially from RMB670.5 million in 2019 to RMB1.4 billion in 2020.

Advertising. Advertising revenue increased by 46.0% from RMB577.4 million in 2019 to RMB843.3 million in 2020. The increase was primarily driven by a 42.7% increase in average MAUs from 48.0 million in 2019 to 68.5 million in 2020 as a result of the continued growth of our user base, as well as an increase of advertising revenue per MAU from RMB12.0 to RMB12.3, despite that the COVID-19 pandemic had a negative impact on the expenditure of some of our merchants and brands in the first half of 2020.

Paid Membership. Paid membership revenue increased significantly from RMB88.0 million in 2019 to RMB320.5 million in 2020, primarily due to the increase in our MAUs as well as the paying ratio. The paying ratio increased from 1.2% in 2019 to 3.4% in 2020, reflecting the deepening penetration of the paid membership business among our users.

Content-Commerce Solutions. We formally launched content-commerce solutions in early 2020 and generated a revenue of RMB135.8 million in 2020, compared to a revenue of RMB0.6 million in 2019.

Others. Other revenue increased substantially from RMB4.4 million in 2019 to RMB52.6 million in 2020, primarily due to the introduction and growth of vocational training and e-commerce services.

Cost of Revenue

	For the Year Ended December 31,			
	2019	2020	Change	
	RMB	RMB	RMB	%
	(in thousands, except percentages)			
Cost of revenue				
Cloud service and bandwidth costs	178,353	226,684	48,331	27.1
Content and operational costs	76,713	204,397	127,684	166.4
Staff costs	58,296	75,412	17,116	29.4
Payment processing costs	13,118	39,536	26,418	201.4
Others	31,761	48,370	16,609	52.3
Total	**358,241**	**594,399**	**236,158**	**65.9**

Our cost of revenue increased by 65.9% from RMB358.2 million in 2019 to RMB594.4 million in 2020. The increase was primarily attributable to (i) an increase in content and operational costs of RMB127.7 million, which mainly includes the content- related cost and execution cost for advertising service incurred due to our expansion in advertising and paid membership services as well as our content offerings, (ii) an increase in cloud service and bandwidth costs of RMB48.3 million due to our growth in user traffic, (iii) an increase in payment processing costs of RMB26.4 million due to the expansion of paid membership business and the corresponding payment made by our subscribing members, and (iv) an increase in staff costs of RMB17.1 million due to our increased headcount.

Gross Profit and Gross Profit Margin

	For the Year Ended December 31,			
	2019	2020	Change	
	RMB	RMB	RMB	%
	(in thousands, except percentages)			
Gross profit	312,270	757,797	445,527	142.7
Gross profit margin	46.6 %	56.0 %	—	—

Our gross profit in 2019 and 2020 was RMB312.3 million and RMB757.8 million, respectively, and our gross profit margin was 46.6% and 56.0%, respectively. The increase in gross profit margin is primarily due to our improved operating efficiency, such as in cloud service and bandwidth and payment processing.

Operating Expenses

	For the Year Ended December 31,			
	2019	2020	Change	
	RMB	RMB	RMB	%
	(in thousands, except percentages)			
Operating expenses				
Selling and marketing expenses	766,465	734,753	(31,712)	(4.1)
Research and development expenses	351,012	329,763	(21,249)	(6.1)
General and administrative expenses	253,268	296,162	42,894	16.9
Total	**1,370,745**	**1,360,678**	**(10,067)**	**(0.7)**

Selling and Marketing Expenses. Our selling and marketing expenses decreased by 4.1% from RMB766.5 million in 2019 to RMB734.8 million in 2020, primarily due to a decrease in promotion and advertising expenses of RMB31.2 million, as many of the regular or scheduled offline marketing events in China were canceled or delayed in 2020 due to the COVID-19 pandemic.

Research and Development Expenses. Our research and development expenses decreased by 6.1% from RMB351.0 million in 2019 to RMB329.8 million in 2020, primarily due to a decrease in share-based compensation expenses of RMB13.4 million, which was due to the front-loading feature of graded vesting method for share-based compensation expenses.

General and Administrative Expenses. Our general and administrative expenses increased by 16.9% from RMB253.3 million in 2019 to RMB296.2 million in 2020, primarily due to an increase in share-based compensation expenses of RMB15.0 million as we granted options to officers of our company.

Loss from Operations

As a result of the foregoing, we had a loss from operations of RMB602.9 million in 2020, in comparison with a loss from operations of RMB1.1 billion in 2019.

Investment Income

Our investment income increased from RMB25.0 million in 2019 to RMB56.1 million in 2020, primarily due to an increase in income from wealth management products that we held for cash management purpose.

Interest Income

Our interest income decreased by 13.7% from RMB28.7 million in 2019 to RMB24.8 million in 2020, primarily due to a decrease in the principal amount of our term deposits.

Fair Value Change of Financial Instrument

We had a loss of RMB68.8 million from fair value change of financial instrument in 2020, in comparison with an income of RMB7.1 million from fair value change of financial instrument in 2019. This change reflected the effect of foreign exchange fluctuation regarding certain contribution placed onshore by one of our shareholders in connection with our financing activities during the period.

Exchange (Losses)/Gains

We had exchange gains of RMB62.7 million in 2020, in comparison with exchange losses of RMB9.2 million in 2019, as a result of fluctuations of the exchange rates of Renminbi against U.S. dollars.

Others, Net

Our net other gains increased from RMB2.7 million in 2019 to RMB11.7 million in 2020 primarily due to increases in non-operating income and government subsidies.

Loss Before Income Tax

Primarily as a result of the foregoing, our loss before income tax in 2020 was RMB516.5 million, decreased by 48.6% from RMB1.0 billion in 2019.

Income Tax Expenses

Our income tax expense increased from RMB40 thousand in 2019 to RMB1.1 million in 2020.

Net Loss

As a result of the foregoing, our net loss decreased by 48.5% from RMB1.0 billion in 2019 to RMB517.6 million in 2020.

B. Liquidity and Capital Resources

To date, we have financed our operations primarily through cash generated by historical equity financing. We had cash and cash equivalents, term deposits, and short-term investments of RMB3.5 billion, RMB3.1 billion, and RMB7.4 billion (US$1.2 billion) as of December 31, 2019, 2020, and 2021, respectively.

We may decide to enhance our liquidity position or increase our cash reserve for future operations and investments through additional financing. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increasing fixed obligations and could result in operating covenants that would restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

As of December 31, 2021, 94.0% of our cash and cash equivalents were held in China. As of December 31, 2021, 2.7% of our cash and cash equivalents were held by our VIE and its subsidiaries.

Substantially all of our revenues have been, and we expect will likely to continue to be, denominated in Renminbi. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval as long as certain routine procedural requirements are fulfilled. Therefore, our PRC subsidiaries are allowed to pay dividends in foreign currencies to us without prior SAFE approval by following certain routine procedural requirements. However, approval from or registration with competent government authorities is required where the Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future.

Although we consolidate the results of our variable interest entities and their subsidiaries, we only have access to the assets or earnings of our variable interest entities and their subsidiaries through contractual arrangements.

We believe that, taking into account the cash and cash equivalents on hand and the financial resources available to us, including internally generated funds, we have sufficient working capital for our present requirement, which is, for at least the next 12 months from the date of this annual report.

Our short-term investments mainly include investments in financial instruments with a variable interest rate indexed to performance of underlying assets for cash management purposes. From the cash management and risk control perspective, we diversify our investment portfolios and mainly purchase low risk products from reputable banks in China and overseas and prefer those products with high liquidity. We prudently manage our short-term investments portfolio and their respective term to ensure that we have short-term investments readily convertible into cash from time to time in the event that there is a need for liquidity. Our short-term investments decreased from RMB1.5 billion as of December 31, 2019 to RMB1.0 billion as of December 31, 2020, primarily due to a decrease in redeemable and low-risk investment products purchased at major banks in China and overseas, and further increased to RMB2.2 billion (US$351.4 million) as of December 31, 2021 primarily due to an increase in redeemable and low-risk investment products purchased at major banks in China using proceeds from our initial public offering in the United States.

Our trade receivables primarily consist of outstanding amounts payable by third parties. Our trade receivables increased from RMB245.9 million as of December 31, 2019 to RMB486.0 million as of December 31, 2020 and further increased to RMB831.6 million (US$130.5 million) as of December 31, 2021, primarily due to the increase in revenues relating to our advertising services due from third parties. We applied ASC Topic 326 to measure current expected credit losses for all trade receivables. We recorded provision of allowance for expected credit losses of trade receivables of RMB11.9 million, RMB27.9 million, and RMB58.6 million (US$9.2 million) as of December 31, 2019 and 2020 and December 31, 2021, respectively.

Accounts payable and accrued liabilities represent (i) accrued sales rebates, (ii) operational costs payables and accruals, and (iii) marketing expenses payables and accruals. Accounts payable and accrued liabilities increased from RMB287.0 million as of December 31, 2019 to RMB501.8 million as of December 31, 2020, and further increased to RMB1,026.5 million (US$161.1 million) as of December 31, 2021, primarily due to increase in marketing expenses payables and accruals, operational costs payables and accruals and accrued sales rebate.

Cash Flows

The following table sets forth a summary of our cash flows for the periods indicated.

	For the Year Ended December 31,			
	2019	2020	2021	
	RMB	RMB	RMB	US$
	(in thousands)			
Net cash used in operating activities	(715,522)	(244,421)	(440,234)	(69,084)
Net cash (used in)/generated from investing activities	(2,102,488)	430,113	(3,136,503)	(492,185)
Net cash generated from financing activities	2,997,575	9,286	4,876,247	765,190
Effect of exchange rate changes on cash and cash equivalents	7,491	(137,508)	(100,169)	(15,718)
Net increase in cash and cash equivalents	187,056	57,470	1,199,341	188,203
Cash, cash equivalents at the beginning of the year	713,294	900,350	957,820	150,303
Cash, cash equivalents at the end of the year	900,350	957,820	2,157,161	338,506

Operating Activities

For the year ended December 31, 2021, net cash used in operating activities was RMB440.2 million (US$69.1 million), which was primarily attributable to our net loss of RMB1.3 billion (US$203.8 million), as adjusted by deducting a fair value change of financial instrument of RMB27.8 million, an accrued investment income of short-term investments of RMB6.4 million and a deferred income tax of RMB1.1 million, adding back other non-cash items of RMB602.5 million, which primarily comprised share-based compensation expenses of RMB548.5 million and provision of allowance for expected credit losses of RMB32.6 million, and adding another RMB291.4 million released from working capital. The cash released from working capital was primarily the result of (i) an increase of RMB524.2 million in accounts payable and accrued liabilities, (ii) an increase of RMB119.8 million in lease liabilities, and (iii) an increase of RMB81.4 million in salary and welfare payables to our employees, partially offset by an increase of RMB374.7 million in trade receivables.

For the year ended December 31, 2020, net cash used in operating activities was RMB244.4 million, which was primarily attributable to our net loss of RMB517.6 million, as adjusted by deducting an accrued investment income of short-term investments of RMB2.4 million, adding back other non-cash items of RMB285.5 million, which primarily comprised share-based compensation expenses of RMB180.1 million and fair value change of financial instrument of RMB68.8 million, and deducting RMB10.1 million used for working capital. The cash used for working capital was primarily the result of (i) an increase of RMB257.1 million in trade receivables in relation to the increasing scale of our advertising business and (ii) a decrease of RMB57.9 million in net amount due to related parties, which reflected an increase in settlement of cloud service fees with service providers who are also our shareholders, which was partially offset by (y) an increase of RMB214.8 million in accounts payable and accrued liabilities and (z) an increase of RMB52.9 million in contract liabilities, both reflecting the increasing scale of our advertising business.

For the year ended December 31, 2019, net cash used in operating activities was RMB715.5 million, which was primarily attributable to our net loss of RMB1.0 billion, as adjusted by deducting an accrued investment income of short-term investments of RMB4.9 million and a gain of RMB7.1 million from unrealized fair value change of financial instrument, adding back other non-cash items of RMB215.3 million, which primarily comprised share-based compensation expenses of RMB179.7 million, and adding another RMB85.4 million released from working capital. The cash released from working capital was primarily the result of (i) an increase of RMB66.0 million in salary and welfare payables to our employees, (ii) an increase of RMB42.0 million in contract liabilities, and (iii) an increase of RMB38.6 million in accounts payable and accrued liabilities, partially offset by an increase of RMB62.6 million in trade receivables. The increase in contract liabilities, accounts payable and accrued liabilities, and trade receivables all reflect the increasing scale of our advertising business.

Investing Activities

For the year ended December 31, 2021, net cash used in investing activities was RMB3,136.5 million (US$492.2 million), which was primarily attributable to (i) purchase of short-term investments of RMB6.4 billion and (ii) purchase of term deposits of RMB4.9 billion, partially offset by proceeds of maturities of short-term investments of RMB5.2 billion and proceeds from disposal of term deposits of RMB3.0 billion .

For the year ended December 31, 2020, net cash generated from investing activities was RMB430.1 million, which was mainly attributable to (i) proceeds of maturities of short-term investments of RMB6,594.7 million and (ii) proceeds from disposal of term deposits of RMB2,319.2 million, partially offset by (y) purchases of short-term investments of RMB6,153.1 million and (z) purchases of term deposits of RMB2,328.7 million.

For the year ended December 31, 2019, net cash used in investing activities was RMB2.1 billion, which was mainly attributable to (i) purchase of short-term investments of RMB3.5 billion and (ii) purchase of term deposits of RMB1.2 billion, partially offset by proceeds of maturities of short-term investments of RMB2.3 billion.

Financing Activities

For the year ended December 31, 2021, net cash generated from financing activities was RMB4,876.2 million (US$765.2 million), which was primarily attributable to net proceeds from issuance of Class A ordinary shares upon the completion of our initial public offering.

For the year ended December 31, 2020, net cash generated from financing activities was RMB9.3 million, which primarily comprised proceeds received from employees in relation to share options.

For the year ended December 31, 2019, net cash generated from financing activities was RMB3.0 billion, which primarily comprised net proceeds from issuance of convertible redeemable preferred shares.

Capital Expenditures

Our capital expenditures are primarily incurred for purchases of property and equipment and purchases of intangible assets. Our total capital expenditures were RMB5.8 million in 2019, RMB2.0 million in 2020 and RMB7.4 million (US$1.2 million) in 2021. We intend to fund our future capital expenditures with our existing cash balance. We will continue to make capital expenditures to meet the expected growth of our business. The following table sets forth our capital expenditures for the periods indicated:

	For the Year Ended December 31,			
	2019	2020	2021	
	RMB	RMB	RMB	US$
	(in thousands)			
Purchase of intangible assets	1,222	—	—	—
Purchase of property and equipment	4,528	1,952	7,440	1,167
Total	**5,750**	**1,952**	**7,440**	**1,167**

Material Cash Requirements

Other than the ordinary cash requirements for our operations, our material cash requirements as of December 31, 2021 and any subsequent interim period primarily include our capital expenditures and operating lease obligations, as well as cash requirements for potential investments.

Our operating lease obligations primarily represent consist of the commitments under the lease agreements for our office premises. We lease our office facilities under non-cancelable operating leases with various expiration dates. Our leasing expense was RMB26.8 million, RMB23.4 million and RMB38.7 million (US$6.1 million) for the years ended December 31, 2019, 2020, and 2021, respectively. The majority of our operating lease commitments are related to our office lease agreements in China.

We intend to fund our existing and future material cash requirements with our existing cash balance and other financing alternatives. We will continue to make cash commitments, including capital expenditures, to support the growth of our business.

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any third parties. We do not have retained or contingent interests in assets transferred. We have not entered into contractual arrangements that support the credit, liquidity or market risk for transferred assets. We do not have obligations that arise or could arise from variable interests held in an unconsolidated entity, or obligations related to derivative instruments that are both indexed to and classified in our own equity, or not reflected in the statement of financial position.

Other than as discussed above, we did not have any significant capital and other commitments, long-term obligations or guarantees as of December 31, 2021.

Holding Company Structure

Zhihu Inc. is a holding company with no material operations of its own. We conduct our operations through our PRC subsidiaries and our VIEs in China. As a result, our ability to pay dividends depends significantly upon dividends paid by our PRC subsidiaries. If our existing PRC subsidiaries or any newly formed ones incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us. In addition, our wholly foreign-owned subsidiaries in China are permitted to pay dividends to us only out of their accumulated after-tax profits, if any, as determined in accordance with PRC accounting standards and regulations. Under the PRC law, each of our PRC subsidiaries and our VIEs in China is required to set aside at least 10% of its after-tax profits each year, if any, after making up previous years' accumulated losses, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of its registered capital. In addition, each of our wholly foreign-owned subsidiaries in China may allocate a portion of its after-tax profits based on PRC accounting standards to enterprise expansion funds and staff bonus and welfare funds at its discretion, and our VIE may allocate a portion of its after-tax profits based on PRC accounting standards to a discretionary surplus fund at its discretion. The statutory reserve funds and the discretionary funds are not distributable as cash dividends. Remittance of dividends by a wholly foreign-owned company out of China is subject to examination by the banks designated by the SAFE. Our PRC subsidiaries have not paid dividends and will not be able to pay dividends until they generate accumulated profits and meet the requirements for statutory reserve funds.

C. Research and Development, Patents and Licenses, etc.

See "Item 4. Information on the Company—B. Business Overview— Technological Infrastructure" And "Item 4. Information on the Company—B. Business Overview—Intellectual Property."

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the period from January 1, 2021 to December 31, 2021 that are reasonably likely to have a material adverse effect on our total revenues, profitability, liquidity, or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

E. Critical Accounting Estimates

Our consolidated financial statements have been prepared in accordance with U.S. GAAP and pursuant to the regulations of the SEC. The preparation of the consolidated financial statements requires management to make assumptions, judgments and estimates that can have a significant impact on the reported amounts of assets, liabilities, revenue and expenses. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. Actual results could differ significantly from these estimates. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. On a regular basis, we evaluate our assumptions, judgments and estimates and make changes accordingly. We also discuss our critical accounting estimates with the Audit Committee of the Board of Directors. Note 2, Summary of Significant Accounting Policies in the Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of the consolidated financial statements.

We have listed below our critical accounting estimates which require management to make difficult, subjective and complex judgements often as a result of the need to make estimate on matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or assumptions. Actual results could differ from those estimates.

Share-based compensation

We set up the Zhihu Employee Option Plan and granted options to employees and other qualifying participants. Prior to the completion of the IPO, the fair value of the options are determined by the binomial option pricing model at the grant date, and is expected to be expensed over the respective vesting periods. We have used the discounted cash flow method to determine our underlying equity fair value and adopted equity allocation model to determine the fair value of the underlying ordinary share. Significant estimates and assumptions, including fair value per share, discount rate, risk-free interest rate, expected volatility, expected term, dividend yield, and discount for lack of marketability are made by the management. Changes in these estimates and assumptions could materially affect the fair value of the options and recognition of share-based compensation expenses.

The following are key assumptions we used in the binomial option pricing model.

Fair value per share. We have used the discounted cash flow method to determine our underlying equity fair value and adopted equity allocation model to determine the fair value of the underlying ordinary share. The higher the fair value per share, the higher the fair value of the option.

Discount rate. Future cash flows are discounted at a rate that is consistent with a weighted-average cost of capital that we anticipate a potential market participant would use. Weighted-average cost of capital is an estimate of the overall risk-adjusted pre-tax rate of return expected by equity and debt holders of a business enterprise. The higher the discount rate, the lower the fair value per share.

Risk-free interest rate. Risk-free interest rate is estimated based on the yield to maturity of U.S. treasury bonds denominated in US$ at the option valuation date. The higher the risk-free interest rate, the lower the fair value of the option.

Expected volatility. The expected volatility at the grant date and each option valuation date was estimated based on the annualized standard deviation of the daily return embedded in historical share prices of comparable peer companies with a time horizon close to the expected expiry of the term of the options. The higher the expected volatility, the lower the fair value of the option.

Expected term. Expected term is the contractual life of the options. The longer the expected term, the higher the fair value of the option.

Dividend yield. The Company has never declared or paid any cash dividends on its capital stock, and the Group does not anticipate any dividend payments in the foreseeable future. The higher the dividend yield, the lower the fair value of the option.

Discount for lack of marketability ("DLOM"). It was quantified by the Finnerty's Average-Strike put options mode. Under this option-pricing method, which assumed that the put option is struck at the average price of the stock before the privately held shares can be sold, the cost of the put option was considered as a basis to determine the DLOM. The higher the DLOM, the lower the fair value of the option.

Our estimation of fair value of the option is highly sensitive to the fair value per share. If our fair value per share increased/decreased by 10% with all other variables held constant, the loss before taxation for the year ended December 31, 2021 would have been approximately RMB54.1 million higher/lower.

Business combinations

We account for business combinations using the acquisition method of accounting, which requires that once control is obtained, the purchase price be allocated to all tangible assets and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date. Any excess purchase price over the fair value of the net assets acquired is recorded as goodwill. The determination of the fair value of assets acquired and liabilities assumed requires estimates and assumptions with respect to the revenue growth rates, perpetual growth rate, discount rates and useful lives which to base the cash flow projections. Although we believe that the assumptions applied in the determination are reasonable based on information available at the date of acquisition, actual results may differ from the forecasted amounts and the difference could be material.

The following are key assumptions we use in making cash flow projections.

Revenue growth rate. We make assumptions about the demand for our products in the marketplace. These projections are derived using our internal business plan forecasts that are updated at least annually and reviewed by our Board of Directors. The higher the revenue growth rate, the higher the fair value of assets acquired and liabilities assumed.

Perpetual growth rate. A growth rate is used to calculate the terminal value of the business and is added to the present value of the debt-free interim cash flows. The growth rate is the expected rate at which an asset group's business unit's earnings stream is projected to grow beyond the planning period. The higher the perpetual growth rate, the higher the fair value of assets acquired and liabilities assumed.

Discount rate. When measuring the fair value of assets acquired and liabilities assumed, future cash flows are discounted at a rate that is consistent with a weighted-average cost of capital that we anticipate a potential market participant would use. Weighted-average cost of capital is an estimate of the overall risk-adjusted pre-tax rate of return expected by equity and debt holders of a business enterprise. The higher the discount rate, the lower the fair value of assets acquired and liabilities assumed.

Useful lives. The length of useful lives of identifiable intangible assets acquired is estimated in determining of the fair value of identifiable intangible assets acquired. The longer the length of useful lives of identifiable intangible assets acquired, the higher the fair value of identifiable intangible assets.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth information regarding our directors and executive officers as of the date of this annual report.

Directors and Executive Officers	Age	Position/Title
Yuan Zhou	41	Founder, Chairman, and Chief Executive Officer
Zhaohui Li	46	Director
Jiatong Peng	37	Director
Dahai Li	40	Director and Chief Technology Officer
Wei Sun	42	Director and Chief Financial Officer
Hanhui Sam Sun	49	Independent Director
Hope Ni	49	Independent Director

Yuan Zhou is our founder and has served as the chairman of our board of directors and chief executive officer since our inception. Mr. Zhou is an entrepreneur with over 15 years of experience in internet and media. He has a deep passion and outstanding acumen and vision for China's internet content industry. Prior to founding our company, Mr. Zhou founded Beijing Nuobote Informational Technology Co., Ltd., a start-up company that focused on the development of big data analytics for e-commerce businesses, in 2008 and led the business from 2008 to 2010. Before that, Mr. Zhou worked as a journalist for the IT Management World magazine from 2006 to 2007. Mr. Zhou received a bachelor's degree in computer science and technology from Chengdu University of Technology in China in 2003 and a master's degree in software engineering from Southeast University in China in 2006.

Zhaohui Li has served as our director since September 2015. Mr. Li jointed Tencent in 2011 and has worked there as the vice president and head of mergers and acquisitions department, and as the managing partner of Tencent Investment. Before joining Tencent, Mr. Li served as an investment principal at Bertelsmann Asia Investment from 2008 to 2010. Prior to that, Mr. Li held various positions related to product and business in Google and Nokia. Mr. Li received a bachelor's degree from Peking University in 1998 and an MBA degree from Duke University Fuqua School of Business in 2004.

Jiatong Peng has served as our director since November 2020. Since April 2020, Mr. Peng has served as a vice president and head of investment and development at Kuaishou Technology (HKEX: 1024), a content community and social platform. From June 2018 to April 2020, Mr. Peng served as vice president at 58.com Inc. (NYSE: WUBA). Prior to that, Mr. Peng served as a director and a senior vice president at Beijing Jingxi Culture & Tourism Co., Ltd. (Shenzhen Stock Exchange: 000802), a film and television entertainment media company, from July 2015 to June 2018. From May 2011 to July 2015, Mr. Peng served as a vice president at SAIF Partners, a private equity firm. From May 2007 to May 2011, Mr. Peng worked as an associate at Bank of America Merrill Lynch. Mr. Peng received a bachelor's degree of science in quantitative finance from the Chinese University of Hong Kong in 2007. Mr. Peng is a CFA charterholder.

Dahai Li has served as our chief technology officer since May 2018 and as our director since March 2021. Mr. Li served as our senior vice president from December 2015 to April 2018. Prior to joining us, Mr. Li served as the head of search technology at Wandoujia, a leading app store in China, from 2013 to 2015. Prior to that, Mr. Li served as the engineering director at YunYun, a search engine company in China, from 2010 to 2013. From 2006 to 2010, Mr. Li served as an engineer at Google China, focusing on search engine. Mr. Li received a bachelor's degree in information and computing science from Beijing University of Chemical Technology in China in 2003 and a master's degree in mathematics from Peking University in 2006.

Wei Sun has served as our chief financial officer since November 2018 and as our director since March 2021. Before joining us, Mr. Sun acted as a founding managing partner of Bochuang Capital in 2018. Prior to that, Mr. Sun served as the chief financial officer of Mia.com, an online retail platform for maternal and baby products, from 2014 to 2018. From 2013 to 2014, Mr. Sun served as a director at Daiwa Capital Markets Hong Kong Limited. Mr. Sun worked for the set-up of a private equity fund from 2012 to 2013. From 2010 to 2012, Mr. Sun worked as a senior vice president of ICBC International Capital Limited. From 2006 to 2010, Mr. Sun worked as a senior associate at Deutsche Bank, Hong Kong Branch. Mr. Sun worked with the Industrial and Commercial Bank of China from 2001 to 2003. Mr. Sun received a bachelor's degree in economics from Xi'an Jiaotong University in China in 2001, a master's degree in finance from London Business School in 2005, and an Executive MBA degree from China Europe International Business School in 2019.

Hanhui Sam Sun has served as our independent director since March 2021. Mr. Sun has served as the chairman of VSP Zhuhai Asset Management Company since January 2021. From January 2010 to September 2015, Mr. Sun assumed various positions at Qunar Cayman Islands Limited, a mobile and online travel platform then listed on Nasdaq, including serving as Qunar's president from May 2015 to September 2015 and its chief financial officer from January 2010 to April 2015. Prior to joining Qunar, Mr. Sun was the chief financial officer of KongZhong Corporation, an online game developer and operator then listed on Nasdaq-listed company, from 2007 to 2009. Mr. Sun was also an independent director and audit committee member of KongZhong Corporation from July 2005 through January 2007. From 2004 to 2007, Mr. Sun served in several financial controller positions at Microsoft China R&D Group, Maersk China Co. Ltd. and SouFun.com. From 1995 to 2004, Mr. Sun worked in KPMG's auditing practice group, including eight years at the Beijing office of KPMG, where he was an audit senior manager, and two years at KPMG in Los Angeles, California. Mr. Sun currently serves as an independent director and audit committee chair of iQIYI Inc. (Nasdaq: IQ) and Yiren Digital Ltd. (NYSE: YRD). Mr. Sun received a bachelor's degree in business administration from Beijing Institute of Technology in 1993. He is a Certified Public Accountant in China.

Hope Ni has served as our independent director since March 2021. Ms. Ni has served as an independent non-executive director of Acotec Scientific Holdings Limited (HKEX: 6669) since August 2021. She has also served as a non-executive director of Cogobuy Group (HKEX: 0400) since June 2020 and prior to that, she served as an executive director from 2015 to 2020. Ms. Ni currently serves as an independent director of Digital China Holdings Limited (HKEX: 0861), UCLOUDLINK GROUP INC. (Nasdaq: UCL), and ATA Creativity Global (Nasdaq: AACG). From 2004 to 2007, Ms. Ni was the chief financial officer and a director of Viewtran Group, Inc. In 2008, Ms. Ni served as the vice chairman of Viewtran Group, Inc. Prior to that, Ms. Ni spent six years as a practicing attorney at Skadden, Arps, Slate, Meagher & Flom LLP in New York and Hong Kong. Earlier in her career, Ms. Ni worked at Merrill Lynch's investment banking division in New York. Ms. Ni received a J.D. degree from University of Pennsylvania Law School in 1998 and a bachelor's degree in applied economics and business management from Cornell University in 1994.

B. Compensation

For the fiscal year ended December 31, 2021, we paid an aggregate of RMB8.6 million (US$1.4 million) in cash to our directors and executive officers. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our executive officers and directors. Our PRC subsidiaries are required by law to make contributions equal to certain percentages of each employee's salary for his or her pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund.

Employment Agreements and Indemnification Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our executive officers is employed for a specified time period. We may terminate employment for cause, at any time, without advance notice or remuneration, for certain acts of the executive officer, such as conviction or plea of guilty to a felony or any crime involving moral turpitude, negligent or dishonest acts to our detriment, or misconduct or a failure to perform agreed duties. We may also terminate an executive officer's employment without cause upon three-month advance written notice. In such case of termination by us, we will provide severance payments to the executive officer as expressly required by applicable law of the jurisdiction where the executive officer is based. The executive officer may resign at any time with a three-month advance written notice.

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence and not to use, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our confidential information or trade secrets, any confidential information or trade secrets of our customers or prospective customers, or the confidential or proprietary information of any third party received by us and for which we have confidential obligations. The executive officers have also agreed to disclose in confidence to us all inventions, designs, and trade secrets which they conceive, develop, or reduce to practice during the executive officer's employment with us and to assign all right, title and interest in them to us, and assist us in obtaining and enforcing patents, copyrights and other legal rights for these inventions, designs, and trade secrets.

In addition, each executive officer has agreed to be bound by non-competition and non-solicitation restrictions during the term of his or her employment and typically for one year following the last date of employment. Specifically, each executive officer has agreed not to (i) approach our suppliers, clients, customers or contacts or other persons or entities introduced to the executive officer in his or her capacity as a representative of us for the purpose of doing business with such persons or entities that will harm our business relationships with these persons or entities; (ii) assume employment with or provide services to any of our competitors, or engage, whether as principal, partner, licensor or otherwise, any of our competitors, without our express consent; or (iii) seek directly or indirectly, to solicit the services of any of our employees who is employed by us on or after the date of the executive officer's termination, or in the year preceding such termination, without our express consent.

We have also entered into indemnification agreements with each of our directors and executive officers. Under these agreements, we agree to indemnify our directors and executive officers against certain liabilities and expenses incurred by such persons in connection with claims made by reason of their being a director or officer of our company.

Share Incentive Plans

2012 Incentive Compensation Plan

In June 2012, our board of directors and members approved an equity incentive plan, which we refer to as the 2012 Plan, to secure and retain the services of valuable employees and consultants and provide incentives for such persons to exert their best efforts for the success of our business. As of February 28, 2022, the maximum aggregate number of Class A ordinary shares which may be issued pursuant to all awards under the 2012 Plan is 44,021,165. As of February 28, 2022, awards to purchase 20,534,450 Class A ordinary shares under the 2012 Plan have been granted and remain outstanding, excluding awards that were forfeited or canceled after the relevant grant dates.

The following paragraphs describe the principal terms of the 2012 Plan.

Types of Awards. The 2012 Plan permits the awards of options and restricted shares.

Plan Administration. Our board of directors, a committee of one or more members of the board of directors, or any director appointed to be the administrator administers the 2012 Plan. The administrator determines, among other things, the fair market value of ordinary shares, the employees and consultants eligible to receive awards, the number of options or restricted shares to be granted to each eligible employee, and the terms and conditions of each option grant.

Award Agreement. Awards granted under the 2012 Plan are evidenced by an award agreement that sets forth terms, conditions and limitations for each award, which is subject to any modification as determined by the administrator.

Eligibility. We may grant awards to employees and consultants.

Vesting Schedule. In general, the plan administrator determines the vesting schedule, which is specified in the relevant award agreement.

Exercise of Options. The plan administrator determines the exercise price for each award, which is stated in the relevant award agreement. Options that are vested and exercisable will terminate if they are not exercised prior to the time as the plan administrator determines at the time of grant. However, the maximum exercisable term is ten years from the date of grant.

Transfer Restrictions. Awards may not be transferred in any manner by the eligible employee other than in accordance with the exceptions provided in the 2012 Plan, such as by will or by the laws of descent or distribution.

Termination and Amendment of the 2012 Plan. Unless terminated earlier, the 2012 Plan has a term of ten years. The board of directors has the authority to terminate, amend, add to, or delete any of the provisions of the plan, subject to the restrictions set out in our memorandum and articles or associations. However, no termination, amendment or modification pf the 2012 Plan may adversely affect in any material way any award previously granted pursuant to the 2012 Plan.

The following table summarizes, as of the date of this annual report, the number of options we have granted to certain of our directors and executive officers, excluding awards that were forfeited or canceled after the relevant grant dates.

Name	Ordinary Shares Underlying Options Awarded	Exercise Price (US$/Share)	Date of Grant	Date of Expiration
Yuan Zhou	*	0.01	December 8, 2016	December 8, 2026
	7,567,730	0.01	December 22, 2020	December 22, 2030
Dahai Li	*	0.01	June 20, 2018	June 20, 2028
	*	0.01	June 20, 2020	June 19, 2030
Wei Sun	*	0.01	December 20, 2018	December 20, 2028
	*	0.01	June 20, 2019	June 20, 2029
Total	13,726,218	—	—	—

Note:

* Less than 1% of our total ordinary shares on an as-converted basis outstanding as of the date of this annual report.

The following table summarizes, as of the date of this annual report, the number of restricted shares we have granted to certain of our directors and executive officers.

Name	Restricted Shares	Purchase Price (US$/Share)	Date of Grant
Dahai Li	*	0.01	February 20, 2016

Note:

* Less than 1% of our total ordinary shares on an as-converted basis outstanding as of the date of this annual report.

As of February 28, 2022, other employees as a group hold options to purchase a total of 11,569,869 Class A ordinary shares of our company, with an average weighted exercise price of US$1.69 per share, and 1,448,416 restricted shares.

2022 Share Incentive Plan

In connection with our proposed listing on the Hong Kong Stock Exchange, our board of directors adopted a 2022 share incentive plan in March 2022 to promote the success and enhance the value of our company by linking the personal interests of the directors, employees, and consultants to our shareholders, which will become effective upon the Listing. The maximum aggregate number of Class A ordinary shares which may be issued pursuant to all awards under the plan is be the sum of (i) a maximum of 13,042,731 Class A ordinary shares which may be issued pursuant to awards in the form of options, and (ii) the sum of (A) 26,085,463 Class A ordinary shares and (B) such number of Class A ordinary shares equivalent to the unused portion of the number of shares of our 2012 Share Incentive Plan of the Company at its expiration, which may be issued pursuant to awards in the form of restricted share units.

C. Board Practices

Board of Directors

Our board of directors currently consists of seven directors. A director is not required to hold any shares in our company by way of qualification. Subject to the New York Stock Exchange rules and disqualification by the chairman of the relevant board meeting, a director may vote with respect to any contract, proposed contract, or arrangement in which he is materially interested, provided that (i) such director, if his or her interest in such contract or arrangement is material, has declared the nature of his or her interest at the earliest meeting of the board at which it is practicable for him or her to do so, either specifically or by way of a general notice and (ii) if such contract or arrangement is a transaction with a related party, such transaction has been approved by the audit committee. The directors may exercise all the powers of the company to borrow money, mortgage or charge its undertaking, property, and uncalled capital, and issue debentures or other securities whenever money is borrowed or as security for any debt, liability, or obligation of the company or of any third party. None of our directors has a service contract with us that provides for benefits upon termination of service as a director.

In connection with the our proposed listing on the Hong Kong Stock Exchange, our board of directors has appointed Mr. Derek Chen to serve as an independent director, effective on the date of the Hong Kong prospectus to be issued in connection with the listing.

Committees of the Board of Directors

We have established three committees under the board of directors: an audit committee, a compensation committee, and a nominating and corporate governance committee. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee. Our audit committee consists of Hanhui Sam Sun and Hope Ni. Hanhui Sam Sun is the chairman of our audit committee. We have determined that Hanhui Sam Sun and Hope Ni each satisfies the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange and meet the independence standards under Rule 10A-3 under the Exchange Act, as amended. We have determined that Hanhui Sam Sun qualifies as an "audit committee financial expert." The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. The audit committee is responsible for, among other things:

- appointing the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing with the independent auditors any audit problems or difficulties and management's response;
- discussing the annual audited financial statements with management and the independent auditors;

- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any steps taken to monitor and control major financial risk exposures;
- reviewing and approving all proposed related party transactions;
- meeting separately and periodically with management and the independent auditors; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

Compensation Committee. Our compensation committee consists of Hanhui Sam Sun, Hope Ni, and Yuan Zhou. Hanhui Sam Sun is the chairman of our compensation committee. We have determined that Hanhui Sam Sun and Hope Ni satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors;
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements; and
- selecting a compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person's independence from management.

Nominating and Corporate Governance Committee. Our nominating and corporate governance committee consists of Hope Ni, Hanhui Sam Sun, and Yuan Zhou. Hope Ni is the chairman of our nominating and corporate governance committee. We have determined that Hope Ni and Hanhui Sam Sun satisfy the "independence" requirements of Section 303A of the Corporate Governance Rules of the New York Stock Exchange. The nominating and corporate governance committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience and diversity;
- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board; and
- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken.

Assuming and upon our listing on the Hong Kong Stock Exchange, our audit committee will consist of Mr. Hanhui Sam Sun (chairperson), Ms. Hope Ni, and Mr. Derek Chen, our compensation committee will consist of Mr. Hanhui Sam Sun (chairperson), Ms. Hope Ni, and Mr. Yuan Zhou, and our nominating and corporate governance committee will consist of Ms. Hope Ni (chairperson), Mr. Hanhui Sam Sun, and Mr. Derek Chen.

Duties of Directors

Under Cayman Islands law, our directors owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly, and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also have a duty to exercise the skill they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association, as amended and restated from time to time, and the class rights vested thereunder in the holders of the shares. Our company has the right to seek damages if a duty owed by our directors is breached. A shareholder may in certain circumstances have rights to damages if a duty owed by the directors is breached.

Our board of directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our board of directors include, among others:

- convening shareholders' annual general meetings and reporting its work to shareholders at such meetings;
- declaring dividends and distributions;
- appointing officers and determining the term of office of the officers;
- exercising the borrowing powers of our company and mortgaging the property of our company; and
- approving the transfer of shares in our company, including the registration of such shares in our share register.

Terms of Directors and Officers

Our directors may be elected by an ordinary resolution of our shareholders. Alternatively, our board of directors may, by the affirmative vote of a simple majority of the directors present and voting at a board meeting appoint any person as a director to fill a casual vacancy on our board or as an addition to the existing board. Our directors are not automatically subject to a term of office and hold office until such time as they are removed from office by an ordinary resolution of our shareholders. In addition, a director will cease to be a director if he

(i) becomes bankrupt or makes any arrangement or composition with his creditors;

(ii) dies or is found to be or becomes of unsound mind;

(iii) resigns his office by notice in writing;

(iv) without special leave of absence from our board, is absent from meetings of our board for three consecutive meetings and our board resolves that his office be vacated; or

(v) is removed from office pursuant to any other provision of our articles of association.

Our officers are appointed by and serve at the discretion of the board of directors, and may be removed by our board of directors.

D. Employees

As of December 31, 2021, we had 2,649 full-time employees, all of whom were based in China, primarily at our headquarters in Beijing, China.

The following table sets forth the number of our employees by function as of December 31, 2021.

Function	Number of Employees	Percentage
Content and Content-Related Operations	687	25.9 %
Research and Development	1,141	43.1 %
Sales and Marketing	584	22.0 %
General Administration	237	9.0 %
Total	2,649	**100 %**

Our success depends on our ability to attract, retain, and motivate qualified personnel. We offer employees competitive salaries, performance-based cash bonuses, regular awards, and long-term incentives. We believe that we maintain a good working relationship with our employees, and we did not experience any material labor disputes or work stoppages or any difficulty in recruiting staff for our operations during 2019, 2020, and 2021.

We primarily recruit our employees through on-campus job fairs, industry referrals, online channels, and recruitment agencies. In addition to on-the-job training, we have adopted a training system, pursuant to which management, technology, regulatory, and other trainings are regularly provided to our employees by internally sourced speakers or externally hired consultants. To efficiently manage our human resources, we have in place an employee handbook approved by our management and distributed to all our employees, which contains internal rules and guidelines regarding best commercial practice, work ethics, fraud prevention mechanism, negligence, and corruption. In addition, we have in place an anti-bribery and anti-corruption policy to safeguard against any corruption within our company. The policy explains potential bribery and corruption conducts and our anti-bribery and anti-corruption measures. Improper payments prohibited by the policy include bribes, kickbacks, excessive gifts or facilitation payment, or any other payment made or offered to obtain an undue business advantage. We keep accurate books and records that reflect the substance of transactions and asset dispositions in reasonable detail. We specifically require that the employees submit all reimbursement requests related to entertainment related fee or gifts presented to third parties on behalf of the company in accordance with our expense expenditure policy, and specifically record the reason for the expenditure. We also have regular trainings for employees regarding anti-bribery and anti-corruption policies to facilitate better implementation.

As required by PRC laws and regulations in respect of our PRC employment, we participate in housing fund and various employee social insurance plans that are organized by applicable competent authorities, including housing, pension, medical, work-related injury, maternity, and unemployment insurance, under which we make contributions at specified percentages of the salaries of our employees. We also purchase commercial health and accidental insurance coverage for our employees. Bonuses are generally discretionary and based in part on the overall performance of our business and in part on employee performance. We have adopted a plan to grant share-based incentive awards to our eligible employees to incentivize their contributions to our growth and development.

We enter into standard confidentiality and employment agreements with our employees. The contracts with our key personnel typically include a standard non-compete covenant that prohibits the employee from competing with us, directly or indirectly, during his or her employment and typically for one year after the termination of his or her employment, provided that we pay a certain amount of compensation during the restriction period.

E. Share Ownership

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of the date of this annual report by:

- each of our directors and executive officers; and
- each person known to us to own beneficially more than 5% of our ordinary shares.

The calculations in the shareholder table below are based on 297,516,840 Class A ordinary shares (excluding the 9,323,863 Class A ordinary shares issued to the depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plan) and 19,227,592 Class B ordinary shares issued and outstanding as of the date of this annual report.

	Class A Ordinary Shares	Class B Ordinary Shares	% of Beneficial Ownership†	% of Aggregate Voting Power††
Directors and Executive Officers:**				
Yuan Zhou[(1)]	17,626,986	19,227,592	11.6	42.9
Zhaohui Li	—	—	—	—
Jiatong Peng	—	—	—	—
Dahai Li	*	—	*	*
Wei Sun[(2)]	3,404,667	—	1.1	0.7
Hanhui Sam Sun	—	—	—	—
Hope Ni	—	—	—	—
All Directors and Executive Officers as a Group	23,910,343	19,227,592	13.6	44.1
MO Holding Ltd[(1)]	17,626,986	19,227,592	11.6	42.9
Principal Shareholders:				
Tencent Entities[(3)]	38,066,599	—	12.0	7.8
Innovation Works Entities[(4)]	30,568,049	—	9.7	6.2
Qiming Entities[(5)]	26,195,598	—	8.3	5.4
SAIF IV Mobile Apps (BVI) Limited[(6)]	21,282,465	—	6.7	4.4
Cosmic Blue Investments Limited[(7)]	19,975,733	—	6.3	4.1

Notes:

* Less than 1% of our total ordinary shares on an as-converted basis outstanding as of the date of this annual report.

** Except as otherwise indicated below, the business address of our directors and executive officers is A5 Xueyuan Road, Haidian District, Beijing 100083, People's Republic of China. The business address of Mr. Zhaohui Li is 10/F, China Technology Trade Center, No. 66 North 4th Ring West Road, Haidian District, Beijing, People's Republic of China. The business address of Mr. Jiatong Peng is No. 6 Shangdi West Road, Haidian District, Beijing, People's Republic of China. The business address of Mr. Hanhui Sam Sun is 64 Donggong Street, Dongcheng District, Beijing 100009, People's Republic of China. The business address of Ms. Hope Ni is House 17B, Shouson Peak, 9-19 Shouson Hill Road, Deep Water Bay, Hong Kong.

† For each person and group included in this column, percentage ownership is calculated by dividing the number of shares beneficially owned by such person or group by the sum of the total number of shares outstanding and the number of shares such person or group has the right to acquire upon exercise of option, warrant or other right within 60 days after February 28, 2022.

†† For each person and group included in this column, percentage of voting power is calculated by dividing the voting power beneficially owned by such person or group by the voting power of all of our Class A and Class B ordinary shares as a single class. Each holder of Class B ordinary shares is entitled to ten votes per share, subject to certain conditions, and each holder of our Class A ordinary shares is entitled to one vote per share on all matters submitted to them for a vote. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Our Class B ordinary shares are convertible at any time by the holder thereof into Class A ordinary shares on a one-for-one basis.

(1) Represents 17,626,986 Class A ordinary shares, including 9,621,477 Class A ordinary shares granted on April 8, 2022, or the CEO Award Shares, and 19,227,592 Class B ordinary shares held by MO Holding Ltd. MO Holding Ltd is a company incorporated in the British Virgin Islands. More than 99% of the interest of MO Holding Ltd is held by a trust that was established for the benefit of Mr. Zhou and his family, and the remaining interest of MO Holding Ltd is held by Mr. Zhou. The registered address of MO Holding Ltd is Start Chambers, Wickham's Cay II, P.O. Box 2221, Road Town, Tortola, British Virgin Islands. Mr. Zhou has undertaken and covenanted that, unless and until the performance results targets set by the audit committee of the board directors have been met, (a) he shall not offer, pledge, sell, contract to sell, lend, or otherwise transfer or dispose of, directly or indirectly, any interest in the CEO Award Shares; and (b) he will cast votes of all of the CEO Award Shares at our shareholder meetings or with respect to written resolution of shareholders in the manner consistent with the views and suggestions of the board of directors; he will abstain from voting if no such view or suggestion is formulated by the board as a whole.

(2) Represents (i) 3,285,167 Class A ordinary shares held by Cross Wave Holdings Limited and (ii) 119,500 Class A ordinary shares in the form of ADSs held by Mr. Sun. Cross Wave Holdings Limited is a company incorporated in the British Virgin Islands and is wholly owned by Cross Water Holding Limited. The entire interest in Cross Water Holding Limited is held by a trust that was established by Mr. Wei Sun for the benefit of him and his family. The registered address of Cross Wave Holdings Limited is Vistra Corporate Services Centre, Wickham's Cay II, Road Town Tortola VG1110, British Virgin Islands.

(3) Represents (i) 20,457,894 Class A ordinary shares held by Dandelion Investment Limited, a company incorporated in the British Virgin Islands, (ii) 10,617,666 Class A ordinary shares held by Image Frame Investment (HK) Limited, a company incorporated in Hong Kong, and (iii) 6,991,039 Class A ordinary shares held by Sogou Technology Hong Kong Limited a company incorporated in Hong Kong. Dandelion Investment Limited, Image Frame Investment (HK) Limited, and Sogou Technology Hong Kong Limited, or Tencent Entities, are subsidiaries of Tencent Holdings Limited. The registered address of Dandelion Investment Limited is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, British Virgin Islands. The registered address of Image Frame Investment (HK) Limited is 29/F., Three Pacific Place, No. 1 Queen's Road East, Wanchai, Hong Kong. Information regarding beneficial ownership is reported as of September 23, 2021, based on the information contained in the Schedule 13D filed by the Tencent Entities with the SEC on September 30, 2021.

(4) Represents (i) 23,011,491 Class A ordinary shares held by Innovation Works Development Fund, L.P., a fund organized under the laws of the Cayman Islands, and (ii) 7,556,558 Class A ordinary shares held by Innovation Works Holdings Limited, a company incorporated in the British Virgin Islands. The general partner of Innovation Works Development Fund, L.P. is Innovation Works Development Fund GP, L.P., whose general partner is Innovation Works Development Fund GP, LLC. Innovation Works Development Fund GP, LLC is beneficially owned by Peter Liu and Kai-Fu Lee. Innovation Works Holdings Limited is wholly owned by Kai-Fu Lee. The registered address of Innovation Works Holdings Limited is P.O. Box 3321, Drake Chambers, Road Town, Tortola, British Virgin Islands. The registered address of Innovation Works Development Fund, L.P. is Maples Corporate Services Limited, P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. Information regarding beneficial ownership is reported as of December 31, 2021, based on the information contained in the Schedule 13G filed by Innovation Works Development Fund, L.P. and Innovation Works Holdings Limited, among other reporting persons, with the SEC on February 17, 2022.

(5) Represents (i) 21,522,109 Class A ordinary shares (in the form of ADSs and 20,798,844 Class A ordinary shares) held by Qiming Venture Partners III, L.P., an exempted limited partnership organized under the laws of the Cayman Islands, (ii) 678,260 Class A ordinary shares (in the form of ADSs and 655,548 Class A ordinary shares) held by Qiming Managing Directors Fund III, L.P., an exempted limited partnership organized under the laws of the Cayman Islands, and (iii) 3,995,229 Class A ordinary shares (in the form of ADSs and 3,861,206 Class A ordinary shares) held by Qiming Venture Partners III Annex Fund, L.P., an exempted limited partnership organized under the laws of the Cayman Islands. Qiming Venture Partners III, L.P., Qiming Managing Directors Fund III, L.P., and Qiming Venture Partners III Annex Fund, L.P., or Qiming entities, are beneficially owned by Qiming Corporate GP III, Ltd., an exempted company incorporated in the Cayman Islands. The registered address of the Qiming entities is Maples Corporate Services Limited, P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. Information regarding beneficial ownership is reported as of December 31, 2021, based on the information contained in the Schedule 13G filed by the Qiming Entities with the SEC on February 14, 2022.

(6) Represents 21,282,465 Class A ordinary shares (including 880,000 Class A ordinary shares in the form of ADSs) held by SAIF IV Mobile Apps (BVI) Limited, a company incorporated in the British Virgin Islands. SAIF IV Mobile Apps (BVI) Limited is wholly owned by SAIF Partners IV L.P., whose general partner is SAIF IV GP, L.L, whose general partner in turn is SAIF IV GP Capital Ltd., which is wholly owned by Mr. Andrew Y. Yan, the managing partner of SAIF Partners. The registered address of SAIF IV Mobile Apps (BVI) Limited is Kingston Chambers, P.O. Box 173, Road Town, Tortola, British Virgin Islands. Information regarding beneficial ownership is reported as of December 31, 2021, based on the information contained in the Schedule 13G filed by SAIF IV Mobile Apps (BVI) Limited and other reporting persons with the SEC on February 14, 2022.

(7) Represents 19,975,733 Class A ordinary shares held by Cosmic Blue Investments Limited, a company incorporated in the British Virgin Islands. Cosmic Investments Limited is wholly owned by Kuaishou Technology (HKEX: 1024). The registered address of Cosmic Blue Investments Limited is Kingston Chambers, P.O. Box 173, Road Town, Tortola, British Virgin Islands. Information regarding beneficial ownership is reported as of December 31, 2021, based on the information contained in the Schedule 13G filed by Cosmic Blue Investments Limited and other reporting person with the SEC on March 28, 2022.

To our knowledge and based on our review of our register of members as of February 28, 2022, 59,162,826 Class A ordinary shares, including Class A ordinary shares issued to our depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plan, were held of record by one holder that reside in the United States, being JPMorgan Chase Bank, N.A., the depositary of our ADS program. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holder of our Class A ordinary shares in the United States. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

See “Item 6. Directors, Senior Management and Employees—E. Share Ownership.”

B. Related Party Transactions

Contractual Arrangements with Our VIEs and Their Shareholders

See “Item 4. Information on the Company—C. Organizational Structure.”

Private Placements

See “Item 4. Information on the Company—A. History and Development of the Company.”

Shareholders Agreement

We entered into our sixth amended and restated shareholders agreement on August 7, 2019 with our shareholders, which consist of holders of preferred shares and holder of warrant to purchase our preferred shares. The sixth amended and restated shareholders agreement provide for certain shareholders’ rights, including registration rights, information and inspection rights, preemptive rights, rights of first refusal and co-sale rights, and voting rights and contains provisions governing our board of directors and other corporate governance matters. The special rights other than registration rights and the corporate governance provisions automatically terminated upon the completion of our initial public offering.

Registration Rights

We have granted certain registration rights to our shareholders who hold our preferred shares prior to our initial public offering. Set forth below is a description of the registration rights granted under the shareholders agreement.

Demand Registration Rights. At any time after the earlier of (i) August 7, 2024 or (ii) six months following the closing of our initial public offering, holders of at least ten percent of Class A ordinary shares issued and Class A ordinary shares issuable upon conversion of the preferred shares held by all such holders, or registrable securities, may request in writing that we effect a registration of at least ten percent of the registrable securities. We have a right to defer filing of a registration statement for the period during which such filing would be materially detrimental to us or our members on the condition that we furnish to the holders a certificate signed by our chief executive officer. However, we cannot exercise the deferral right for more than 90 days on any one occasion or more than once during any twelve-month period and cannot register any other securities during such 90-day period. We are obligated to effect no more than three demand registrations that have been declared and ordered effective.

Registration on Form F-3. Holders of at least ten percent of the registrable securities may request us to effect a registration on Form F-3 if we qualify for registration on Form F-3. We have a right to defer filing of a registration statement for the period during which such filing would be materially detrimental to us or our members on the condition that we furnish to the holders a certificate signed by our chief executive officer. However, we cannot exercise the deferral right for more than 90 days on any one occasion or more than once during any twelve-month period and cannot register any other securities during such 90-day period.

Piggyback Registration Rights. If we propose to register for our own account any of our equity securities, in connection with the public offering of such equity securities, we should promptly give holders of our registrable securities written notice of such registration and, upon the written request of any holder given within fifteen (15) days after delivery of such notice, we should use our reasonable best efforts to include in such registration the registrable securities requested to be registered by such holder.

Expenses of Registration. We will bear all registration expenses, other than the underwriting discounts and selling commissions applicable to the sale of the registrable securities.

Termination of Obligations. The shareholders' registration rights will terminate upon the earlier of (i) the fifth anniversary of the date of closing of our initial public offering, and (ii) with respect to any holder, the date on which such holder may sell all of such holder' registrable securities under Rule 144 of the Securities Act in any 90-day period.

Employment Agreements and Indemnification Agreements

See "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Employment Agreements and Indemnification Agreements."

Share Incentive Plans

See "Item 6. Directors, Senior Management and Employees—B. Compensation—Share Incentive Plans."

Other Transactions with Related Parties

Transactions with Tencent entities. Our transactions with Tencent Holdings Limited, one of our principal beneficial owners, and its subsidiaries, included (i) purchase of services which primarily related to cloud and bandwidth services, amounting to RMB154.3 million, RMB77.3 million, and RMB110.8 million (US$17.4 million) in 2019, 2020 and 2021, respectively; and (ii) provision of services which primarily related to advertising services, amounting to RMB8.4 million, RMB12.6 million, and RMB10.9 million (US$1.7 million) in 2019, 2020 and 2021, respectively. The amount due from the Tencent entities were RMB4.9 million, RMB7.4 million, and RMB8.8 million (US$1.4 million) as of December 31, 2019, 2020 and 2021, respectively, and the amount due to the Tencent entities were RMB95.4 million, RMB41.5 million, and RMB67.4 million (US$10.6 million) as of December 31, 2019, 2020 and 2021, respectively.

Transactions with Baidu entities. Our transactions with Baidu, Inc., one of our beneficial owners, and its subsidiaries, included (i) purchase of services which primarily related to marketing services and cloud and bandwidth services, amounting to RMB25.0 million, RMB48.7 million, and RMB142.3 million (US$22.3 million) in 2019, 2020, and 2021, respectively; and (ii) provision of services which primarily related to advertising services, amounting to RMB0.6 million, RMB17.2 million, and RMB19.7 million (US$3.1 million) in 2019, 2020, and 2021, respectively. The amount due from the Baidu entities were RMB1.1 million, RMB3.9 million, and RMB6.4 million (US$1.0 million) as of December 31, 2019, 2020 and 2021, respectively, and the amount due to the Baidu entities were RMB0.8 million, RMB4.5 million, and RMB14.6 million (US$2.3 million) as of December 31, 2019 2020 and 2021, respectively.

Transactions with Kuaishou entities. Our transactions with Kuaishou Technology, one of our principal beneficial owners, and its subsidiary, included (i) purchase of services which primarily related to cloud and bandwidth services, amounting to nil and RMB2.2 million (US$0.3 million) in 2020 and 2021 , respectively; and (ii) provision of services, which primarily related to advertising services, amounting to RMB7.4 million and RMB7.9 million (US$1.2 million) in 2020 and 2021, respectively. The amount due from the Kuaishou entities was RMB2.5 million and RMB3.0 million (US$0.5 million) as of December 31, 2020 and 2021, respectively, and the amount due to the Kuaishou entities was nil and RMB1.6 million (US$0.3 million) as of December 31, 2020 and 2021, respectively.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

We may from time to time be subject to various legal or administrative claims and proceedings arising in the ordinary course of our business. We are currently not a party to any material legal or administrative proceedings. Litigation or any other legal or administrative proceeding, regardless of the outcome, could result in substantial costs and diversion of our resources, including our management's time and attention.

Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial costs and diversion of our resources, including our management's time and attention. For potential impact of legal or administrative proceedings on us, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—We may be subject to regulatory actions or legal proceedings in the ordinary course of our business. If the outcomes of these regulatory actions or legal proceedings are adverse to us, it could materially and adversely affect our business, financial condition, and results of operations."

Dividend Policy

Our board of directors has discretion on whether to distribute dividends, subject to certain requirements of Cayman Islands law. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. In either case, all dividends are subject to certain restrictions under Cayman Islands law, namely that our company may only pay dividends out of profits or share premium, and provided always that in no circumstances may a dividend be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business. Even if we decide to pay dividends, the form, frequency, and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions, and other factors that the board of directors may deem relevant.

We do not have any present plan to pay any cash dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings our business operations.

We are a holding company incorporated in the Cayman Islands. We may rely on dividends from our subsidiaries in China for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC subsidiaries to pay dividends to us. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Dividend Distribution."

If we pay any dividends on our Class A ordinary shares, we will pay those dividends that are payable in respect of the Class A ordinary shares underlying our ADSs to the depositary, as the registered holder of such Class A ordinary shares, and the depositary then will pay such amounts to holders of ADSs in proportion to the Class A ordinary shares underlying the ADSs held by such ADS holders, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. Cash dividends on our Class A ordinary shares, if any, will be paid in U.S. dollars.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offer and Listing Details

Our ADSs have been listed on New York Stock Exchange since March 26, 2021. The ADSs trade under the ticker symbol "ZH." Two ADSs represent one Class A ordinary share, par value US$0.000125 per share.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs have been listed on New York Stock Exchange since March 26, 2021. The ADSs trade under the ticker symbol "ZH." Two ADSs represent one Class A ordinary share, par value US$0.000125 per share.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

We are a Cayman Islands exempted company and our affairs are governed by our memorandum and articles of association, as amended from time to time, the Companies Act (As Revised) of the Cayman Islands, which we refer to as the Companies Act below, and the common law of the Cayman Islands.

Our shareholders have conditionally adopted a tenth amended and restated memorandum and articles of association, which become effective immediately prior to the completion of the initial public offering of our American Depositary Shares in the United States. The following are summaries of material provisions of the tenth amended and restated memorandum and articles of association and of the Companies Act, insofar as they relate to the material terms of our ordinary shares.

Registered Office and Objects

Pursuant to Article 2 of our tenth amended and restated memorandum of association, our registered office is at the offices of Maples Corporate Services Limited, P.O. Box 309, Ugland House, Grand Cayman KY1-1104, Cayman Islands, or at such other location within the Cayman Islands as our directors may from time to time determine. Pursuant to Article 3 of our tenth amended and restated memorandum of association, the objects for which our company is established are unrestricted and our company shall have full power and authority to carry out any object not prohibited by the Companies Act or any other law of the Cayman Islands.

Directors

See "Item 6. Directors, Senior Management and Employees—C. Board Practices."

Ordinary Shares

General. Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares. Holders of our Class A ordinary shares and Class B ordinary shares will have the same rights except for voting and conversion rights. Our ordinary shares are issued in registered form and are issued when registered in our register of members. We may not issue shares to bearer. Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their shares.

Conversion. Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment, disposition, or a change of ultimate beneficial ownership of Class B ordinary shares by a holder thereof to any person who is not Mr. Yuan Zhou or any entity which is ultimately controlled by Mr. Yuan Zhou, such Class B ordinary shares shall be automatically and immediately converted into the same number of Class A ordinary shares. If either of the following events occurs and remains unchanged for 20 consecutive business days: (i) Mr. Yuan Zhou is neither a director nor the chief executive officer of the Company or (ii) Mr. Yuan Zhou is permanently incapable of acting as a director and the chief executive officer as a result of a legal judgment or incapacity due to his then physical and/or mental condition, all the Class B ordinary shares held by Mr. Yuan Zhou and/or any entity which is ultimately controlled by Mr. Yuan Zhou shall be automatically and immediately converted into the same number of Class A ordinary shares, provided, however, that such triggering event shall not be deemed to take place if Mr. Yuan Zhou is removed as, or otherwise discharged from duty of, either a director or the chief executive officer on an involuntary basis.

Dividends. Our directors may from time to time declare dividends (including interim dividends) and other distributions on our shares in issue and authorize payment of the same out of the funds of our company lawfully available therefor. In addition, our shareholders may declare dividends by ordinary resolution, but no dividend may exceed the amount recommended by our directors. Our tenth amended and restated memorandum and articles of association provide that dividends may be declared and paid out of the funds of our company lawfully available therefor. Under the laws of the Cayman Islands, our company may pay a dividend out of either profit or share premium account; provided that in no circumstances may a dividend be paid if that would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights. In respect of all matters subject to a shareholders' vote, each holder of Class A ordinary shares is entitled to one vote per share and each holder of Class B ordinary shares is entitled to ten votes per share on all matters subject to vote at our general meetings. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Voting at any meeting of shareholders is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any one shareholder holding not less than 10% of the votes attaching to the shares present in person or by proxy.

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast at a meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes cast attaching to the issued and outstanding ordinary shares at a meeting. A special resolution will be required for important matters such as a change of name or making changes to our tenth amended and restated memorandum and articles of association. Our shareholders may, among other things, divide or combine their shares by ordinary resolution.

General Meetings of Shareholders. As a Cayman Islands exempted company, we are not obliged by the Companies Act to call shareholders' annual general meetings. Our tenth amended and restated memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we will specify the meeting as such in the notices calling it, and the annual general meeting will be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by the chairman of our board of directors or by our directors (acting by a resolution of our board). Advance notice of at least seven calendar days is required for the convening of our annual general shareholders' meeting (if any) and any other general meeting of our shareholders. A quorum required for any general meeting of shareholders consists of one or more of our shareholders holding shares which carry in aggregate (or representing by proxy) not less than one-third of all votes attaching to the issued and outstanding shares in our company entitled to vote at such general meeting.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our tenth amended and restated memorandum and articles of association provide that upon the requisition of any one or more of our shareholders holding shares which carry in aggregate not less than one-third of all votes attaching to all issued and outstanding shares of our company entitled to vote at general meetings, our board will convene an extraordinary general meeting and put the resolutions so requisitioned to a vote at such meeting. However, our tenth amended and restated memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

Transfer of Ordinary Shares. Subject to the restrictions set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of ordinary shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four;
- the shares are free from any lien in favor of the Company; and
- a fee of such maximum sum as the New York Stock Exchange may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they must, within three calendar months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, on ten calendar days' notice being given by advertisement in such one or more newspapers, by electronic means or by any other means in accordance with the rules of the New York Stock Exchange be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine; provided, however, that the registration of transfers may not be suspended nor the register closed for more than 30 days in any year as our board may determine.

Liquidation. On the winding up of our company, if the assets available for distribution amongst our shareholders will be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus will be distributed amongst our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay all of the paid-up capital, such assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

Calls on Shares and Forfeiture of Shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 calendar days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders of these shares, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by our shareholders by special resolution. Our company may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders. Under the Companies Act, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a new issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variation of Rights of Shares. Whenever the capital of our company is divided into different classes, the rights attached to any such class may, subject to any rights or restrictions for the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of all of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued will not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation, allotment, or issue of further shares ranking *pari passu* with such existing class of shares.

Issuance of Additional Shares. Our tenth amended and restated memorandum and articles of association authorize our board of directors to issue additional ordinary shares from time to time as our board of directors may determine, to the extent of available authorized but unissued shares.

Our tenth amended and restated memorandum and articles of association also authorize our board of directors to establish from time to time one or more series of preference shares and to determine, with respect to any series of preference shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue preference shares without action by our shareholders to the extent authorized but unissued. Issuance of these shares may dilute the voting power of holders of ordinary shares.

Inspection of Books and Records. Holders of our ordinary shares will have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records (other than copies of our memorandum and articles of association and register of mortgages and charges, and any special resolution passed by our shareholders). However, we intend to provide our shareholders with annual audited financial statements.

Anti-Takeover Provisions. Some provisions of our tenth amended and restated memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders; and
- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our tenth amended and restated memorandum and articles of association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Exempted Company. We are an exempted company with limited liability under the Companies Act. The Companies Act distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;
- does not have to hold an annual general meeting;
- may issue negotiable or bearer shares or shares with no par value;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 20 years in the first instance);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

"Limited liability" means that the liability of each shareholder is limited to the amount unpaid by the shareholder on the shares of the company (except in exceptional circumstances, such as involving fraud, the establishment of an agency relationship or an illegal or improper purpose or other circumstances in which a court may be prepared to pierce or lift the corporate veil).

Exclusive forum. Unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum within the United States for the resolution of any complaint asserting a cause of action arising under the Securities Act and the Exchange Act. Any person or entity purchasing or otherwise acquiring any of our shares, ADSs or other securities shall be deemed to have notice of and consented to the provisions of our tenth amended and restated memorandum and articles of association. See "Item 3. Key Information—D. Risk Factors—Risks Relating to the ADSs—Forum selection provisions in our currently effective memorandum and articles of association and our deposit agreement with the depositary bank could limit the ability of holders of our Class A ordinary shares, ADSs, or other securities to obtain a favorable judicial forum for disputes with us, our directors and officers, the depositary bank, and potentially others."

Proposed Amendments to Articles

In connection with our application for listing on the Hong Kong Stock Exchange, we undertake to put forth resolutions to amend our currently effective memorandum and articles of association to comply with (a) certain shareholder protection measures and governance safeguards under Chapter 8A of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, or the Hong Kong Listing Rules, and (b) the articles requirements set out in Appendix 3 and Appendix 13 to the Hong Kong Listing Rules at the first time that we hold an annual general meeting after the proposed listing in Hong Kong, which is expected to be convened before August 31, 2022. In addition, Mr. Yuan Zhou, Mr. Dahai Li, and Mr. Wei Sun will irrevocably undertake to vote in favor of the resolutions for the proposed amendments to our memorandum and articles of association.

C. Material Contracts

Other than in the ordinary course of business and other than those described under this item, in "Item 4. Information on the Company," "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions," or elsewhere in this annual report, we have not entered into any material contract during the two years immediately preceding the date of this annual report.

D. Exchange Controls

The Cayman Islands currently has no exchange control restrictions. See also "Item 4. Information on the Company - B. Business Overview - Regulation - Regulations on Foreign Exchange."

E. Taxation

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains, or appreciation, and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties, which may be applicable on instruments executed in, or brought within the jurisdiction of, the Cayman Islands. In addition, the Cayman Islands does not impose withholding tax on dividend payments.

PRC Taxation

Under the PRC Enterprise Income Tax Law effective from January 1, 2008, our PRC subsidiaries, and consolidated affiliated entities and their subsidiaries are subject to the statutory rate of 25%, subject to preferential tax treatments available to qualified enterprises in certain encouraged sectors of the economy.

Enterprises that qualify as "high and new technology enterprises" are entitled to a preferential rate of 15% for three years. Enterprises that qualify as "small low-profit enterprises" are entitled to a preferential rate of 20%. Specifically, during the period from January 1, 2019 to December 31, 2021, the portion of annual taxable income amount of a small low-profit enterprise not exceeding RMB1 million is computed at a reduced rate of 25% as taxable income amount, subject to an enterprise income tax rate of 20%, and the portion of annual taxable income amount exceeding RMB1 million and not exceeding RMB3 million is computed at a reduced rate of 50% as taxable income amount, subject to an enterprise income tax rate of 20%.

Zhizhe Sihai was certified as a "high and new technology enterprise" under the relevant PRC laws and regulations, and accordingly was eligible for a preferential tax rate of 15% in each of 2019, 2020, and 2021. Some of our subsidiaries were "small low-profit enterprises" under the relevant PRC laws and regulations, and accordingly were eligible for a preferential tax rate of 20% in each of 2019, 2020, and 2021. Our other PRC entities were subject to enterprise income tax at a rate of 25% in 2019, 2020, and 2021. Pursuant to the PRC Enterprise Income Tax Law, a 5% or 10% withholding tax is levied on dividends declared to foreign investors from China effective from January 1, 2008.

United States Federal Income Tax Considerations

The following discussion is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of our ADSs or Class A ordinary shares by a U.S. Holder (as defined below) that acquires our ADSs and holds our ADSs as "capital assets" (generally, property held for investment) under the U.S. Internal Revenue Code of 1986, as amended (the "Code"). This discussion is based upon existing U.S. federal tax law, which is subject to differing interpretations or change, possibly with retroactive effect. There can be no assurance that the IRS or a court will not take a contrary position. This discussion, moreover, does not address the U.S. federal estate, gift, alternative minimum tax, and other non-income tax considerations, the Medicare tax on certain net investment income or any state, local, or non-U.S. tax considerations, relating to the ownership or disposition of our ADSs or Class A ordinary shares. The following summary does not address all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual circumstances or to persons in special tax situations such as:

- banks and other financial institutions;
- insurance companies;
- pension plans;
- cooperatives;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;
- traders that elect to use a mark-to-market method of accounting;
- certain former U.S. citizens or long-term residents;
- tax-exempt entities (including private foundations);
- holders who acquire their ADSs or Class A ordinary shares pursuant to any employee share option or otherwise as compensation;
- investors that will hold their ADSs or Class A ordinary shares as part of a straddle, hedge, conversion, constructive sale, or other integrated transaction for U.S. federal income tax purposes;
- investors that have a functional currency other than the U.S. dollar;
- persons that actually or constructively own 10% or more of our stock (by vote or value); or
- partnerships or other entities taxable as partnerships for U.S. federal income tax purposes, or persons holding ADSs or Class A ordinary shares through such entities;

all of whom may be subject to tax rules that differ significantly from those discussed below.

Each U.S. Holder is urged to consult its tax advisor regarding the application of U.S. federal taxation to its particular circumstances, and the state, local, non-U.S. and other tax considerations of the ownership and disposition of our ADSs or Class A ordinary shares.

General

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our ADSs or Class A ordinary shares that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created in, or organized under the law of the United States or any state thereof or the District of Columbia;
- an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust (A) the administration of which is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise validly elected to be treated as a U.S. person under the Code.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of our ADSs or Class A ordinary shares, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partnerships holding our ADSs or Class A ordinary shares and their partners are urged to consult their tax advisors regarding an investment in our ADSs or Class A ordinary shares.

For U.S. federal income tax purposes, it is generally expected that a U.S. Holder of ADSs will be treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a U.S. Holder of our ADSs will be treated in this manner. Accordingly, deposits or withdrawals of Class A ordinary shares for ADSs will generally not be subject to U.S. federal income tax.

Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be classified as a PFIC for United States federal income tax purposes for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of "passive" income (the "income test") or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income (the "asset test"). For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the company's goodwill and other unbooked intangibles are taken into account. Passive income generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, at least 25% (by value) of the stock.

Although the law in this regard is not entirely clear, we treat our VIE and its subsidiaries as being owned by us for U.S. federal income tax purposes because we control their management decisions and are entitled to substantially all of the economic benefits associated with them. As a result, we consolidated their results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of our VIE for U.S. federal income tax purposes, we may be treated as a PFIC for the current taxable year and any subsequent taxable year.

Assuming that we are the owner of our VIE (including its subsidiaries) for United States federal income tax purposes, and based upon our current and expected income and assets, including goodwill and other unbooked intangibles, we do not believe that we were a PFIC for the taxable year ended December 31, 2021 and we do not expect to be a PFIC for the current taxable year or the foreseeable future. While we do not expect to be or become a PFIC, no assurance can be given in this regard because the determination of whether we will be or become a PFIC for any taxable is a fact intensive determination made annually that depends, in part, upon the composition of our income and assets. Fluctuations in the market price of our ADSs may cause us to be or become classified as a PFIC for the current or future taxable years because the value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined by reference to the market price of our ADSs from time to time (which may be volatile). In particular, recent decline in the market price of our ADSs significantly increased our risk of becoming a PFIC. The market price of our ADSs may continue to decline and, consequently, we cannot assure you of our PFIC status for any taxable year. Furthermore, the composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets. Under circumstances where revenues from activities that produce passive income significantly increase relative to our revenues from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of being or becoming classified as a PFIC may substantially increase. Because PFIC status is a factual determination made annually after the close of each taxable year, there can be no assurance that we will not be a PFIC for the current taxable year or any future taxable year.

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A ordinary shares, the PFIC rules discussed below under "—Passive Foreign Investment Company Rules" generally will apply to such U.S. Holder for such taxable year, and unless the U.S. Holder makes certain elections, will apply in future years even if we cease to be a PFIC.

The discussion below under "—Dividends" and "—Sale or Other Disposition" is written on the basis that we will not be or become classified as a PFIC for U.S. federal income tax purposes. The U.S. federal income tax rules that apply generally if we are treated as a PFIC for any taxable year are discussed below under "—Passive Foreign Investment Company Rules."

Dividends

Any cash distributions (including the amount of any PRC tax withheld) paid on our ADSs or Class A ordinary shares out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of Class A ordinary shares, or by the depositary, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution we pay will generally be treated as a "dividend" for U.S. federal income tax purposes. Dividends received on our ADSs or Class A ordinary shares will not be eligible for the dividends received deduction generally allowed to corporations. A non-corporate U.S. Holder will be subject to tax at the lower capital gain tax rate applicable to "qualified dividend income," provided that certain conditions are satisfied, including that (1) our ADSs or ordinary shares on which the dividends are paid are readily tradeable on an established securities market in the United States, or, in the event that we are deemed to be a PRC resident enterprise under the PRC tax law, we are eligible for the benefits of the United States-PRC income tax treaty (the "Treaty"), (2) we are neither a PFIC nor treated as such with respect to such a U.S. Holder for the taxable year in which the dividend was paid and the preceding taxable year, and (3) certain holding period requirements are met. Our ADSs (but not our Class A ordinary shares) are readily tradeable on the New York Stock Exchange, which is an established securities market in the United States. There can be no assurance, however, that our ADSs will be considered readily tradeable on an established securities market in later years.

In the event that we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law (see "—PRC Taxation"), we may be eligible for the benefits of the Treaty. If we are eligible for such benefits, dividends we pay on our Class A ordinary shares, regardless of whether such shares are represented by the ADSs, would be eligible for the reduced rates of taxation described in the preceding paragraph.

Dividends paid on our ADSs or ordinary shares, if any, will generally be treated as income from foreign sources and will generally constitute passive category income for U.S. foreign tax credit purposes. Depending on the U.S. Holder's individual facts and circumstances, a U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any nonrefundable foreign withholding taxes imposed on dividends received on our ADSs or Class A ordinary shares. A U.S. Holder who does not elect to claim a foreign tax credit for foreign taxes withheld may instead claim a deduction, for U.S. federal income tax purposes, in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex and their outcome depends in large part on the U.S. Holder's individual facts and circumstances. Accordingly, U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or Other Disposition

A U.S. Holder will generally recognize capital gain or loss upon the sale or other disposition of ADSs or Class A ordinary shares in an amount equal to the difference between the amount realized upon the disposition and the holder's adjusted tax basis in such ADSs or Class A ordinary shares. Any capital gain or loss will be long-term if the ADSs or Class A ordinary shares have been held for more than one year and will generally be U.S.-source gain or loss for U.S. foreign tax credit purposes. Long-term capital gain of non-corporate U.S. Holders will generally be eligible for a reduced rate of taxation. In the event that gain from the disposition of the ADSs or Class A ordinary shares is subject to tax in China, a U.S. Holder may elect to treat such gain as PRC-source gain under the Treaty. Pursuant to recently issued Treasury Regulations, however, if a U.S. Holder is not eligible for the benefits of the Treaty or does not elect to apply the Treaty, then such holder may not be able to claim a foreign tax credit arising from any PRC tax imposed on the disposition of the ADSs or common shares. The deductibility of a capital loss may be subject to limitations. U.S. Holders are urged to consult their tax advisors regarding the tax consequences if a foreign tax is imposed on a disposition of our ADSs or Class A ordinary shares, including the availability of the foreign tax credit or deduction under their particular circumstances, their eligibility for benefits under the Treaty, and the potential impact of the recently issued Treasury Regulations.

Passive Foreign Investment Company Rules

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A ordinary shares, and unless the U.S. Holder makes a mark-to-market election (as described below), the U.S. Holder will generally be subject to special tax rules on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125 percent of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs or Class A ordinary shares), and (ii) any gain realized on the sale or other disposition of ADSs or Class A ordinary shares. Under the PFIC rules:

- the excess distribution or gain will be allocated ratably over the U.S. Holder's holding period for the ADSs or Class A ordinary shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC (each, a "pre-PFIC year"), will be taxable as ordinary income;
- the amount allocated to each prior taxable year, other than a pre-PFIC year, will be subject to tax at the highest tax rate in effect for individuals or corporations, as appropriate, for that year; and
- an additional tax equal to the interest charge generally applicable to underpayments of tax will be imposed on the tax attributable to each prior taxable year, other than a pre-PFIC year.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A ordinary shares and any of our subsidiaries, our VIE or any of its subsidiaries is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. Holders are urged to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries, our VIE, or its subsidiaries.

As an alternative to the foregoing rules, a U.S. Holder of "marketable stock" in a PFIC may make a mark-to-market election with respect to such stock, provided that such stock is regularly traded on a qualified exchange or other market, as defined in applicable United States Treasury regulations. For those purposes, our ADSs, but not our Class A ordinary shares, are listed on the New York Stock Exchange, which is a qualified exchange. We anticipate that our ADSs should qualify as being regularly traded, but no assurances may be given in this regard. If a U.S. Holder makes this election, the holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the amount previously included in income as a result of the mark-to-market election. The U.S. Holder's adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes a mark-to-market election in respect of a corporation classified as a PFIC and such corporation ceases to be classified as a PFIC, the holder will not be required to take into account the gain or loss described above during any period that such corporation is not classified as a PFIC. If a U.S. Holder makes a mark-to-market election, any gain such U.S. Holder recognizes upon the sale or other disposition of our ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election.

Because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the PFIC rules with respect to such U.S. Holder's indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

If a U.S. Holder owns our ADSs or Class A ordinary shares during any taxable year that we are a PFIC, the holder must generally file an annual IRS Form 8621. You should consult your tax advisors regarding the U.S. federal income tax consequences of owning and disposing of our ADSs or Class A ordinary shares if we are or become a PFIC.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We have filed with SEC registration statements on Form F-1 (File No. 333-253910), including relevant exhibits and securities under the Securities Act with respect to underlying ordinary shares represented by the ADSs. We have also filed with SEC a related registration statement on Form F-6 (File No. 333-254493) to register the ADSs.

We are subject to periodic reporting and other informational requirements of the Exchange Act as applicable to foreign private issuers, and are required to file reports and other information with the SEC. Specifically, we are required to file annually an annual report on Form 20-F within four months after the end of each fiscal year, which is December 31. All information filed with the SEC can be obtained over the internet at the SEC's website at www.sec.gov. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish JPMorgan Chase Bank, N.A., the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

In accordance with NYSE Rule 203.01, we will post this annual report on Form 20-F on our website at *http://ir.zhihu.com*. In addition, we will provide hardcopies of our annual report free of charge to shareholders and ADS holders upon request.

I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our exposure to interest rate risk primarily relates to the interest income generated by excess cash, which is mostly held in interest-bearing bank deposits and wealth management products. Interest-earning instruments carry a degree of interest rate risk. We have not been exposed to material risks due to changes in market interest rates, and we have not used any derivative financial instruments to manage our interest risk exposure.

We may invest the net proceeds that we receive from our overseas offerings in interest-earning instruments. Investments in both fixed-rate and floating rate interest-earning instruments carry a degree of interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating-rate securities may produce less income than expected if interest rates fall.

Foreign Exchange Risk

Our expenditures are mainly denominated in Renminbi and, therefore, we are exposed to risks related to movements between Renminbi and U.S. dollars. We enter into hedging transactions in an effort to reduce our exposure to foreign currency exchange risk when we deem appropriate. In addition, the value of your investment in our ADSs will be affected by the exchange rate between U.S. dollars and Renminbi because the value of our business is effectively denominated in Renminbi, while our ADSs will be traded in U.S. dollars.

The value of Renminbi against U.S. dollars and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions and the foreign exchange policy adopted by the PRC government. On July 21, 2005, the PRC government changed its policy of pegging the value of Renminbi to U.S. dollars. Following the removal of the U.S. dollar peg, Renminbi appreciated over 20% against U.S. dollars over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between Renminbi and U.S. dollars remained within a narrow band. Since June 2010, the PRC government has allowed Renminbi to appreciate slowly against U.S. dollars again, and it has appreciated over 10% since June 2010. On August 11, 2015, the People's Bank of China, or the PBOC, announced plans to improve the central parity rate of Renminbi against U.S. dollars by authorizing market-makers to provide parity to the China Foreign Exchange Trading Center operated by the PBOC with reference to the interbank foreign exchange market closing rate of the previous day, the supply and demand for foreign currencies as well as changes in exchange rates of major international currencies. Effective from October 1, 2016, the International Monetary Fund added Renminbi to its Special Drawing Rights currency basket. Such change and additional future changes may increase volatility in the trading value of the Renminbi against foreign currencies. The PRC government may adopt further reforms of its exchange rate system, including making the Renminbi freely convertible in the future. Accordingly, it is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and U.S. dollars in the future.

To the extent that we need to convert U.S. dollars or other currencies into Renminbi for our operations, appreciation of Renminbi against U.S. dollars would have an adverse effect on the Renminbi amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars or other currency for the purpose of making payments to suppliers or for dividends on our ordinary shares or ADSs or for other business purposes, appreciation of U.S. dollars against Renminbi would have a negative effect on the U.S. dollar amounts available to us.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Fees and Charges Our ADS Holders May Have to Pay

The depositary may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities, or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities or whose ADRs are cancelled or reduced for any other reason, $5.00 for each 100 ADSs (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, or upon which a share distribution or elective distribution is made or offered, as the case may be. The depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights, and/or other distribution prior to such deposit to pay such charge.

The following additional charges shall also be incurred by the ADR holders, the beneficial owners, by any party depositing or withdrawing shares or by any party surrendering ADSs and/or to whom ADSs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of US$1.50 per ADR or ADRs for transfers of certificated or direct registration ADRs;
- a fee of US$0.05 or less per ADS held for any cash distribution made, or for any elective cash/stock dividend offered, pursuant to the deposit agreement;
- an aggregate fee of US$0.05 or less per ADS per calendar year (or portion thereof) for services performed by the depositary in administering the ADRs (which fee may be charged on a periodic basis during each calendar year and shall be assessed against holders of ADRs as of the record date or record dates set by the depositary during each calendar year and shall be payable in the manner described in the next succeeding provision);

- a fee for the reimbursement of such fees, charges, and expenses as are incurred by the depositary and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of ADR holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in connection with the servicing of the shares or other deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary's or its custodian's compliance with applicable law, rule or regulation (which fees and charges shall be assessed on a proportionate basis against ADR holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such ADR holders or by deducting such charge from one or more cash dividends or other cash distributions);

- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the $0.05 per ADS issuance fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depositary to those ADR holders entitled thereto;

- stock transfer or other taxes and other governmental charges;

Fees and Other Payments Made by the Depositary to Us

Our depositary anticipates to reimburse us for certain expenses we incur that are related to establishment and maintenance of the ADR program upon such terms and conditions as we and the depositary may agree from time to time. The depositary may make available to us a set amount or a portion of the depositary fees charged in respect of the ADR program or otherwise upon such terms and conditions as we and the depositary may agree from time to time. For the year ended December 31, 2021, we have not received any reimbursement from the depositary.

PART II.

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Material Modifications to the Rights of Security Holders

See "Item 10. Additional Information" for a description of the rights of securities holders, which remain unchanged.

Use of Proceeds

The following "Use of Proceeds" information relates to the registration statement on Form F-1 (File Number: 333-253910) relating to our initial public offering of 55,000,000 ADSs representing 27,500,000 Class A ordinary shares, and the underwriters' partial exercise of their option to purchase from us 259,904 additional ADSs representing 129,952 Class A ordinary shares, at an initial offering price of US$9.50 per ADS. The registration statement was declared effective by the SEC on March 25, 2021. Credit Suisse Securities (USA) LLC, Goldman Sachs (Asia) L.L.C., and J.P. Morgan Securities LLC were the representatives of the underwriters.

We raised approximately US$739.4 million in net proceeds from our initial public offering, after deducting underwriting commissions and the offering expenses payable by us, including the net proceeds we received from the underwriters' partial exercise of their option to purchase additional ADSs from us. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities, or our affiliates. None of the net proceeds from the initial public offering were paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities, or our affiliates.

For the period from March 25, 2021 to December 31, 2021, we have used less than 5% of the net proceeds from our initial public offering for the development of product and service, market and user growth, research and development, and general corporate purposes. There is no material change in the use of proceeds as described in our registration statement on Form F-1. We still intend to use the remainder of the proceeds from our initial public offering for purposes as disclosed in our registration statement on Form F-1.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures, which is defined in Rules 13a-15(e)of the Exchange Act, as of December 31, 2021. Based upon that evaluation, our management, with the participation of our chief executive officer and chief financial officer, has concluded that, due to the outstanding material weakness described below, as of December 31, 2021, our disclosure controls and procedures were not effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

Attestation Report of the Registered Public Accounting Firm

See "—Management's Annual Report on Internal Control over Financial Reporting."

Internal Control over Financial Reporting

Prior to our listing on the New York Stock Exchange in March 2021, we had been a private company with insufficient accounting personnel and other resources with which to address our internal control. Our management has not completed an assessment of the effectiveness of our internal control and procedures over financial reporting and our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting as of and for the year ended December 31, 2021. In the course of auditing our consolidated financial statements as of and for the years ended December 31, 2019 and 2020, we and our independent registered public accounting firm identified one material weakness in our internal control over financial reporting and other control deficiencies. The material weakness identified relates to our lack of sufficient financial reporting and accounting personnel with appropriate understanding and knowledge of U.S. GAAP to handle complex accounting issues and to establish and implement key controls over period end closing and financial reporting to properly prepare and review financial statements and related disclosures in accordance with U.S. GAAP and SEC reporting requirements.

We have implemented a number of measures to address the material weakness, including: (i) we have hired additional accounting staff with adequate experience and knowledge with U.S. GAAP and SEC reporting requirements to address complex U.S. GAAP technical accounting issues, strengthen the financial reporting function, and set up an internal control framework to prepare and review the financial statements and related disclosures in accordance with U.S. GAAP and SEC financial reporting requirements; (ii) we have implemented regular U.S. GAAP and SEC financial reporting training programs for the accounting and financial personnel to equip them with sufficient knowledge and practical experience of preparing financial statements under U.S. GAAP and SEC reporting requirements; and (iii) we have developed and implement a comprehensive set of period-end financial reporting policies and procedures, especially for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are in compliance with U.S. GAAP and SEC reporting requirements.

Although the aforementioned remediation measures were implemented, these measures will require validation and testing of the operating effectiveness of internal controls over a sustained period of financial reporting cycles. As a result, the previously identified material weakness still existed as of December 31, 2021. We will continue to implement measures to remediate the material weakness. However, we cannot assure you that all these measures will be sufficient to remediate our material weakness in time, or at all.

Since our initial public offering, we have become subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act requires that we include a report from management on our internal control over financial reporting in our annual report on Form 20-F beginning with our annual report for the fiscal year ending December 31, 2022. In addition, once we cease to be an "emerging growth company" as such term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. It is possible that, had we performed a formal assessment of our internal control over financial reporting or had our independent registered public accounting firm perform an audit of our internal control over financial reporting, additional internal control deficiencies may have been identified. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—If we fail to implement and maintain an effective system of internal controls to remediate our material weakness over financial reporting, we may be unable to accurately report our results of operations, meet our reporting obligations or prevent fraud, and investor confidence and the market price of our ADSs may be materially and adversely affected."

Changes in Internal Control over Financial Reporting

Except for the measures to improve our internal control over financial reporting as described in this annual report, there were no changes in our internal control over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. Hanhui Sam Sun, an independent director (under the standards set forth in Section 303A of the Corporate Governance Rules of the New York Stock Exchange and Rule 10A-3 under the Exchange Act) and member of our audit committee, is an audit committee financial expert.

ITEM 16B. CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to all of the directors, officers and employees of us and our subsidiaries, whether they work for us on a full-time, part-time, consultative, or temporary basis. In addition, we expect those who do business with us, such as consultants, suppliers and collaborators, to also adhere to the principles outlined in the code of ethics. Certain provisions of the code of ethics apply specifically to our chief executive officer, chief financial officer, senior finance officer, controller, vice presidents and any other persons who perform similar functions for us. We have filed our code of business conduct and ethics as an exhibit to our registration statement on Form F-1 (No. 333-253910) in connection with our initial public offering in March 2021, which was incorporated by reference thereto in this annual report.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, for the periods indicated. We did not pay any other fees to our principal accountant during the periods except as indicated below.

	For the Year Ended December 31,		
	2020	2021	
	RMB	RMB	US$
		(in thousands)	
Audit fees[(1)]	4,000	14,160	2,222
All other fees[(2)]	1,065	605	95

Notes:

(1) "Audit fees" represent the aggregate fees billed for each of the fiscal years listed for professional services rendered by our principal accountant for the audit of our annual consolidated financial statements and the review of quarterly financial information, including the audit fees relating to our initial public offering in 2021.

(2) "All other fees" represent the aggregate fees billed for professional services rendered by our principal external auditors other than services reported under "Audit fees."

The policy of our audit committee is to pre-approve all audit and other service provided by PricewaterhouseCoopers Zhong Tian LLP and its affiliates, including audit services, audit-related services, tax services and other services as described above, other than those for *de minimis* services which are approved by the Audit Committee prior to the completion of the audit.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

None.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

As a Cayman Islands company listed on the New York Stock Exchange, we are subject to the New York Stock Exchange listing standards, which requires listed companies to have, among other things, a majority of their board members to be independent and independent director oversight of executive compensation and nomination of directors. However, New York Stock Exchange rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the New York Stock Exchange listing standards. We have elected to follow our home country practice in lieu of the corporate governance requirements of the New York Stock Exchange that a listed company must have (i) a majority of independent directors, (ii) a compensation committee and a nominating/corporate governance committee composed entirely of independent directors, and (iii) an audit committee with a minimum of three members, and with respect to the adoption of our 2022 share incentive plan without the approval of our shareholders. As a result, our shareholders may be afforded less protection than they otherwise would enjoy under New York Stock Exchange corporate governance listing standards applicable to U.S. domestic issuers. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Business and Industry—As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the New York Stock Exchange listing standards."

Other than the requirements discussed above, there are no significant differences between our corporate governance practices and those followed by domestic listed companies as required under the NYSE Listed Company Manual.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

PART III.

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The consolidated financial statements of Zhihu Inc. are included at the end of this annual report.

ITEM 19. EXHIBITS

Exhibit Number		Document
1.1		Tenth Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated herein by reference to Exhibit 3.2 to the registration statement on Form F-1, as amended (File No. 333-253910), initially filed with the Securities and Exchange Commission on March 5, 2021)
2.1		Registrant's Specimen American Depositary Receipt (incorporated herein by reference to Exhibit 4.1 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
2.2		Registrant's Specimen Certificate for Class A Ordinary Shares (incorporated herein by reference to Exhibit 4.2 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
2.3		Deposit Agreement, among the Registrant, JPMorgan Chase Bank, N.A., as depositary, and holders and beneficial owners of the American Depositary Receipts issued thereunder dated March 25, 2021 (incorporated herein by reference to Exhibit 4.3 to the registration statement on Form S-8 (File No. 333-256178) filed with the Securities and Exchange Commission on May 17, 2021)
2.4		Sixth Amended and Restated Shareholders' Agreement between the Registrant and other parties thereto dated August 7, 2019 (incorporated herein by reference to Exhibit 4.4 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
2.5*		Description of Securities
4.1		2012 Incentive Compensation Plan (incorporated herein by reference to Exhibit 10.1 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
4.2		Form of Indemnification Agreement between the Registrant and its directors and executive officers (incorporated herein by reference to Exhibit 10.2 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
4.3		Form of Employment Agreement between the Registrant and its executive officers (incorporated herein by reference to Exhibit 10.3 to the registration statement on Form F-1 (File No. 333-253910), as amended, initially filed with the Securities and Exchange Commission on March 5, 2021)
4.4*		English translation of the Exclusive Business Cooperation Agreement between Zhizhe Sihai and Zhizhe Tianxia dated December 21, 2021
4.5*		English translation of executed form of Shareholders' Rights Entrustment Agreement between the Zhizhe Tianxia, its shareholders, and Zhizhe Sihai dated December 21, 2021
4.6*		English translation of Share Pledge Agreement between Zhizhe Sihai, Zhizhe Tianxia, and its shareholders dated December 21, 2021
4.7*		English translation of Exclusive Option Agreement between Zhizhe Sihai, Zhizhe Tianxia, and its shareholders dated December 21, 2021
4.8*		English translation of Exclusive Technology Development, Consultancy, and Services Agreement between Shanghai Zhishi and Shanghai Pinzhi dated September 7, 2021
4.9*		English translation of Power of Attorney issued by the shareholders of Shanghai Pinzhi dated September 7, 2021
4.10*		English translation of Share Pledge Agreement between Shanghai Zhishi, Shanghai Pinzhi, and its shareholders dated September 7, 2021
4.11*		English translation of Exclusive Option Agreement between Shanghai Zhishi, Shanghai Pinzhi, and its shareholders dated September 7, 2021
4.12*		English translation of Exclusive Technology Development, Consultancy, and Services Agreement between Shanghai Paya and Shanghai Biban dated November 9, 2021
4.13*		English translation of Power of Attorney issued by the shareholders of Shanghai Biban dated November 9, 2021
4.14*		English translation of Share Pledge Agreement between Shanghai Paya, Shanghai Biban, and its shareholders dated November 9, 2021
4.15*		English translation of Exclusive Option Agreement between Shanghai Paya, Shanghai Biban, and its shareholders dated November 9, 2021
8.1*		Principal Subsidiaries of the Registrant
11.1		Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 99.1 to the registration statement on Form F-1, as amended (File No. 333-253910), initially filed with the Securities and Exchange Commission on March 5, 2021)
12.1*		CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*		CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**		CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**		CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*		Consent of Maples and Calder (Hong Kong) LLP
15.2*		Consent of Han Kun Law Offices
15.3*		Consent of PricewaterhouseCoopers Zhong Tian LLP
101.INS*		Inline XBRL Instance Document
101.SCH*		Inline XBRL Taxonomy Extension Scheme Document
101.CAL*		Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*		Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*		Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*		Inline XBRL Taxonomy Extension Presentation Linkbase Document
104		Cover Page Interactive Data File (embedded within the Inline XBRL document)

Notes:

* Filed with this annual report on Form 20-F.

** Furnished with this annual report on Form 20-F.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Zhihu Inc.

By: /s/ Yuan Zhou
Name: Yuan Zhou
Title: Chairman and Chief Executive Officer

Date: April 8, 2022

Zhihu Inc.

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Zhihu Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Zhihu Inc. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of operations and comprehensive loss, changes in shareholders' (deficit)/equity and cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers Zhong Tian LLP
Beijing, the People's Republic of China
April 8, 2022

We have served as the Company's auditor since 2017.

Zhihu Inc.

CONSOLIDATED BALANCE SHEETS

(All amounts in thousands, except for share and per share data)

	As of December 31,		
	2020	2021	2021
	RMB	RMB	US$
ASSETS			
Current assets:			
Cash and cash equivalents	957,820	2,157,161	338,506
Term deposits	1,092,921	2,815,509	441,815
Short-term investments	1,046,000	2,239,596	351,441
Trade receivables	486,046	831,628	130,501
Amounts due from related parties	13,843	18,196	2,855
Prepayments and other current assets	123,536	272,075	42,695
Total current assets	**3,720,166**	**8,334,165**	**1,307,813**
Non-current assets:			
Property and equipment, net	8,105	9,865	1,548
Intangible assets, net	23,478	68,308	10,719
Goodwill	—	73,663	11,559
Long-term investments	—	19,127	3,001
Term deposits	—	159,393	25,012
Right-of-use assets	3,241	126,512	19,852
Other non-current assets	6,451	14,132	2,218
Total non-current assets	**41,275**	**471,000**	**73,909**
Total assets	**3,761,441**	**8,805,165**	**1,381,722**
LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' (DEFICIT)/EQUITY			
Current liabilities (including amounts of the consolidated VIEs and their subsidiaries without recourse to the primary beneficiaries of RMB152,482 and RMB 295,911 as of December 31, 2020 and 2021, respectively)			
Accounts payable and accrued liabilities	501,848	1,026,534	161,086
Salary and welfare payables	231,847	313,676	49,223
Taxes payable	7,066	66,184	10,386
Contract liabilities	159,995	239,757	37,623
Amounts due to related parties	45,983	83,591	13,117
Short-term lease liabilities	2,893	40,525	6,359
Other current liabilities	64,936	127,447	19,999
Total current liabilities	**1,014,568**	**1,897,714**	**297,793**
Non-current liabilities (including amounts of the consolidated VIEs and their subsidiaries without recourse to the primary beneficiaries of nil and RMB 26,158 as of December 31, 2020 and 2021, respectively)			
Long-term lease liabilities	—	82,133	12,888
Deferred tax liabilities	—	14,030	2,202
Other non-current liabilities	—	73,139	11,477
Total non-current liabilities	—	**169,302**	**26,567**
Total liabilities	**1,014,568**	**2,067,016**	**324,360**
Commitments and contingencies (See Note 16)			
Mezzanine equity:			
Series A convertible redeemable preferred shares (US$0.000125 par value; 36,009,602 and nil shares authorized, issued and outstanding with redemption value of RMB89,551 and nil as of December 31, 2020 and 2021, respectively)	89,551	—	—
Series B convertible redeemable preferred shares (US$0.000125 par value; 25,164,697 and nil shares authorized, issued and outstanding with redemption value of RMB220,403 and nil as of December 31, 2020 and 2021, respectively)	220,403	—	—
Series C convertible redeemable preferred shares (US$0.000125 par value; 27,935,316 and nil shares authorized, issued and outstanding with redemption value of RMB556,552 and nil as of December 31, 2020 and 2021, respectively)	556,552	—	—
Series D convertible redeemable preferred shares (US$0.000125 par value; 22,334,525 and nil shares authorized, issued and outstanding with redemption value of RMB943,841 and nil as of December 31, 2020 and 2021, respectively)	943,841		
		—	—
Series D1 convertible redeemable preferred shares (US$0.000125 par value; 6,947,330 and nil shares authorized, issued and outstanding with redemption value of RMB315,239 and nil as of December 31, 2020 and 2021, respectively)	315,239	—	—
Series E convertible redeemable preferred shares (US$0.000125 par value; 27,267,380 and nil shares authorized, issued and outstanding with redemption value of RMB2,244,966 and nil as of December 31, 2020 and 2021, respectively)	2,244,966	—	—
Series F convertible redeemable preferred shares (US$0.000125 par value; 34,677,873 and nil shares authorized, 34,677,872 and nil shares issued and outstanding with redemption value of RMB3,520,796 and nil as of December 31, 2020 and 2021, respectively)	3,520,796	—	—
Total mezzanine equity	**7,891,348**	—	—
Shareholders' (deficit)/equity:			
Class A Ordinary shares (US$0.000125 par value, 200,435,685 and 1,500,000,000 shares authorized as of December 31, 2020 and 2021, respectively; 40,080,478 and 279,835,705 shares issued and outstanding as of December 31, 2020 and 2021, respectively)	31	226	35
Class B Ordinary shares (US$0.000125 par value, 19,227,592 and 50,000,000 shares authorized as of December 31, 2020 and 2021, respectively; 19,227,592 and 19,227,592 shares issued and outstanding as of December 31, 2020 and 2021, respectively)	15	15	2
Additional paid-in capital	—	13,350,347	2,094,961
Accumulated other comprehensive loss	(195,928)	(339,118)	(53,215)
Accumulated deficit	(4,948,593)	(6,280,816)	(985,597)
Total Zhihu Inc.'s shareholders' (deficit)/equity	**(5,144,475)**	**6,730,654**	**1,056,186**
Noncontrolling interests	—	7,495	1,176
Total shareholders' (deficit)/equity	**(5,144,475)**	**6,738,149**	**1,057,362**
Total liabilities, mezzanine equity and shareholders' (deficit)/equity	**3,761,441**	**8,805,165**	**1,381,722**

The accompanying notes are an integral part of these consolidated financial statements.

Zhihu Inc.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(All amounts in thousands, except for share and per share data)

	For the Year Ended December 31,			
	2019	2020	2021	2021
	RMB	RMB	RMB	US$
Revenues (including transactions with related parties of RMB9,045, RMB37,152 and RMB38,471 for the years ended December 31, 2019, 2020 and 2021, respectively)	670,511	1,352,196	2,959,324	464,382
Cost of revenues (including transactions with related parties of RMB154,256, RMB91,989 and RMB135,058 for the years ended December 31, 2019, 2020 and 2021, respectively)	(358,241)	(594,399)	(1,405,423)	(220,542)
Gross profit	**312,270**	**757,797**	**1,553,901**	**243,840**
Operating expenses:				
Selling and marketing expenses (including transactions with related parties of RMB24,972, RMB33,921 and RMB120,315 for the years ended December 31, 2019, 2020 and 2021, respectively)	(766,465)	(734,753)	(1,634,733)	(256,525)
Research and development expenses	(351,012)	(329,763)	(619,585)	(97,226)
General and administrative expenses	(253,268)	(296,162)	(690,292)	(108,322)
Total operating expenses	**(1,370,745)**	**(1,360,678)**	**(2,944,610)**	**(462,073)**
Loss from operations	**(1,058,475)**	**(602,881)**	**(1,390,709)**	**(218,233)**
Other income/(expenses):				
Investment income	25,035	56,087	59,177	9,286
Interest income	28,669	24,751	31,305	4,912
Fair value change of financial instrument	7,132	(68,818)	27,846	4,370
Exchange (losses)/gains	(9,216)	62,663	(16,665)	(2,615)
Others, net	2,675	11,728	(4,391)	(689)
Loss before income tax	**(1,004,180)**	**(516,470)**	**(1,293,437)**	**(202,969)**
Income tax expense	(40)	(1,080)	(5,443)	(854)
Net loss	**(1,004,220)**	**(517,550)**	**(1,298,880)**	**(203,823)**
Accretions of convertible redeemable preferred shares to redemption value	(426,781)	(680,734)	(170,585)	(26,769)
Net loss attributable to Zhihu Inc.'s shareholders	**(1,431,001)**	**(1,198,284)**	**(1,469,465)**	**(230,592)**
Net loss	**(1,004,220)**	**(517,550)**	**(1,298,880)**	**(203,823)**
Other comprehensive loss:				
Foreign currency translation adjustments	(4,021)	(143,326)	(143,190)	(22,470)
Total other comprehensive loss	**(4,021)**	**(143,326)**	**(143,190)**	**(22,470)**
Total comprehensive loss	**(1,008,241)**	**(660,876)**	**(1,442,070)**	**(226,293)**
Accretions of convertible redeemable preferred shares to redemption value	(426,781)	(680,734)	(170,585)	(26,769)
Comprehensive loss attributable to Zhihu Inc.'s shareholders	**(1,435,022)**	**(1,341,610)**	**(1,612,655)**	**(253,062)**
Net loss per share, basic and diluted	(22.99)	(18.36)	(6.12)	(0.96)
Weighted average number of ordinary shares, basic and diluted	62,249,946	65,279,970	240,174,108	240,174,108
Share-based compensation expenses included in:				
Cost of revenues	6,338	5,424	18,973	2,977
Selling and marketing expenses	16,293	15,973	31,947	5,013
Research and development expenses	28,650	15,281	57,595	9,038
General and administrative expenses	128,409	143,412	439,950	69,038

The accompanying notes are an integral part of these consolidated financial statements

Zhihu Inc.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' (DEFICIT)/EQUITY

(All amounts in thousands, except for share and per share data)

	Ordinary shares		Class A ordinary shares		Class B ordinary shares		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total shareholders' deficit
	Shares	Amount	Shares	Amount	Shares	Amount				
		RMB		RMB		RMB	RMB	RMB	RMB	RMB
Balance as of December 31, 2018	**58,808,070**	**46**	**—**	**—**	**—**	**—**	**—**	**(48,581)**	**(2,674,877)**	**(2,723,412)**
Net loss	—	—	—	—	—	—	—	—	(1,004,220)	(1,004,220)
Share-based compensation	—	—	—	—	—	—	179,690	—	—	179,690
Foreign currency translation adjustment	—	—	—	—	—	—	—	(4,021)	—	(4,021)
Accretions of convertible redeemable preferred shares to redemption value	—	—	—	—	—	—	(166,193)	—	(260,588)	(426,781)
Repurchase of share options	—	—	—	—	—	—	(24,903)	—	—	(24,903)
Re-designation of ordinary shares into Class A ordinary shares	(40,080,478)	(31)	40,080,478	31	—	—	—	—	—	—
Re-designation of ordinary shares into Class B ordinary shares	(18,727,592)	(15)	—	—	18,727,592	15	—	—	—	—
Proceeds received from employees in relation to share options	—	—	—	—	—	—	11,406	—	—	11,406
Balance as of December 31, 2019	**—**	**—**	**40,080,478**	**31**	**18,727,592**	**15**	**—**	**(52,602)**	**(3,939,685)**	**(3,992,241)**

Zhihu Inc.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' (DEFICIT)/EQUITY (Continued)

(All amounts in thousands, except for share and per share data)

	Class A ordinary shares		Class B ordinary shares		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total shareholders' deficit
	Shares	Amount	Shares	Amount				
		RMB		RMB	RMB	RMB	RMB	RMB
Balance as of December 31, 2019	**40,080,478**	**31**	**18,727,592**	**15**	**—**	**(52,602)**	**(3,939,685)**	**(3,992,241)**
Net loss	—	—	—	—	—	—	(517,550)	(517,550)
Share-based compensation	—	—	—	—	180,090	—	—	180,090
Foreign currency translation adjustment	—	—	—	—	—	(143,326)	—	(143,326)
Accretions of convertible redeemable preferred shares to redemption value	—	—	—	—	(189,376)	—	(491,358)	(680,734)
Exercise of share options	—	—	500,000	—	—	—	—	—
Proceeds received from employees in relation to share options	—	—	—	—	9,286	—	—	9,286
Balance as of December 31, 2020	**40,080,478**	**31**	**19,227,592**	**15**	**—**	**(195,928)**	**(4,948,593)**	**(5,144,475)**

	Class A ordinary shares		Class B ordinary shares		Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Non-controlling interests	Total shareholders' (deficit)/ equity
	Shares	Amount	Shares	Amount					
		RMB		RMB	RMB	RMB	RMB	RMB	RMB
Balance as of December 31, 2020	**40,080,478**	**31**	**19,227,592**	**15**	**—**	**(195,928)**	**(4,948,593)**	**—**	**(5,144,475)**
Net loss	—	—	—	—	—	—	(1,298,880)	—	(1,298,880)
Share-based compensation expenses					540,970	—	—	7,495	548,465
Foreign currency translation adjustment	—	—	—	—	—	(143,190)	—	—	(143,190)
Accretions of convertible redeemable preferred shares to redemption value	—	—	—	—	(137,242)	—	(33,343)	—	(170,585)
Proceeds/receivables in relation to share options	—	—	—	—	31,588	—	—	—	31,588
Issuance of Class A ordinary shares upon the completion of IPO, net of issuance cost	40,787,844	33	—	—	4,853,260	—	—	—	4,853,293
Conversion of convertible redeemable preferred shares into Class A shares upon the completion of IPO	180,336,722	148	—	—	8,061,785	—	—	—	8,061,933
Exercise of share options and restricted shares	16,528,770	14	—	—	(14)	—	—	—	—
Balance as of December 31, 2021	**277,733,814**	**226**	**19,227,592**	**15**	**13,350,347**	**(339,118)**	**(6,280,816)**	**7,495**	**6,738,149**

The accompanying notes are an integral part of these consolidated financial statements.

Zhihu Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(All amounts in thousands, except for share and per share data)

	For the Year Ended December 31,			
	2019	2020	2021	2021
	RMB	RMB	RMB	US$
Cash flows from operating activities:				
Net loss	(1,004,220)	(517,550)	(1,298,880)	(203,823)
Depreciation of property and equipment and amortization of intangible assets	20,236	19,611	21,451	3,366
Share-based compensation expenses	179,690	180,090	548,465	86,066
Accrued investment income of short-term investments	(4,899)	(2,359)	(6,366)	(999)
Deferred income tax	—	—	(1,095)	(172)
Provision of allowance for expected credit loss	7,175	16,773	32,633	5,121
Loss on disposal of property and equipment	245	255	—	—
Fair value change of financial instrument	(7,132)	68,818	(27,846)	(4,370)
Unrealized exchange losses	7,966	—	—	—
Changes in operating assets and liabilities:				
Trade receivables	(62,630)	(257,070)	(374,676)	(58,795)
Prepayments and other current assets	(10,127)	(17,061)	(134,357)	(21,084)
Right-of-use assets	26,425	22,744	(123,271)	(19,344)
Other non-current assets	142	412	(7,681)	(1,205)
Accounts payable and accrued liabilities	38,639	214,807	524,245	82,265
Contract liabilities	41,967	52,867	79,404	12,460
Amounts due from/to related parties	13,061	(57,921)	33,203	5,210
Taxes payable	2,350	20	59,017	9,261
Salary and welfare payables	66,007	25,007	81,422	12,777
Other current liabilities	(6,594)	28,883	34,333	5,388
Lease liabilities	(23,823)	(22,747)	119,765	18,794
Net cash used in operating activities	(715,522)	(244,421)	(440,234)	(69,084)
Cash flows from investing activities:				
Cash paid for long-term investments	—	—	(19,380)	(3,041)
Purchases of short-term investments	(3,549,524)	(6,153,104)	(6,418,000)	(1,007,124)
Proceeds of maturities of short-term investments	2,280,000	6,594,676	5,234,592	821,422
Purchases of term deposits	(1,163,708)	(2,328,717)	(4,946,963)	(776,286)
Proceeds from withdrawal of term deposits	336,315	2,319,201	3,018,396	473,652
Purchase of intangible assets	(1,222)	—	—	—
Purchases of property and equipment	(4,528)	(1,952)	(7,440)	(1,167)
Proceeds from disposal of property and equipment	179	9	—	—
Acquisition of subsidiaries, net of cash acquired	—	—	(33,180)	(5,207)
Proceeds from foreign exchange options	—	—	35,472	5,566
Net cash (used in)/generated from investing activities	(2,102,488)	430,113	(3,136,503)	(492,185)
Cash flows from financing activities:				
Proceeds from issuance of convertible redeemable preferred shares, net of issuance cost	3,011,072	—	—	—
Proceeds from issuance of Class A ordinary shares upon the completion of IPO, net of issuance cost	—	—	4,853,293	761,588
Proceeds received from employees in relation to share options	11,406	9,286	22,954	3,602
Payments for repurchase of share options	(24,903)	—	—	—
Net cash provided by financing activities	2,997,575	9,286	4,876,247	765,190
Effect of exchange rate changes on cash and cash equivalents	7,491	(137,508)	(100,169)	(15,718)
Net increase in cash and cash equivalents	187,056	57,470	1,199,341	188,203
Cash and cash equivalents at beginning of the year	713,294	900,350	957,820	150,303
Cash and cash equivalents at end of the year	900,350	957,820	2,157,161	338,506
Supplemental schedule of non-cash investing and financing activities:				
Accretions of convertible redeemable preferred shares to redemption value	426,781	680,734	170,585	26,769
Unpaid consideration for acquisition (including contingent consideration)	—	—	79,636	12,497

The accompanying notes are an integral part of these consolidated financial statements.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Operations and Principal Activities

(a) Principal activities

Zhihu Inc., (the "Company" or "Zhihu"), previously known as Zhihu Technology Limited, was incorporated in the Cayman Islands on May 17, 2011 under the Cayman Islands Companies Law as an exempted company with limited liability. The Company, through its consolidated subsidiaries and variable interest entities ("VIEs") (collectively referred to as the "Group"), is primarily engaged in the operation of one online content community which monetizes through paid membership services, advertising services and content-commerce solutions services in the People's Republic of China (the "PRC" or "China"). The Company completed its initial public offering (the "IPO") on the New York Stock Exchange in the United States of America in March 2021.

As of December 31, 2021, the Company's major subsidiaries, VIEs and VIE's subsidiary are as follows:

	Place and year of Incorporation/acquisition	Principal activities
Major Subsidiaries		
Zhihu Technology (HK) Limited	Hong Kong, 2011	Investment holding
Zhizhe Sihai (Beijing) Technology Co., Ltd.	PRC, 2012	Technology, business support and consulting service
Beijing Zhihu Network Technology Co., Ltd.	PRC, 2018	Information and marketing service
Shanghai Zhishi Commercial Consulting Co., Ltd.	PRC, 2021	Consulting service
Shanghai Paya Information Technology Co., Ltd.	PRC, 2021	Consulting service
Zhizhe Information Technology Services Chengdu Co., Ltd.	PRC, 2016	Technology, business support in the PRC
Chengdu Zhizhewanjuan Technology Co., Ltd.	PRC, 2017	Information transmission, software and information technology service in the PRC
VIEs		
Beijing Zhizhe Tianxia Technology Co., Ltd.	PRC, 2011	Internet service
Shanghai Pinzhi Education Technology Co., Ltd.	PRC, 2021	Vocational training
Shanghai Biban Network Technology Co., Ltd.	PRC, 2021	Vocational training
VIE's subsidiary		
Beijing Leimeng Shengtong Cultural Dvelopment Co., Ltd.	PRC, 2017	Audio-Visual Permit holder in the PRC

(b) VIE arrangements between the Company's PRC subsidiaries

As of December 31, 2021, the Company, through the Zhizhe Sihai (Beijing) Technology Co., Ltd., Shanghai Zhishi Commercial Consulting Co., Ltd and Shanghai Paya Information Technology Co., Ltd. ("WFOEs"), entered into the following contractual arrangements with the Beijing Zhizhe Tianxia Technology Co., Ltd., Shanghai Pinzhi Education Technology Co., Ltd and Shanghai Biban Network Technology Co., Ltd ("VIEs") and their shareholders, respectively, that enabled the Company to (1) have power to direct the activities that most significantly affect the economic performance of the VIEs, and (2) bear the risks and enjoy the rewards normally associated with ownership of the VIEs. Accordingly, WFOEs are considered the primary beneficiary of the VIEs, and the financial results of operations, assets and liabilities of the VIEs were included in the Group's consolidated financial statements.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(b) VIE arrangements between the Company's PRC subsidiaries (Continued)

The following is a summary of the contractual agreements entered into by and among the WFOEs, the VIEs and their shareholders:

i) Contracts that give the Company effective control of the VIEs

Exclusive Share Option Agreements. Pursuant to the exclusive share option agreements among the WFOEs, the VIEs and the VIEs' shareholders, each of the shareholders of the relevant VIE irrevocably granted the relevant WFOE an exclusive option to purchase, or have its designated person to purchase, at its discretion, to the extent permitted under PRC law, all or part of his or her equity interests in the relevant VIE, and the purchase price shall be RMB10 or the price permitted by applicable the PRC law. The shareholders of the VIEs undertake that, without the prior written consent of the WFOEs, they will not, among other things, (i) change VIEs' registered capital, (ii) merge VIEs with any other entity, (iii) sell, transfer, mortgage, or dispose of VIEs' assets, or (iv) amend VIEs' articles of association. The exclusive share option agreements will remain effective unless the WFOEs terminate these agreements with written request or other circumstances mentioned therein take place. The agreements amongst the VIEs, the relevant subsidiaries and VIE's shareholders that provide the Company effective control over these VIEs contain substantially the same terms, except that contract termination date and materiality threshold for the corporate actions that require WFOEs' consent vary.

Shareholders Voting Proxy Agreements. Pursuant to the shareholders voting proxy agreement, each shareholder of the relevant VIE irrevocably authorized the relevant WFOE to act on his or her respective behalf as proxy attorney, to exercise the voting and management rights of shareholders concerning all the equity interests held by each of them in the VIEs, including but not limited to voting rights, rights of operation and management, and all other rights as shareholders under the articles of association of the VIEs. The agreements amongst the VIEs, the relevant subsidiaries and VIEs' shareholders that provide the Company effective control over these VIEs contain substantially the same terms, except that contract termination date varies.

Equity Interest Pledge Agreements. Pursuant to the equity interest pledge agreements, the shareholders pledge 100% of their equity interests in the VIEs to the WFOEs to guarantee the performance by the VIEs and their shareholders of their obligations under the exclusive business cooperation agreement, the exclusive share option agreements and the shareholders voting proxy agreement. In the event of a breach by the VIEs or any shareholder of contractual obligations under the equity interest pledge agreement, the WFOEs, as pledgee, will have the right to dispose of the pledged equity interests in the VIEs and will have priority in receiving the proceeds from such disposal. The shareholders of the VIEs agree that, without the WFOEs' prior written consent, during the term of the equity interest pledge agreements, they will not dispose of, create, or allow any encumbrance on the pledged equity interests. The agreements amongst the VIEs, the relevant subsidiaries and VIEs' shareholders that provide the Company effective control over these VIEs contain substantially the same terms, except that contract termination date varies.

Spousal Consent Letters. Spouses of shareholders of the VIEs have each signed a spousal consent letter. Each signing spouse of the relevant shareholder unconditionally and irrevocably agreed that the equity interests in the VIEs held by and registered in the name of such shareholder be disposed of in accordance with the equity interest pledge agreements, the exclusive share option agreements, the shareholders voting proxy agreements, and the exclusive business cooperation agreements, and that such shareholder may perform, amend or terminate such agreements without any additional consent of his or her spouse. Additionally, the signing spouses agreed not to assert any rights over the equity interests in the VIEs held by the shareholders. In addition, in the event that the signing spouses obtain any equity interests in the VIEs held by the shareholders for any reason, they agree to be bound by and sign any legal documents substantially similar to the contractual arrangements described above, as may be amended from time to time.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(b) VIE arrangements between the Company's PRC subsidiaries (Continued)

ii) Contracts that enable the Company to receive substantially all of the economic benefits from the VIEs

Exclusive business cooperation agreements. Each VIE has entered into an exclusive business cooperation agreement with the relevant WFOE, pursuant to which the WFOEs provides exclusive services to the VIEs. In exchange, the VIEs pay a service fee to the WFOEs, the amount of which shall be determined, to the extent permitted by applicable PRC laws as proposed by the WFOEs, resulting in a transfer of substantially all of the profits from the VIEs to the WFOEs. The agreements amongst the VIEs, the relevant subsidiaries and VIE's shareholders that provide the Company effective control over these VIEs contain substantially the same terms, except that contract termination date varies.

iii) Risks in relation to VIE structure

Part of the Group's business is conducted through the VIEs of the Group, of which the Company is the ultimate primary beneficiary. In the opinion of the management, the contractual arrangements with the VIEs and the nominee shareholders are in compliance with PRC laws and regulations and are legally binding and enforceable. The nominee shareholders indicate they will not act contrary to the contractual arrangements. However, there are substantial uncertainties regarding the interpretation and application of the PRC laws and regulations including those that govern the contractual arrangements, which could limit the Group's ability to enforce these contractual arrangements and if the nominee shareholders of the VIEs were to reduce their interests in the Group, their interests may diverge from that of the Group and that may potentially increase the risk that they would seek to act contrary to the contractual arrangements.

On March 15, 2019, the National People's Congress approved the Foreign Investment Law, which took effect on January 1, 2020. Along with the Foreign Investment Law, the Implementing Regulation of Foreign Investment Law promulgated by the State Council and the Interpretation of the Supreme People's Court on Several Issues Concerning the Application of the Foreign Investment Law promulgated by the Supreme People's Court became effective on January 1, 2020. Since the Foreign Investment Law and its current implementation and interpretation rules are relatively new, uncertainties still exist in relation to their further application and improvement. The Foreign Investment Law and its current implementation and interpretation rules do not explicitly classify whether variable interest entities that are controlled through contractual arrangements would be deemed as foreign-invested enterprises if they are ultimately "controlled" by foreign investors. However, it has a catch-all provision under the definition of "foreign investment" that includes investments made by foreign investors in China through other means as provided by laws, administrative regulations, or the State Council. Therefore, it still leaves leeway for future laws, administrative regulations, or provisions of the State Council to provide for contractual arrangements as a form of foreign investment. Therefore, there can be no assurance that the Group's control over the variable interest entities through contractual arrangements will not be deemed as a foreign investment in the future. Furthermore, if future laws, administrative regulations or provisions mandate further actions to be taken by companies with respect to existing contractual arrangements, the Group may face substantial uncertainties as to whether the Group can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect the Group's current corporate structure and business operations.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(b) VIE arrangements between the Company's PRC subsidiaries (Continued)

If the Group is found in violation of any PRC laws or regulations or if the contractual arrangements among WFOEs, VIEs and their nominee shareholders are determined as illegal or invalid by any PRC court, arbitral tribunal or regulatory authorities, the relevant governmental authorities would have broad discretion in dealing with such violation, including, without limitation:

- revoke the agreements constituting the contractual arrangements;
- revoke the Group's business and operating licenses;
- require the Group to discontinue or restrict operations;
- restrict the Group's right to collect revenue;
- restrict or prohibit the Group's use of the proceeds from the public offering to fund the Group's business and operations in China;
- shut down all or part of the Group's websites or services;

iii) Risks in relation to VIE structure (Continued)

- levy fines on the Group or confiscate the proceeds that they deem to have been obtained through non-compliant operations;
- require the Group to restructure the operations in such a way as to compel the Group to establish a new enterprise, re-apply for the necessary licenses or relocate the Group's businesses, staff, and assets;
- impose additional conditions or requirements with which the Group may not be able to comply; or
- take other regulatory or enforcement actions that could be harmful to the Group's business.

The imposition of any of these penalties may result in a material and adverse effect on the Group's ability to conduct the Group's businesses. In addition, if the imposition of any of these penalties causes the Group to lose the right to direct the activities of the VIE (through its equity interests in its subsidiaries) or the right to receive their economic benefits, the Group will no longer be able to consolidate the VIEs and their subsidiaries, if any. In the opinion of management, the likelihood of loss in respect of the Group's current ownership structure or the contractual arrangements with its VIEs is remote. The Group's operations depend on the VIEs and their nominee shareholders to honor their contractual arrangements with the Group. These contractual arrangements are governed by PRC law and disputes arising out of these agreements are expected to be decided by arbitration in the PRC. The management believes that each of the contractual arrangements constitutes valid and legally binding obligations of each party to such contractual arrangements under the PRC laws. However, the interpretation and implementation of the laws and regulations in the PRC and their application on the legality, binding effect and enforceability of contracts are subject to the discretion of competent PRC authorities, and therefore there is no assurance that relevant PRC authorities will take the same position as the Group herein in respect of the legality, binding effect and enforceability of each of the contractual arrangements. Meanwhile, since the PRC legal system continues to evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit legal protections available to the Group to enforce the contractual arrangements should the VIEs or the nominee shareholders of the VIEs fail to perform their obligations under those arrangements.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(b) VIE arrangements between the Company's PRC subsidiaries (Continued)

iii) Risks in relation to VIE structure (Continued)

The following consolidated financial information of the Group's VIEs and their subsidiaries as of December 31, 2020 and 2021 and for the years ended December 31, 2019, 2020 and 2021 was included in the accompanying consolidated financial statements of the Group as follows (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
ASSETS		
Current assets:		
Cash and cash equivalents	86,487	59,313
Short-term investments	51,479	434,505
Trade receivables	32,307	58,282
Amounts due from related parties	8,063	7,971
Amounts due from Group companies[(a)]	6,587	7,742
Prepayments and other current assets	23,352	50,753
Non-current assets:		
Property and equipment, net	53	557
Intangible assets, net	21,048	66,186
Goodwill	—	73,663
Right-of-use assets	—	5,878
Other non-current assets	30	243
Total assets	**229,406**	**765,093**
Current liabilities		
Accounts payable and accrued liabilities	51,321	120,057
Salary and welfare payables	1,537	2,473
Taxes payable	587	2,508
Contract liabilities	76,992	130,420
Amounts due to related parties	4,942	16,303
Amounts due to Group companies	121,377	420,411
Short-term lease liabilities	—	1,613
Other current liabilities	17,103	22,537
Non-current liabilities		
Long-term lease liabilities	—	3,689
Deferred tax liabilities	—	14,030
Other non-current liabilities	—	8,439
Total liabilities	**273,859**	**742,480**

	For the Year Ended December 31,		
	2019	2020	2021
	RMB	RMB	RMB
Inter-company revenues	438	1,113	196
Third-party revenues	102,157	368,933	766,032
Inter-company cost[(a)]	(31,928)	(187,993)	(330,486)
Third-party cost	(72,123)	(177,598)	(373,390)
Gross Profit	**(1,456)**	**4,455**	**62,352**
Operating Expenses	(15,005)	(15,561)	(85,017)
Other income	4,749	4,572	4,834
Loss before income tax	**(11,712)**	**(6,534)**	**(17,831)**
Income tax expense	—	(1,049)	(3,435)
Net loss	(11,712)	(7,583)	(21,266)

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(b) VIE arrangements between the Company's PRC subsidiaries (Continued)

iii) Risks in relation to VIE structure (Continued)

	For the Year Ended December 31,		
	2019	2020	2021
	RMB	RMB	RMB
Purchases of goods and services from Group Companies[(a)]	(215,200)	(159,651)	(45,579)
Operating activities with external parties	86,219	225,436	432,031
Net cash (used in)/provided by operating activities	**(128,981)**	**65,785**	**386,452**
Purchases of short-term investments	(120,000)	(175,000)	(870,000)
Proceeds of maturities of short-term investments	255,000	165,000	490,000
Other investing activities with external parties	—	—	(33,626)
Net cash provided by/(used in) investing activities	**135,000**	**(10,000)**	**(413,626)**
Net increase/(decrease) in cash and cash equivalents	6,019	55,785	(27,174)
Cash and cash equivalents at beginning of the year	24,683	30,702	86,487
Cash and cash equivalents at end of the year	**30,702**	**86,487**	**59,313**

(a) VIEs have incurred RMB 31.9 million, RMB 186.1 million, and RMB330.5 million in fees related to services provided by the WFOEs and WFOEs concurrently recognized same amounts as revenues for the years ended December 31, 2019, 2020 and 2021, respectively. In 2019, 2020, and 2021, the total amount of such service fees that VIEs paid to the relevant WFOE under the relevant agreements was RMB215.2 million, RMB159.7 million and RMB45.6 million, respectively. Unsettled balance of such transactions was RMB63.8 million and RMB345.9 million as of December 31, 2020 and 2021, respectively.

In accordance with various contractual agreements, the Company has the power to direct the activities of the VIE and can have assets transferred out of the VIEs and their subsidiaries. Therefore, the Company considers that there are no assets in the VIEs and their subsidiaries that can be used only to settle obligations of the VIEs and their subsidiaries, except for the registered capital of the VIEs and their subsidiaries amounting to approximately RMB21.7 million and RMB22.8 million as of December 31, 2020 and 2021, respectively. As the VIEs are incorporated as limited liability company under the PRC Company Law, creditors do not have recourse to the general credit of the Company for the liabilities of the VIEs and their subsidiaries. There is currently no contractual arrangement that would require the Company to provide additional financial support to the VIEs.

(c) Liquidity

The Group incurred net losses of RMB1,004.2 million, RMB517.6 million and RMB1,298.9 million for the years ended December 31, 2019, 2020 and 2021, respectively. Net cash used in operating activities was RMB715.5 million, RMB244.4 million and RMB440.2 million for the years ended December 31, 2019, 2020 and 2021, respectively. Accumulated deficit was RMB4,948.6 million and RMB6,280.8 million as of December 31, 2020 and 2021, respectively. The Group assesses its liquidity by its ability to generate cash from operating activities and attract investors' investments.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Operations and Principal Activities (Continued)

(c) Liquidity (Continued)

Historically, the Group has relied principally on both operational sources of cash and non-operational sources of financing from investors to fund its operations and business development. The Group's ability to continue as a going concern is dependent on management's ability to successfully execute its business plan, which includes increasing revenues while controlling operating expenses, as well as, generating operational cash flows and continuing to gain support from outside sources of financing. The Group has been continuously receiving financing support from outside investors through the issuance of preferred shares. In March 2021, with the completion of its initial public offering on New York Stock Exchange, the Group received net proceeds of RMB4,838.2 million. In April 2021, the underwriters exercised their option to purchase additional ADSs and the Company received net proceeds of RMB15.1 million. Moreover, the Group can adjust the pace of its operational expansion and control its operating expenses. As of December 31, 2020 and 2021, the Group had RMB957.8 million and RMB2,157.2 million of cash and cash equivalents, RMB1,092.9 million and RMB2,974.9 million of term deposits and RMB1,046.0 million and RMB2,239.6 million of short-term investments, respectively. As of December 31, 2020 and 2021, the Group had RMB2,705.6 million and RMB6,436.5 million of net current assets. Based on the above considerations, the Group believes the cash and cash equivalents, term deposits and short-term investments are sufficient to meet the cash requirements to fund planned operations and other commitments for at least the next twelve months from the issuance of the consolidated financial statements. The Group's consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and liquidation of liabilities in the normal course of business.

2. Significant Accounting Policies

(a) Basis of presentation

The consolidated financial statements of the Group have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Significant accounting policies followed by the Group in the preparation of the accompanying consolidated financial statements are summarized below.

(b) Principles of consolidation

The consolidated financial statements include the financial statements of the Company, its subsidiaries, the VIEs and subsidiaries of the VIEs for which the Company are the primary beneficiary.

Subsidiaries are those entities in which the Company, directly or indirectly, controls more than one half of the voting power, has the power to appoint or remove the majority of the members of the board of directors, or to cast a majority of votes at the meeting of the board of directors, or has the power to govern the financial and operating policies of the investee under a statute or agreement among the shareholders or equity holders.

Consolidated VIEs are entities in which the Company, or its subsidiaries, through contractual arrangements, has the power to direct the activities that most significantly impact the entities' economic performance, bears the risks of and enjoys the rewards normally associated with ownership of the entity, and therefore the Company or its subsidiary is the primary beneficiary of the entity.

All transactions and balances among the Company, its subsidiaries, the consolidated VIEs and subsidiaries of the VIEs have been eliminated upon consolidation.

(c) Use of estimates

The preparation of the Group's consolidated financial statements in conformity with the U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent liabilities at the balance sheet date and reported revenues and expenses during the reported periods in the consolidated financial statements and accompanying notes. Significant accounting estimates include but are not limited to assessment for the determination of the fair value of convertible redeemable preferred shares valuation, recognition of share-based compensation expenses and purchase price allocation in relation to acquisitions.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(d) Functional currency and foreign currency translation

The Group uses Renminbi ("RMB") as its reporting currency. The functional currency of the Company and its overseas subsidiaries which are incorporated in the Cayman Islands, the British Virgin Islands and Hong Kong is United States dollars ("US$"). The functional currency of the Group's PRC entities is RMB.

In the consolidated financial statements, the financial information of the Company and other entities located outside of the PRC have been translated into RMB. Assets and liabilities are translated at the exchange rates on the balance sheet date, equity amounts are translated at historical exchange rates, and revenues, expenses, gains and losses are translated using the periodic average exchange rate. Translation adjustments are reported as foreign currency translation adjustments and are shown as a component of other comprehensive (loss)/income in the consolidated statements of operations and comprehensive loss.

Foreign currency transactions denominated in currencies other than the functional currency are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into the functional currency using the applicable exchange rates at the balance sheet dates. Net gains and losses resulting from foreign exchange transactions are included in others, net in the consolidated statements of operations and comprehensive loss.

(e) Convenience Translation

Translations of balances in the consolidated balance sheets, consolidated statements of operations and comprehensive loss and consolidated statements of cash flows from RMB into US$ as of and the year ended December 31, 2021 are solely for the convenience of the reader and were calculated at the rate of US$1.00 = RMB6.3726, representing the exchange rate set forth in the H.10 statistical release of the U.S. Federal Reserve Board on December 30, 2021. No representation is made that the RMB amounts represent or could have been, or could be, converted, realized or settled into US$ at that rate on December 30, 2021, or at any other rate.

(f) Fair value measurements

Fair value reflects the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Group considers the principal or most advantageous market in which it would transact and it considers assumptions that market participants would use when pricing the asset or liability.

The Group applies a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Accounting guidance specifies a hierarchy of valuation techniques, which is based on whether the inputs into the valuation techniques are observable or unobservable. The hierarchy is as follows:

- Level 1 applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.
- Level 2 applies to assets or liabilities for which there are inputs other than quoted prices included within Level 1 that are observable for the asset or liability such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical asset or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.
- Level 3 applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(f) Fair value measurements (Continued)

Accounting guidance also describes three main approaches to measure the fair value of assets and liabilities: (1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

When available, the Group uses quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, the Group will measure fair value using valuation techniques that use, when possible, current market-based or independently sourced market parameters, such as interest rates and currency rates.

Financial assets and liabilities of the Group primarily consist of cash and cash equivalents, term deposits, short-term investments, trade receivables, other receivables and amounts due from/to related parties, accounts payable and accrued liabilities and other current liabilities and contingent consideration in relation to acquisitions. As of December 31, 2020 and 2021, the carrying values of cash and cash equivalents, term deposits, trade receivables, amounts due from/to related parties, other receivables, accounts payable and accrued liabilities and other current liabilities approximate their respective fair values due to their short-term duration. Please see Note 20 for additional information of contingent consideration.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(g) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(h) Term deposits

Term deposits are the balances placed with the banks with original maturities over three months. The term deposits are unsecured and carry fixed interest per annum for the years presented.

(i) Short-term investments

Short-term investments mainly include investments in financial instruments with a variable interest rate indexed to performance of underlying assets. In accordance with ASC 825 — "Financial Instruments", the Group elected the fair value method at the date of initial recognition and carried these investments at fair value. Changes in the fair value are reflected in the consolidated statements of operations and comprehensive loss as other income/(expense).

(j) Expected credit losses

In 2016, the FASB issued ASC Topic 326, which amends previously issued guidance regarding the impairment of financial instruments by creating an impairment model that is based on expected losses. The Group adopted ASC Topic 326 on January 1, 2019 and several associated ASUs using a modified retrospective approach which did not have a material impact to the Group's consolidated financial statements as of January 1, 2019.

The Group's trade receivables and other receivables included in prepayment and other current assets and other non-current assets are within the scope of ASC Topic 326. The Group has identified the relevant risk characteristics of its customers and the related receivables and other receivables which include size, type of the services or the products the Group provides, or a combination of these characteristics. Receivables with similar risk characteristics have been grouped into pools. For each pool, the Group considers the historical credit loss experience, current economic conditions, supportable forecasts of future economic conditions, and any recoveries in assessing the lifetime expected credit losses. Other key factors that influence the expected credit loss analysis include customer demographics, payment terms offered in the normal course of business to customers, and industry-specific factors that could impact the Group's receivables. Additionally, external data and macroeconomic factors are also considered. They are assessed at each quarter based on the Group's specific facts and circumstances. Changes in these factors in the current expected credit loss model from January 1, 2019 had no significant impact on the consolidated financial statements.

The Group's trade receivables consist primarily of advertising agencies and direct advertising customers. The Group recorded RMB7.2 million, RMB15.8 million and RMB32.6 million in expected credit loss expense for the years ended December 31, 2019, 2020 and 2021, respectively.

(k) Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and impairment, if any. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range as follows:

Electronic equipment	3 years
Office equipment and furniture	3 - 5 years
Leasehold improvement	Shorter of their useful life and the lease term

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(k) Property and equipment, net (Continued)

Expenditures for maintenance and repairs are expensed as incurred. The gain or loss on the disposal of property and equipment is the difference between the net sales proceeds and the carrying amount of the relevant assets and is recognized in the consolidated statements of operations and comprehensive loss.

(l) Intangible assets, net

Separately acquired license, software and other intangible assets are shown at historical cost. Intangible assets acquired in a business combination were recognized initially at fair value at the date of acquisition. They have finite useful lives and are subsequently carried at cost less accumulated amortization and impairment losses (if any). The Group amortizes intangible assets with a limited useful life using the straight-line method over the following years:

Licenses	5 years
Software	10 years
Content	5 years
Brand name	10 years
Technology	5 years

(m) Goodwill

Goodwill represents the excess of the purchase consideration over the acquisition date amounts of the identifiable tangible and intangible assets acquired and liabilities assumed from the acquired entity in a business combination. Goodwill is not amortized but is tested for impairment on December 31 annually, or more frequently if events or changes in circumstances indicate that it might be impaired. The Company first assesses qualitative factors to determine whether it is necessary to perform the quantitative goodwill impairment test. In the qualitative assessment, the Company considers factors such as macroeconomic conditions, industry and market considerations, overall financial performance of the reporting unit, and other specific information related to the operations, business plans and strategies of the reporting unit, including consideration of the impact of the COVID-19 pandemic. Based on the qualitative assessment, if it is more likely than not that the fair value of a reporting unit is less than the carrying amount, the quantitative impairment test is performed. Otherwise, no further testing is required.

On January 1, 2020, the Group adopted ASU No. 2017-04, Simplifying the Test for Goodwill Impairment to simplify the test for goodwill impairment by removing Step 2, which was issued by the FASB in January 2017. If the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, versus determining an implied fair value in Step 2 to measure the impairment loss.

Management evaluated the recoverability of goodwill by performing a qualitative assessment before using a two-step impairment test approach at the reporting unit level. Based on an assessment of the qualitative factors, management determined that it is more-likely-than-not that the fair value of each reporting unit is in excess of its carrying amount as of December 31, 2021. Therefore, no impairment loss was recorded for the year ended December 31, 2021.

(n) Lease

In February 2016, the Financial Accounting Standards Board (“FASB”) issued ASU 2016-02, Leases, which specifies the accounting for leases. Earlier application is permitted for all entities as of February 25, 2016, the issuance date of the final standard. The Group early adopted ASC 842 on January 1, 2018, along with all subsequent ASU clarifications and improvements that are applicable to the Group, to each lease that existed in the years presented in the financial statements, using the modified retrospective transition method and used the commencement date of the leases as the date of initial application. Consequently, financial information and the disclosures required under ASC 842 are provided for dates and years presented in the financial statements. The Group has applied the practical expedient to not recognize short-term leases with lease terms of one year or less.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(n) Leases (Continued)

The Group determines if a contract contains a lease based on whether it has the right to obtain substantially all of the economic benefits from the use of an identified asset which the Group does not own and whether it has the right to direct the use of an identified asset in exchange for consideration. Right-of-use assets represent the Group's right to use an underlying asset for the lease term and lease liabilities represent the Group's obligation to make lease payments arising from the lease. Right-of-use assets are recognized as the amount of the lease liability, adjusted for lease incentives received. Lease liabilities are recognized at the present value of the future lease payments at the lease commencement date. The interest rate used to determine the present value of the future lease payments is the Group's incremental borrowing rate ("IBR"), because the interest rate implicit in most of the Group's leases is not readily determinable. The IBR is a hypothetical rate based on the Group's understanding of what its credit rating would be to borrow and resulting interest the Group would pay to borrow an amount equal to the lease payments in a similar economic environment over the lease term on a collateralized basis. Lease payments may be fixed or variable, however, only fixed payments or in-substance fixed payments are included in the Group's lease liability calculation. Variable lease payments are recognized in operating expenses in the year in which the obligation for those payments is incurred.

(o) Revenue recognition

The Group adopted ASC 606 — "Revenue from Contracts with Customers" for all years presented. According to ASC 606, revenue is recognized as the control of the goods or services is transferred to a customer. Depending on the terms of the contract and the laws that apply to the contract, control of the goods and services may be transferred over time or at a point in time. Control of the goods and services is transferred over time if the Group's performance:

- provides all of the benefits received and consumed simultaneously by the customer;
- creates and enhances an asset that the customer controls as the Group performs; or
- does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

If control of the goods and services transfers over time, revenue is recognized over the period of the contract by reference to the progress towards complete satisfaction of that performance obligation. Otherwise, revenue is recognized at a point in time when the customer obtains control of the goods and services.

Contracts with customers may include multiple performance obligations. For such arrangements, the Group allocates revenue to each performance obligation based on its relative standalone selling price. The Group generally determines standalone selling prices based on the prices charged to customers. If the standalone selling price is not directly observable, it is estimated using expected cost plus a margin or adjusted market assessment approach, depending on the availability of observable information. Assumptions and estimations have been made in estimating the relative selling price of each distinct performance obligation, and changes in judgements on these assumptions and estimates may impact the revenue recognition.

When either party to a contract has performed, the Group presents the contract in the balance sheet as a contract asset or a contract liability, depending on the relationship between the entity's performance and the customer's payment.

A contract asset is the Group's right to consideration in exchange for goods and services that the Group has transferred to a customer. Contract assets as of December 31, 2020 and 2021 were not material.

Trade receivable is recorded when the Group has an unconditional right to consideration. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(o) Revenue recognition (Continued)

If a customer pays consideration or the Group has a right to an amount of consideration that is unconditional, before the Group transfers a good or service to the customer, the Group presents the contract liability when the payment is made or a receivable is recorded (whichever is earlier). A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

Paid membership services

The Group generates revenue through paid membership services on its community where users pay a membership fee to access premium content library for a fixed time period. The Group is determined to be the primary obligor and accordingly, the Group records revenue on a gross basis, and the revenue sharing to the content providers is recorded as cost of revenues.

The Group offers membership service which provides subscription members' access right to premium content. Membership periods range from one month to twelve months. Membership service represents a stand ready obligation to provide the paid content service and the customer simultaneously receives and consumes the benefits as the Group provide such services throughout the membership period. The receipt of membership fees is initially recorded as contract liabilities and revenue is recognized ratably over the membership period as services are rendered.

Users who are undecided about or otherwise do not need paid memberships can pay retail prices to access the premium content. This on-demand access option supplements the membership programs as an additional revenue stream and provides flexibility to the users. The Group determined that the retail purchase consists of two performance obligations: the content and the hosted connection for content online playback ("online hosting"). The transaction price is allocated between the two performance obligations based on the relative standalone selling price. The purchased content usually has no expiry period unless otherwise stated. As the Group does not have further obligation after making the content available to the user for content performance obligation, the revenue from content performance obligation is recognized at the time of purchase for pre-recorded content and at the time of completion of live streaming for live streaming content. The online hosting performance obligation is satisfied over the viewing period of the customers. Accordingly, the Group recognizes the revenue over the estimated benefit periods. The revenue derived from the retail purchase is not significant for the years ended December 31, 2019, 2020 and 2021.

The Group also provides discount coupons to its customers for use in purchasing online paid contents, which were not material for the years ended December 31, 2019, 2020 and 2021, and treated as a reduction of revenue upon usage of coupon.

Advertising services

Advertising revenues are derived principally from advertising contracts with customers where the customers pay to place their advertisements on the Group's community over a particular period of time. Such formats generally include but are not limited to launch screen advertisements, in-app bannered advertisements and feed advertisements. Merchants and brands can choose to compose their advertisements in text, images or videos and decide whether they are display-based or performance-based. Zhihu primarily charge display-based advertisements by cost-per -mille ("CPM") model and cost-per-day ("CPD") model, and primarily charge performance-based advertisements by cost-by-click ("CPC") model and CPM model.

Content-commerce solutions services

Content-commerce solution services are online marketing solutions that are seamlessly integrated into our regular content operations. The Group provides content-commerce solutions services to expose the designated content to a more targeted audience. Zhihu primarily charges the content-commerce solutions service by CPC model.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(o) Revenue recognition (Continued)

Content-commerce solutions services (Continued)

For advertising and content-commerce solutions, the Group recognizes revenue on the satisfied performance obligations and defers the recognition of revenue for the estimated value of the undelivered elements until the remaining performance obligations have been satisfied. When all of the elements within arrangement are delivered uniformly over the agreement period, the revenues are recognized on a straight-line basis over the contract period. The primary services and pricing models of advertising and content-commerce solutions are summarized as below:

CPM model

Under the CPM model, the unit price for each qualified display is fixed and stated in the contract with advertisers. A qualified display is defined as the appearance of an advertisement, where advertisement meets the criteria specified in the contract. Given the fees are priced consistently throughout the contract and the unit prices for each qualified display is fixed accordingly, the Group recognizes revenue based on the fixed unit prices and the number of qualified displays upon occurrence of display, provided all revenue recognition criteria have been met.

CPC model

Under the CPC model, there is no fixed price for advertising services or content-commerce solutions services stated in the contract with the advertiser and the unit price for each click is auction-based. The Group charges merchants and brands on a per-click basis, when the users click on the advertisements or the designated content. Given that the unit price is fixed, the Group recognizes revenue based on qualifying clicks and unit price upon the occurrence of a click, provided all revenue recognition criteria have been met.

CPD model

Under the CPD model, a contract is signed to establish a fixed price for the advertising services to be provided over a period of time. Given the advertisers benefit from the displayed advertising evenly, the Group recognizes revenue on a straight-line basis over the period of display, provided all revenue recognition criteria have been met.

Sales rebate to certain customers

Certain customers may receive sales rebates, which are accounted for as variable consideration. The Group estimates annual expected revenue volume of each individual customer with reference to their historical results. The sales rebate reduces revenues recognized. The Group recognizes revenue for the amount of fees it receives from its advertisers, after deducting sales rebates and net of value-added tax (“VAT”). The Group believes that there will not be significant changes to its estimates of variable consideration.

Other revenues

The Group’s other revenues are primarily generated from the vocational training, e-commerce services and other activities. Other revenues are recognized when control of promised goods or services is transferred to the customers, which generally occurs upon the acceptance of the goods or services by the customers. Pursuant to ASC 606-10-55-39, for arrangements where the Group is primarily responsible for fulfilling the promise to provide the goods or services, are subject to inventory risk, and have latitude in establishing prices and selecting suppliers, revenues are recorded on a gross basis. Otherwise, revenues are recorded on a net basis.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(o) Revenue recognition (Continued)

Nonmonetary transactions

The group entered into nonmonetary transactions with certain advertising service providers whereby each parties of these transactions would place counter parties' advertisement on their own platform. Revenue from the nonmonetary transactions is recognized when advertising service is provided as discussed above and the expense related to the advertising activities is recognized over the duration of display. The Group use the fair value of the goods or services received when measuring the non-cash consideration for advertising service revenue earned. The Group will only measure the non-cash consideration indirectly by reference to the standalone selling price of the goods or services surrendered if the fair value of the goods or services received is not reasonably estimable.

Principal expedients and exemptions

The transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, has not been disclosed, as substantially all of the Group's contracts have a duration of one year or less.

The Group recognizes an asset for the incremental costs of obtaining a contract if those costs are expected recoverable. The Group elects to expense certain costs to obtain a contract as incurred when the expected recover period is one year or less.

(p) Cost of revenues

Cost of revenues consist primarily of cloud service and bandwidth costs, staff costs including share-based compensation, content and operational cost, payment processing cost, and other direct costs related to the operation of business. These costs are charged to the consolidated statements of operations and comprehensive loss as incurred.

(q) Selling and marketing expenses

Selling and marketing expenses consist primarily of promotion and advertising expenses, staff costs including share-based compensation and other daily expenses which are related to the selling and marketing departments. For the years ended December 31, 2019, 2020 and 2021, advertising expenses were RMB350.2 million, RMB311.0 million and RMB782.6 million.

(r) General and administrative expenses

General and administrative expenses consist of staff costs including share-based compensation expenses and related expenses for employees involved in general corporate functions, including accounting, finance, tax, legal and human resources and costs associated with use by these functions of facilities and equipment, such as traveling and general expenses, professional service fees and other related expenses.

(s) Research and development expenses

Research and development expenses mainly consist of staff costs including share-based compensation expenses, rental expenses incurred associated with research and development departments.

For those websites and platforms of applications, the Group expenses all costs incurred for the preliminary project stage and post implementation-operation stage of development, and costs associated with repair or maintenance of the existing platform. Costs incurred in the application development stage are capitalized and amortized over the estimated useful life. Since the amount of the Group's research and development expenses qualifying for capitalization has been immaterial, as a result, all website and software development costs have been expensed in "research and development expenses" as incurred.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(t) Share-based compensation

Share-based compensation benefits are provided to employees under the 2012 incentive compensation plan ("Zhihu Employee Option Plan" or the "Plan"). The Company accounts for share-based compensation benefits granted to employees in accordance with ASC 718 Stock Compensation. Information relating to the plan is set out in Note 14.

Prior to the completion of the IPO, the Company has used the discounted cash flow method to determine the underlying equity fair value of the Company and adopted an equity allocation model to determine the fair value of the underlying ordinary share. After the completion of the IPO, the Company has used share prices as the fair value of the underlying ordinary share. The determination of estimated fair value of share-based compensation on the grant date using binomial option-pricing model is affected by the fair value of the Company's ordinary shares as well as assumptions in relation to a number of complex and subjective variables. These variables include the expected value volatility of the Company over the expected term of the awards, actual and projected employee share option exercise behaviors, a risk-free interest rate and expected dividends, if any.

The fair value of options granted under the plan is recognized as an employee benefits expense with a corresponding increase in equity. The total amount to be expensed is determined by reference to the fair value of the options granted.

The total expense is recognized over the vesting period, over which all the specified vesting conditions are to be satisfied, using a graded vesting method. The Group accounts for forfeitures in the period they occur as a reduction to expense.

(u) Employee benefits

PRC Contribution Plan

Full time employees of the Group in the PRC participate in a government mandated defined contribution plan, pursuant to which certain pension benefits, medical care, employee housing fund and other welfare benefits are provided to the employees. Chinese labor regulations require that the PRC subsidiaries and the VIE of the Group make contributions to the government for these benefits based on certain percentages of the salaries, up to a maximum amount specified by the local government. The Group has no legal obligation for the benefits beyond making the required contributions. The total amounts of such employee benefit expenses, which were expensed as incurred, were approximately RMB103.8 million, RMB63.6 million and RMB148.5 million for the years ended December 31, 2019, 2020 and 2021, respectively. The total balances of such employee benefit including the accrual for estimated underpaid amounts were approximately RMB123.7 million and RMB112.9 million as of December 31, 2020 and 2021, respectively.

(v) Taxation

Income taxes

Current income taxes are provided on the basis of income/(loss) for financial reporting purposes, adjusted for income and expense items which are not assessable or deductible for income tax purposes, in accordance with the regulations of the relevant tax jurisdictions. Deferred income taxes are provided using the liability method. Under this method, deferred income taxes are recognized for the tax consequences of temporary differences by applying enacted statutory rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. The tax basis of an asset or liability is the amount attributed to that asset or liability for tax purposes. The effect on deferred taxes of a change in tax rates is recognized in the consolidated statement of operations and comprehensive loss in the year of change. A valuation allowance is provided to reduce the amount of deferred tax assets if it is considered more likely than not that some portion of, or all of the deferred tax assets will not be realized.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(v) Taxation (Continued)

Uncertain tax positions

In order to assess uncertain tax positions, the Group applies a more likely than not threshold and a two-step approach for the tax position measurement and financial statement recognition. Under the two-step approach, the first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon settlement. The Group recognizes interest and penalties, if any, under other current liabilities on its consolidated balance sheet and under other expenses in its consolidated statement of operations and comprehensive loss. The Group did not have any significant unrecognized uncertain tax positions as of and for the years ended December 31, 2019, 2020 and 2021, respectively.

(w) Related parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or significant influence. Related parties may be individual or corporation entities.

(x) Net loss per share

Net loss per share is computed in accordance with ASC 260, “Earnings per Share”. The two-class method is used for computing earnings per share in the event the Group has net income available for distribution. Under the two-class method, net income is allocated between ordinary shares and other participating securities based on their participating rights. Class A ordinary share and Class B ordinary share have the same rights in dividend. Therefore, basic and diluted loss per share are the same for both classes of ordinary shares. The Company’s convertible redeemable preferred shares may be considered as participating securities because they are entitled to receive dividends or distributions on an as if converted basis if the Group has net income available for distribution under certain circumstances. Net losses are not allocated to other participating securities as they are not obligated to share the losses based on their contractual terms.

Basic net loss per share is computed by dividing net loss attributable to ordinary shareholders, considering the accretions of convertible redeemable preferred shares, by the weighted average number of ordinary shares outstanding during the year. Diluted net loss per share is calculated by dividing net loss attributable to ordinary shareholders, as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary equivalent shares outstanding during the years. Ordinary equivalent shares consist of ordinary shares issuable upon the conversion of the convertible redeemable preferred shares using as if converted method and ordinary shares issuable upon the exercise of share options using the treasury stock method. Ordinary equivalent shares are not included in the denominator of the diluted net loss per share calculation when inclusion of such share would be anti-dilutive.

(y) Statutory reserves

In accordance with China’s Company Laws, the Company’s VIE in PRC must make appropriations from their after-tax profit (as determined under the accounting principles generally acceptable in the People’s Republic of China (“PRC GAAP”)), after offsetting accumulated losses from prior years, to non-distributable reserve funds including (i) statutory surplus fund and (ii) discretionary surplus fund. The appropriation to the statutory surplus fund must be at least 10% of the after-tax profits calculated in accordance with PRC GAAP. Appropriation is not required if the statutory surplus fund has reached 50% of the registered capital of the respective company. Appropriation to the discretionary surplus fund is made at the discretion of the respective company.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(y) Statutory reserves (Continued)

Pursuant to the laws applicable to China's Foreign Investment Enterprises, the Company's subsidiary that is a foreign investment enterprise in China have to make appropriations from their after-tax profit (as determined under PRC GAAP), after offsetting accumulated losses from prior years, to reserve funds including (i) general reserve fund, (ii) enterprise expansion fund and (iii) staff bonus and welfare fund. The appropriation to the general reserve fund must be at least 10% of the after-tax profits calculated in accordance with PRC GAAP. Appropriation is not required if the general reserve fund has reached 50% of the registered capital of the respective company. Appropriations to the other two reserve funds are at the respective companies' discretion. The Foreign Investment Law of the PRC (the Foreign Investment Law) and the Regulation on the Implementation of the Foreign Investment Law are effective from January 1, 2020, and the Law of the PRC on Sino-Foreign Equity Joint Ventures, the Law of the PRC on Wholly Foreign-owned Enterprises, and the Law of the PRC on Sino-Foreign Contractual Joint Ventures as well as relevant regulations for the implementation of these laws and specific clauses shall be repealed simultaneously. According to Article 46 of the Regulation on the Implementation of the Foreign Investment Law, the original joint operators and cooperators in pre-existing foreign-invested enterprises may continue to follow the agreed upon terms in their contract on methods for profit allocation, distribution of surplus property, etc. Enterprises shall determine the applicability of the agreed-upon terms by taking into account of their own circumstances.

The use of general reserve fund, enterprise expansion fund, statutory surplus fund and discretionary surplus fund are restricted to the offsetting of losses or increasing of the registered capital of the respective company.

The Group did not make any appropriations to its any reserve fund for the years ended December 31, 2019, 2020 and 2021, respectively, as each subsidiary was in an accumulated loss position.

(z) Business combination and noncontrolling interests

The Group accounts for its business combinations using the acquisition method of accounting in accordance with ASC 805, Business Combinations. Transaction costs directly attributable to the acquisition are expensed as incurred. Identifiable assets and liabilities acquired or assumed are measured separately at their fair values as of the acquisition date, irrespective of the extent of any noncontrolling interests. The excess of (i) the total costs of acquisition, fair value of the noncontrolling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree is recorded as goodwill. During the measurement period, which can be up to one year from the acquisition date, the Group may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded as gain or loss on the consolidated statements of operations and comprehensive loss.

In a business combination achieved in stages, the Group re-measures the previously held equity interests in the acquiree when obtaining control at its acquisition date fair value and the re-measurement gain or loss, if any, is recognized in the consolidated statements of operations and comprehensive loss.

For the Company's majority-owned subsidiaries and consolidated VIEs, noncontrolling interests are recognized to reflect the portion of the equity which is not attributable, directly or indirectly, to the Company as the controlling shareholder. Noncontrolling interests acquired through a business combination are recognized at fair value at the acquisition date, which is estimated with reference to the purchase price per share as of the acquisition date.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. Significant Accounting Policies (Continued)

(aa) Comprehensive income/(loss)

Comprehensive income/(loss) is defined to include all changes in equity/(deficit) of the Group during a year arising from transactions and other events and circumstances excluding transactions resulting from investments by shareholders and distributions to shareholders. Other comprehensive income/(loss), as presented on the consolidated balance sheets, consists of accumulated foreign currency translation adjustments.

(ab) Segment reporting

Operating segments are defined as components of an enterprise engaging in business activities for which separate financial information is available that is regularly evaluated by the Group's chief operating decision makers ("CODM"). Based on the criteria established by ASC280 "Segment Reporting", the Group's CODM has been identified as the Chief Executive Officer, who reviews consolidated results of the Group when making decisions about allocating resources and assessing performance.

The Group's CODM reviews consolidated results including revenue and operating income at a consolidated level. This resulted in only one operating and reportable segment in the Group.

The Group's long-lived assets are substantially all located in the PRC and substantially all the Group's revenues are derived from within the PRC, therefore, no geographical segments are presented.

(ac) Recently issued accounting pronouncements not yet adopted

In May 2021, the FASB issued ASU No. 2021-04, Earnings Per Share (Topic 260), Debt – Modifications and Extinguishments (Subtopic 470-50), Compensation – Stock Compensation (Topic 718), and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40). The amendments in this update are effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. An entity should apply the amendments prospectively to modifications or exchanges occurring on or after the effective date of the amendments. The Group is currently evaluating the impact of these accounting standard updates on its consolidated financial statements.

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which clarifies that an acquirer of a business should recognize and measure contract assets and contract liabilities in a business combination in accordance with Topic 606, Revenue from Contracts with Customers. The amendments in this update are effective for public business entities for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The amendments should be applied prospectively to business combinations occurring on or after the effective date of the amendments, with early adoption permitted. The Group is currently evaluating the impact of these accounting standard updates on its consolidated financial statements.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Concentrations and Risks

(a) Foreign currency exchange rate risk

In July 2005, the PRC government changed its decades-old policy of pegging the value of the RMB to the US$, and the RMB appreciated by more than 20% against the US$ over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the RMB and the US$ remained within a narrow band. Since June 2010, the RMB has fluctuated against the US$, at times significantly and unpredictably. The appreciation of the RMB against the US$ was approximately 6% in 2017. The depreciation of the RMB against the US$ was approximately 5% and 2% in 2018 and 2019, respectively. The appreciation of the RMB against the US$ was approximately 6% and 2% in 2020 and 2021, respectively. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the US$ in the future.

(b) Credit and concentration risk

Financial instruments that potentially subject the Group to significant concentrations of credit risk consist primarily of cash and cash equivalents, term deposits, trade receivables, other receivables and short-term investments. The carrying amounts of these financial instruments represent the maximum amount of loss due to credit risk.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

3. Concentrations and Risks (Continued)

(b) Credit and concentration risk (Continued)

As of December 31, 2020 and 2021, substantially all of the Group's cash and cash equivalents, term deposits and short-term investments were held in state-owned or reputable financial institutions in the PRC and reputable international financial institutions outside of the PRC.

Trade receivables are typically unsecured and are generally derived from customers. No single customer represented greater than 10% of the Group's total revenues for the years ended December 31, 2019, 2020 and 2021. Nil and two customers accounted for greater than 10% of the Group's trade receivables as of December 31, 2020 and 2021, respectively.

One, two and nil suppliers represented more than 10% of the Group's total purchases for the years ended December 31, 2019, 2020 and 2021, respectively, but accounts payable due to one supplier accounted for greater than 10% of the Group's accounts payable as of December 31, 2020 and 2021.

(c) Currency convertibility risk

The PRC government imposes controls on the convertibility of RMB into foreign currencies. The Group's cash and cash equivalents, term deposits and short-term investments denominated in RMB that are subject to such government controls amounted to RMB1,188.7 million and RMB2,821.1 million as of December 31, 2020 and 2021, respectively. The value of RMB is subject to changes in the central government policies and to international economic and political developments affecting supply and demand in the PRC foreign exchange trading system market. In the PRC, certain foreign exchange transactions are required by law to be transacted only by authorized financial institutions at exchange rates set by the People's Bank of China (the "PBOC"). Remittances in currencies other than RMB by the Group in the PRC must be processed through PBOC or other Chinese foreign exchange regulatory bodies which require certain supporting documentation in order to process the remittance.

4. Prepayments and Other Current Assets

The following is a summary of prepayments and other current assets (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
Deductible input value-added tax	46,689	29,567
Prepayment for promotion and advertising expense and other operation expenses	27,612	70,628
Other receivable related to exercise of employee options	—	94,264
Prepayment for 10th anniversary celebration events	25,188	—
Prepaid content cost	8,441	35,204
Interest income receivable	364	15,303
Rental and other deposits	10,583	19,336
Others	4,659	7,773
Total	123,536	272,075

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Short-term Investments

As of December 31, 2020 and 2021, the Group's short-term investments consisted of wealth management products and structured deposits, which contain a variable interest rate. To estimate the fair value of short-term investments, the Group refers to the quoted rate of return provided by financial institutions at the end of each year/period using discounted cash flow method. The Group classifies the valuation techniques that use these inputs as level 2 of fair value measurement.

The following is a summary of short-term investments (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
Structured deposits	—	230,993
Wealth management products	1,046,000	2,008,603
Total	1,046,000	2,239,596

During the years ended December 31, 2019, 2020 and 2021, the Group recorded investment income related to short-term investments of RMB25.0 million, RMB56.1 million and RMB59.2 million in the consolidated statements of operations and comprehensive loss, respectively.

6. Property and equipment, net

The following is a summary of property and equipment, net (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
Electronic equipment	13,653	15,443
Office equipment and furniture	5,083	7,209
Leasehold improvement	10,078	13,700
Total	28,814	36,352
Less: Accumulated depreciation	(20,709)	(26,487)
Net book value	8,105	9,865

Depreciation expenses were RMB9.0 million, RMB8.1 million and RMB5.8 million for the years ended December 31, 2019, 2020 and 2021, respectively.

7. Intangible assets, net

The following is a summary of intangible assets, net (in thousands):

	As of December 31, 2020		
	Gross carrying value	Accumulated amortization	Net carrying value
	RMB	RMB	RMB
Software	3,083	(653)	2,430
License	54,904	(33,857)	21,047
Others	9	(8)	1
Total	57,996	(34,518)	23,478

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. Intangible assets, net (Continued)

	As of December 31, 2021		
	Gross carrying value	Accumulated amortization	Net carrying value
	RMB	RMB	RMB
Software	3,083	(961)	2,122
License	54,904	(44,839)	10,065
Content	31,500	(3,150)	28,350
Brand name	25,000	(950)	24,050
Technology	4,000	(280)	3,720
Others	9	(8)	1
Total	118,496	(50,188)	68,308

Amortization expenses were RMB11.2 million, RMB11.5 million and RMB15.7 million for the years ended December 31, 2019, 2020 and 2021, respectively. No impairment charge was recognized for any of the years presented.

As of December 31, 2021, estimated amortization expense for intangible assets subject to amortization is as follows (in thousands):

	RMB
2022	19,974
2023	9,908
2024	9,908
2025	9,908
2026	6,478
Thereafter	12,132
Total	68,308

8. Lease

The Group's leasing activities primarily consist of operating leases for offices. The Group adopted ASC 842 effective January 1, 2018. ASC 842 requires lessees to recognize right-of-use assets and lease liabilities on the balance sheet. The Group has applied practical expedient to not recognize short-term leases with lease terms of one year or less on the balance sheet.

As of December 31, 2020 and 2021, the Group recorded right-of-use assets of approximately RMB3.2 million and RMB126.5 million and lease liabilities of approximately RMB2.9 million and RMB122.7 million, respectively, for operating leases as a leasee. Supplemental cash flow information related to operating leases was as follows (in thousands):

	For the Year Ended December 31,	
	2020	2021
	RMB	RMB
Cash payments for operating leases	22,316	38,532
Right-of-use assets obtained in exchange for operating lease liabilities	—	157,946

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Lease (Continued)

Future lease payments under operating leases as of December 31, 2021 were as follows (in thousands):

	RMB
2022	46,410
2023	45,675
2024	37,803
2025	778
Total future lease payments	130,666
Less: imputed interest	(8,008)
Total lease liabilities	122,658

The weighted-average remaining lease term was 1.00 year and 2.95 years as of December 31, 2020 and 2021, respectively.

The weighted-average discount rate used to determine the operating lease liability as of December 31, 2020 and 2021 was 4.75% and 4.75%, respectively.

Operating lease expenses for the years ended December 31, 2019, 2020 and 2021 was RMB26.8 million, RMB23.4 million and RMB38.7 million, respectively, which excluded expenses of short-term contracts. Short-term lease expenses for the years ended December 31, 2019, 2020 and 2021 were RMB0.6 million, RMB2.0 million and RMB0.5 million, respectively.

No lease contract was early terminated for the years ended December 31, 2020 and 2021.

9. Taxation

(a) Value-added tax (“VAT”)

The Group’s subsidiaries, consolidated VIE and VIE’ subsidiaries incorporated in China are subject to statutory VAT rate of 6% for services rendered and 9% or 13% for goods sold.

(b) Income taxes

Composition of income tax

The current income tax expenses for the years ended December 31, 2019, 2020 and 2021 were approximately RMB40,000, RMB1,080,000 and RMB5,443,000, respectively.

Cayman Islands

Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gain. Additionally, upon payments of dividends by the Company in the Cayman Islands to their shareholders, no Cayman Islands withholding tax will be imposed.

Hong Kong

Under the current Hong Kong Inland Revenue Ordinance, from the year of assessment 2018/2019 onwards, the subsidiaries in Hong Kong are subject to profits tax at the rate of 8.25% on assessable profits up to HK$2 million, and 16.5% on any part of assessable profits over HK$2 million. The payments of dividends by these companies to their shareholders are not subject to any Hong Kong withholding tax.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Taxation (Continued)

(b) Income taxes (Continued)

China

On March 16, 2007, the National People's Congress of PRC enacted the Enterprise Income Tax("EIT") Law, under which Foreign Invested Enterprises ("FIEs") and domestic companies would be subject to EIT at a uniform rate of 25%. Preferential tax treatments will continue to be granted to FIEs or domestic companies which conduct businesses in certain encouraged sectors and to otherwise classified as "Software Enterprises", "Key Software Enterprises" and/or "High and New Technology Enterprises" ("HNTEs"). The Enterprise Income Tax Law became effective on January 1, 2008.

The aforementioned preferential tax rates are subject to annual review by the relevant tax authorities in China. One subsidiary of the Company was accredited as a HNTE in 2016, therefore it is entitled to a preferential income tax rate at 15% for three years starting from 2016. It continues to be qualified as a HNTE in 2019 annual review by the relevant tax authorities, therefore it is entitled to a preferential income tax rate at 15% for 2019, 2020 and 2021.

All other major PRC incorporated entities of the Group were subject to a 25% income tax rate for all the years presented.

In accordance with PRC Tax Administration Law on the Levying and Collection of Taxes, the PRC tax authorities generally have up to five years to claw back underpaid tax plus penalties and interest for PRC entities' tax filings. In the case of tax evasion, which is not clearly defined in the law, there is no limitation on the tax years open for investigation.

The Company may also be subject to the examination of the tax filings in other jurisdictions, which are not material to the consolidated financial statements.

There were no ongoing examinations by tax authorities as of December 31, 2021.

The following table presents a reconciliation of the income tax expenses computed by the statutory income tax rate to the Group's income tax expense of the year presented are as follows (in thousands):

	For the Year Ended December 31,		
	2019	2020	2021
	RMB	RMB	RMB
Income tax expenses at PRC statutory income tax rate	(251,045)	(129,117)	(323,359)
Permanent differences[(1)]	28,025	30,326	125,132
Effect of different tax jurisdiction	(2,321)	(2,574)	4,077
Effect of preferential tax rate	99,470	51,055	128,584
Change in deferred tax assets valuation allowance	125,911	51,390	71,009
Income tax expenses	40	1,080	5,443

(1) The permanent differences mainly consist of additional deduction for research and development expenditures and non-deductible expenses.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Taxation (Continued)

(b) Income taxes (Continued)

China (Continued)

The following table sets forth the effect of preferential tax rate on the PRC operations (in thousands except per share data):

	For the Year Ended December 31,		
	2019	2020	2021
	RMB	RMB	RMB
Tax holiday effect	99,470	51,055	128,584
Basic and diluted net loss per share effect	1.60	0.78	0.54

(c) Deferred tax assets

The following table presents the tax impact of significant temporary differences that give rise to the deferred tax assets and liabilities as of the years presented (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
Deferred tax assets:		
Net operating tax loss carry forwards	284,300	345,744
Advertising and promotion expenses in excess of deduction limit	227,206	232,339
Provision of allowance for expected credit losses	7,008	14,570
Payroll and expense accrued	19,124	15,994
Less: valuation allowance	(537,638)	(608,647)
Total deferred tax assets, net	—	—

The following table sets forth the movement of the valuation allowances for deferred tax assets for the years presented (in thousands):

	2020	2021
	RMB	RMB
Deferred tax assets:		
Balance as of January 1,	(486,248)	(537,638)
Change of valuation allowance	(51,390)	(71,009)
Balance as of December 31,	(537,638)	(608,647)

The tax losses of the Group expire over different time intervals depending on local jurisdiction. Certain entity's expiration year for tax losses has been extended from five years to ten years due to new tax legislation released in 2018. As of December 31, 2021, certain entities of the Group had net operating tax loss carry forwards, if not utilized, which would expire as follows (in thousands):

	RMB
Loss expiring in 2023	17,153
Loss expiring in 2024	27,331
Loss expiring in 2025	67,626
Loss expiring after 2025	1,989,567
Total	2,101,677

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Taxation (Continued)

(d) Withholding income tax

The EIT Law also imposes a withholding income tax of 10% on dividends distributed by a foreign invested entity ("FIE") to its immediate holding company outside of China, if such immediate holding company is considered as a non-resident enterprise without any establishment or place within China or if the received dividends have no connection with the establishment or place of such immediate holding company within China, unless such immediate holding company's jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. Such withholding income tax was exempted under the Previous EIT Law. The Cayman Islands, where the Company incorporated, does not have such tax treaty with China. According to the arrangement between Mainland China and Hong Kong Special Administrative Region on the Avoidance of Double Taxation and Prevention of Fiscal Evasion in August 2006, dividends paid by a FIE in China to its immediate holding company in Hong Kong will be subject to withholding tax at a rate that may be lowered to 5% (if the foreign investor owns directly at least 25% of the shares of the FIE). The State Administration of Taxation ("SAT") further promulgated Circular 601 on October 27, 2009, which provides that tax treaty benefits will be denied to "conduit" or shell companies without business substance and that a beneficial ownership analysis will be used based on a "substance-over-form" principle to determine whether or not to grant the tax treaty benefits.

To the extent that subsidiaries and VIEs and the subsidiaries of VIEs of the Group have undistributed earnings, the Company will accrue appropriate expected tax associated with repatriation of such undistributed earnings. As of December 31, 2020 and 2021, the Company did not record any withholding tax on the retained earnings of its subsidiaries and VIEs in the PRC as they were still in accumulated deficit position.

10. Other Current Liabilities

The following is a summary of other current liabilities as of December 31, 2020 and 2021 (in thousands):

	As of December 31,	
	2020	2021
	RMB	RMB
Payable of deposits	17,394	28,234
Accrued VAT tax payable	32,688	52,675
Payable to the users	7,942	13,434
Payable of employee benefit	4,930	5,993
Consideration payable for acquisition	—	18,936
Others	1,982	8,175
Total	64,936	127,447

11. Contract Liabilities

Contract liabilities primarily relate to the payments received for advertising services, paid content services and content-commerce solutions in advance of revenue recognition. The increase in contract liabilities over the prior year was a result of the increase in consideration received from the Group's customers, which was in line with the growth of revenues in advertising service, content-commerce solutions and paid membership service. Due to the generally short-term duration of the relevant contracts, the majority of the performance obligations are satisfied within one year. The amount of revenue recognized that was included in the contract liabilities balance at the beginning of the year was RMB64.2 million, RMB105.8 million and RMB138.6 million for the years ended December 31, 2019, 2020 and 2021, respectively.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

12. Ordinary Shares

The Company was incorporated on May 17, 2011 with an authorized share capital of US$50,000 divided into 50,000 ordinary shares of US$1 each, of which 10 ordinary shares had been issued. Zhihu Holdings Inc. and Innovation Works Holdings Limited, companies organized under the laws of the British Virgin Islands, held 80% and 20% of total equities of the Company, respectively.

After several issuances, share splits and repurchases of certain shares held by investors prior to 2019, the Company had 58,808,070 of ordinary shares issued and outstanding as of December 31, 2018.

In March 2021, the Company completed the IPO. Immediately prior to the completion of the IPO, the Company's authorized share capital was changed into US$200,000 divided into 1,600,000,000 shares comprising (i) 1,500,000,000 Class A ordinary shares of a par value of US$0.000125 each, (ii)50,000,000 Class B ordinary shares of a par value of US$0.000125 each, and (iii) 50,000,000 shares of a par value of US$0.000125 each of such class or classes (however designated) as the board of directors may determine in accordance with the Company's post-offering memorandum and articles of association. Immediately prior to the completion of the IPO, all of the Company's issued and outstanding preferred shares and ordinary shares were converted into, and re-designated and re-classified, as Class A ordinary shares on a one-for-one basis, except that the 19,227,592 shares beneficially owned by Mr. Yuan Zhou continue to be Class B ordinary shares.

During the IPO, the Company sold a total of 55,000,000 ADSs, with two ADSs representing one Class A ordinary share of the Company with par value of US$0.000125 per share. In addition, the Company sold and issued 13,157,892 Class A ordinary shares in the concurrent private placements to certain investors based on the IPO price of US$9.50 per ADS. The Company received a total of approximately US$737.1 million (RMB4.8 billion) of net proceeds after deducting the underwriter commissions and relevant offering expenses.

In April 2021, the underwriters exercised their option to purchase 259,904 additional ADSs and the Company received a total of approximately US$2.3 million (RMB15.1 million) of net proceeds after deducting the underwriter commissions.

13. Preferred Shares

The following table summarizes the issuances of convertible redeemable preferred shares (collectively, "Preferred Shares").

Series of Preferred Shares	Date of issuance	Total number of shares issued	Consideration per share
			US$
Series A	08/11/2011	37,858,584	0.26
Series B	05/05/2014	25,164,697	0.93
Series C	21/09/2015	27,935,316	2.17
Series D	08/12/2016	22,334,525	4.63
Series D1	22/03/2017	6,947,330	5.04
Series E	26/07/2018, 14/09/2018	27,267,380	9.89
Series F	07/08/2019	34,677,872 (i)	12.52
		182,185,704	

(i) Including 11,985,440 Series F preferred shares legally issued in December 2020 upon the exercise of the warrant as discussed in Accounting of Preferred Shares.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Preferred Shares (Continued)

The key terms of the preferred shares are as follows:

Conversion rights

Unless converted earlier pursuant to the provisions with respect to automatic conversion as set out below, preferred shares shall be convertible, at the option of the holder thereof, at any time into such number of fully paid and non-assessable Class A ordinary shares at an initial conversion ratio of 1:1, and thereafter shall be subject to adjustment and readjustment from time to time for (a) share splits and combination, (b) ordinary share dividends and distributions, (c) reorganizations, mergers, consolidations, reclassifications, exchanges, substitution, (d) dilutive issuance.

Each Preferred Shares shall automatically be converted, based on the then-effective conversion price, without the payment of any additional consideration, into fully-paid and non-assessable Class A ordinary shares upon the earlier of (i) the consummation of the qualified initial public offering ("Qualified IPO"), or (ii) the date specified by the written consent of the majority Preferred Shareholders of each Preferred Shares.

Qualified IPO means a closing of an IPO on a stock exchange reasonably accepted to the majority Preferred Shareholders with the company's market capitalization, immediately after the offering of at least US$4 billion.

Redemption rights

The shareholders of preferred shares may request redemption of all or any part of the then outstanding shares held, at any time after the occurrence of (i) if a Qualified IPO or a trade sale is not consummated within forty-two month period after the closing of Series F financing, or (ii) if any Preferred Shares are required to be redeemed by any preferred shareholder after the closing of Series F financing, or iii) if there has been any change that does not allow or materially restricts the company to effectively control its structured entities as defined in Note 2 (b), or (iv) the occurrence of a material breach of the transaction documents by any of the Group, founders, co-founders and other parties specified in the transaction documents during the forty-two month period after the closing of Series F financing. The commencement date of term (i) mentioned above was originally five-year period after the issuance date of each preferred share and modified to forty-two-month period after the closing of Series F financing.

The redemption price of each share to be redeemed shall equal to (i) 150% of each series stated issue price, plus (ii) any accrued but unpaid dividends on such share, proportionally adjusted for share subdivisions, share dividends, reorganizations, reclassifications, consolidations, or mergers.

Voting rights

Each Preferred Shares has voting rights equivalent to the number of Class A ordinary shares into which such Preferred Shares could be then convertible.

Dividend rights

Each preferred shareholder shall be entitled to receive the dividends on pro-rata basis according to the relative number of shares held by them on an as-converted basis, only when, as and if declared at the sole discretion of the Board and duly approved. The distribution sequence should be in the following order: Series F preferred shareholders, Series E preferred shareholders, Series D and/or Series D1 preferred shareholders, Series C preferred shareholders, Series B preferred shareholders, Series A preferred shareholders, ordinary shareholders.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Preferred Shares (Continued)

Liquidation rights

In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the assets and funds of the Company legally available for distribution to the shareholders shall be distributed to shareholders in the following manner and order:

Each preferred shareholder shall be entitled to receive, prior and in preference to any distribution of any of the assets or funds of the Company to the holders of any previous preferred shares and ordinary shares, the amount equal to one hundred percent (100%) of the original issue price on each preferred share, plus all declared but unpaid dividends thereon up to the date of liquidation or otherwise agreed in the transaction documents. The liquidation preference amount will be paid to the Preferred Shareholders in the following order: first to holders of Series F Preferred Shares, second to holders of Series E Preferred Shares, third to holders of Series D/D1 Preferred Shares, forth to holders of Series C Preferred Shares, fifth to holders of Series B Preferred Shares and lastly to holders of Series A Preferred Shares. After distributing or paying in full the liquidation preference amount to all of the Preferred Shareholders, the remaining assets of the Company available for distribution, if any, shall distributed to the holders of ordinary shares and the Preferred Shareholders on a pro rata basis, based on the number of ordinary shares then held by each shareholder on an as converted basis. If the value of the remaining assets of the Company is less than aggregate liquidation preference amounts payable to the holders of a particular series of Preferred Shares, then the remaining assets of the Company shall be distributed pro rata amongst the holders of all outstanding Preferred Shares of that series.

Accounting of Preferred Shares

The Company has classified the Preferred Shares in the mezzanine equity of the consolidated balance sheets as they are contingently redeemable at the options of the holders. In addition, the Company records accretions on the Preferred Shares to the redemption value from the issuance dates to the earliest redemption dates. The accretions using the effective interest method, are recorded against retained earnings, or in the absence of retained earnings, by charges against additional paid-in capital. Once additional paid-in capital has been exhausted, additional charges are recorded by increasing the accumulated deficit. Each issuance of the Preferred Shares is recognized at the respective fair value at the date of issuance net of issuance costs. The issuance costs for Series A, Series B, Series C, Series D, Series D1, Series E Preferred Shares and Series F Preferred Shares were RMB0.5 million, RMB0.5 million, RMB0.8 million, RMB6.1 million, RMB2.2 million, RMB35.0 million and RMB27.0 million, respectively.

The Company has determined that there was no beneficial conversion feature attributable to the Preferred Shares because the initial effective conversion prices of these Preferred Shares were higher than the fair value of the Company's ordinary shares determined by the Company taking into account independent valuations.

Pursuant to laws applicable to PRC entities incorporated in the PRC, PRC investors should complete its statutory filings and foreign exchange registrations for outbound investment, before such PRC entities can legally own offshore investments or equity interests in offshore entities. As such, all PRC shareholders of Zhihu Inc. must complete their relevant registrations and statutory filings, as appropriate, before they can, in accordance with applicable PRC laws, hold directly or indirectly any share of the Company, which is incorporated under the laws of the Cayman Islands. Certain Preferred Shareholder who made full payment of the purchase consideration holds warrant and one Preferred Share in the Company to reflect such holder 's rights, obligations, and interests in the Company as if such holder were holding all Preferred Shares of the Company issuable upon exercise of the warrant before such holder completes its necessary registration for outbound investment to exercise its warrant to purchase Preferred Shares of the Company. This was a transitional arrangement pending completion of necessary registration process by such holder. Once such holder completes the necessary registration for outbound investment, such holder is required to exercise the warrant immediately. Accordingly, the one Preferred Share was accounted for and represented based on the terms on all Preferred Shares of the Company issuable upon exercise of the warrant. Concurrently, the Group entered into a foreign exchange forward contract with the investor. The Group accounts for the foreign exchange forward contract and the warrant as derivative asset (included in other current assets), which was measured at fair value with the changes in the fair value recorded within other income/(expenses) in the consolidated statements of operations and comprehensive loss. The holder of the warrant has completed the relevant registration and filing, and exercised the warrant in December 2020. The underlying Preferred Shares have been legally issued accordingly.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Preferred Shares (Continued)

Accounting of Preferred Shares (Continued)

The fair value of the derivative asset was categorized as Level 3 of fair value measurement. The following table sets forth the reconciliation of the fair value measurements of derivative asset:

	Fair value measurements of derivative asset
	RMB in thousand
Beginning balance as of January 1, 2019	—
Change in fair value	7,132
Ending balance as of December 31, 2019	7,132
Beginning balance as of January 1, 2020	7,132
Change in fair value	(68,818)
Settlement of derivative asset	61,686
Ending balance as of December 31, 2020	—

The key inputs used in valuation of derivative asset as of December 31, 2019 date were as follow.

	As of December 31, 2019
Forward foreign exchange rate	7.04
Risk-free interest rate	1.59
Expected term (in years)	0.98

Significant increases/(decreases) in any of these inputs in isolation would have resulted in a significantly lower/(higher) fair value measurement. Generally, a change in the assumption used for the risk-free interest rate would have been accompanied by a directionally similar change in the assumption used for the expected term and a directionally opposite change in the assumption used for forward foreign exchange rate. In December 2020, the derivative asset has been settled at the foreign exchange rate of US$1.00 = RMB6.53 accordingly.

Upon the completion of the IPO in March 2021, all of issued and outstanding Preferred Shares automatically converted into ordinary shares on a one-for-one basis.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Preferred Shares (Continued)

Accounting of Preferred Shares (Continued)

The Company's preferred shares activities for the years ended December 31, 2019, 2020 and 2021, respectively, are summarized below (in thousands, except number of shares):

	Series A Preferred Shares		Series B Preferred Shares		Series C Preferred Shares		Series D Preferred Shares		Series D1 Preferred Shares		Series E Preferred Shares		Series F Preferred Shares		Mezzanine Equity	
	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Number of shares	Amount	Total number of shares	Total Amount
		RMB		RMB		RMB		RMB		RMB		RMB		RMB		RMB
Balance as of December 31, 2018	36,009,602	89,551	25,164,697	212,476	27,935,316	506,846	22,334,525	829,328	6,947,330	274,386	27,267,380	1,860,174	—	—	145,658,850	3,772,761
Issuance of Preferred Shares	—	—	—	—	—	—	—	—	—	—	—	—	34,677,872	3,011,072	34,677,872	3,011,072
Accretion to Preferred Shares redemption value	—	—	—	7,927	—	34,935	—	63,557	—	21,870	—	176,521	—	121,971	—	426,781
Balance as of December 31, 2019	36,009,602	89,551	25,164,697	220,403	27,935,316	541,781	22,334,525	892,885	6,947,330	296,256	27,267,380	2,036,695	34,677,872	3,133,043	180,336,722	7,210,614
Balance as of December 31, 2019	36,009,602	89,551	25,164,697	220,403	27,935,316	541,781	22,334,525	892,885	6,947,330	296,256	27,267,380	2,036,695	34,677,872	3,133,043	180,336,722	7,210,614
Accretion to Preferred Shares redemption value	—	—	—	—	—	14,771	—	50,956	—	18,983	—	208,271	—	387,753	—	680,734
Balance as of December 31, 2020	36,009,602	89,551	25,164,697	220,403	27,935,316	556,552	22,334,525	943,841	6,947,330	315,239	27,267,380	2,244,966	34,677,872	3,520,796	180,336,722	7,891,348
Balance as of December 31, 2020	36,009,602	89,551	25,164,697	220,403	27,935,316	556,552	22,334,525	943,841	6,947,330	315,239	27,267,380	2,244,966	34,677,872	3,520,796	180,336,722	7,891,348
Accretion to Preferred Shares redemption value	—	—	—	—	—	3,524	—	12,390	—	4,634	—	51,967	—	98,070	—	170,585
Conversion of Preferred Shares to ordinary shares upon the completion of the IPO	(36,009,602)	(89,551)	(25,164,697)	(220,403)	(27,935,316)	(560,076)	(22,334,525)	(956,231)	(6,947,330)	(319,873)	(27,267,380)	(2,296,933)	(34,677,872)	(3,618,866)	(180,336,722)	(8,061,933)
Balance as of December 31, 2021	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Share-based Compensation

In June 2012, the Company established a share incentive plan, which permits the grant of options, and restricted shares of the Company to relevant directors, officer and other employees of the Company and its affiliates. In December 2021, the maximum number of shares that may be issued under the 2012 incentive compensation plan was 44,021,165 Class A ordinary shares.

Under the Plan, during 2012 and 2013, options or restricted shares granted are subject to both service conditions and the occurrence of an initial public offering ("IPO") as a performance condition, which are measured at the grant date fair value.

After 2013, participants are granted options or restricted shares which only vest if certain service conditions are met. Participation in the Plan is at the board's discretion, and no individual has a contractual right to participate in the Plan or to receive any guaranteed benefits. Options issued under the Plan are valid and effective for 10 years from the grant date.

Majority of the share options shall be subject to different vesting schedules of three, three and a half or four years from the vesting commencement date, subject to the participant continuing to be an employee through each vesting date. For vesting schedule of three years, 25% of the granted share options are vested on the vesting commencement date; and 75% of the granted shares options are vested in equal monthly installments over the following thirty six (36) months. For vesting schedule of three and a half years, 25% of the granted share options are vested on the 6-month anniversary of the vesting commencement date; and 75% of the granted shares options are vested in equal monthly installments over the following thirty six (36) months. For vesting schedule of four years, 25% of the granted share options are vested on the first anniversary from the vesting commencement date; and 75% of the granted shares options are vested in equal monthly installments over the following thirty six (36) months or vested in equal yearly installments over the following three years.

Employees' share-based compensation awards are measured at the grant date fair value of the awards and recognized as expenses (a) for share options granted with only service conditions, using the graded vesting method, net of actual forfeitures, over the vesting period; or (b) for share options granted with service conditions and performance condition, the share-based compensation expenses are recorded when the performance condition is considered probable using the graded vesting method. Where the occurrence of an IPO is a performance condition, cumulative share-based compensation expenses for the options that have satisfied the service condition should be recorded upon the completion of the IPO.

Compensation expenses related to options granted during 2012 and 2013 with a performance condition of an IPO were RMB6.3 million, for which the service condition had been met and were recognized when the performance target of an IPO was achieved in March 2021.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Share-based Compensation (Continued)

Share options activities

The following table presents a summary of the Company's options activities for the years ended December 31, 2019, 2020 and 2021:

	Number of options (in thousands)	Weighted Average Exercise Price US$	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value (US$in thousands)
Outstanding as of January 1, 2019	22,722	0.78	7.73	88,678
Granted	5,360	2.28		
Repurchased	(288)	0.03		
Forfeited	(1,546)	2.21		
Outstanding as of December 31, 2019	26,248	1.01	7.22	159,818
Outstanding as of January 1, 2020	26,248	1.01	7.22	159,818
Granted	11,811	0.60		
Exercised	(500)	0.01		
Forfeited	(1,699)	2.22		
Outstanding as of December 31, 2020	35,860	0.84	7.33	339,953
Outstanding as of January 1, 2021	35,860	0.84	7.33	339,953
Granted	1,846	2.14		
Exercised	(15,568)	0.40		
Forfeited	(954)	4.49		
Outstanding as of December 31, 2021	21,184	1.10	6.39	211,515
Exercisable as of December 31, 2021	9,483	1.47	3.58	91,167

The weighted-average fair value of granted share options was US$5.31, US$9.33 and US$13.55 for the years ended December 31, 2019, 2020 and 2021, respectively. The total intrinsic value of share options exercised was US$239.3 million for the year ended December 31, 2021.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Share-based Compensation (Continued)

Restricted shares activities

The following table presents a summary of the Company's restricted shares activities for the years ended December 31, 2019, 2020 and 2021:

	Number of Restricted shares (in thousands)	Weighted Average Grant Date Fair Value US$
Unvested as of January 1, 2019	594	2.15
Vested	(311)	1.88
Forfeited	(69)	1.31
Unvested as of December 31, 2019	214	2.70
Unvested as of January 1, 2020	214	2.70
Vested	(123)	2.56
Unvested as of December 31, 2020	91	2.90
Unvested as of January 1, 2021	91	2.90
Granted	1,598	22.49
Vested	(81)	2.86
Forfeited	(127)	24.10
Unvested as of December 31, 2021	1,481	22.22

As of December 31, 2021, the weighted average remaining contractual life of outstanding restricted shares is 9.58 years.

Valuation

Prior to the completion of the initial public offering in the United States, the Company used the discounted cash flow method to determine the underlying equity fair value of the Company and adopted equity allocation model to determine the fair value of each underlying ordinary share. Key assumptions, such as discount rate and projections of future performance, are required to be determined, on a best estimate basis, by the Company.

After the completion of the initial public offering in the United States, the fair value of the share options is estimated based on the fair market value of the underlying ordinary shares at the grant date.

Based on fair value of each underlying ordinary share, the Company used the Binomial option-pricing model to determine the fair value of the share options as at the grant date. Key assumptions are set as below:

	For the Year Ended December 31,		
	2019	2020	2021
Fair value per share (US$)	$ 6.27-7.08	$ 7.42-10.32	$ 25.02
Risk-free interest rate	1.92%-2.01 %	0.70%-0.93 %	1.44 %
Expected volatility	53.78%-54.38 %	54.94%-59.31 %	54.85%-55.51 %
Expected term (in years)	10	10	10
Dividend yield	0.00 %	0.00 %	0.00 %

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

14. Share-based Compensation (Continued)

Valuation (Continued)

The expected volatility at the grant date and each option valuation date was estimated based on the annualized standard deviation of the daily return embedded in historical share prices of comparable peer companies with a time horizon close to the expected expiry of the term of the options. The Company has never declared or paid any cash dividends on its capital stock, and the Group does not anticipate any dividend payments in the foreseeable future. Expected term is the contractual life of the options. The Group estimated the risk-free interest rate based on the yield to maturity of U.S. treasury bonds denominated in US$ at the option valuation date.

The total expenses recognized in profit or loss in respect of the share-based compensation under for the Plan was RMB179.7 million, RMB180.1 million and RMB541.0 million for the years ended December 31, 2019, 2020 and 2021, respectively. As of December 31, 2021, total unrecognized compensation expenses under the Plans granted after 2013 were US$75.8 million, which is expected to be recognized over a weighted average period of 2.65 years.

In 2019, and on an exceptional basis (no prior like history) the Group repurchased options from a small number of members of senior management. The Group determined that this event (which did not result pursuant to a preexisting right of the Company) did not create a reasonable expectation for the Company to settle remaining share-based awards in cash, therefore all the remaining share-based awards are still classified as equity-settled awards.

15. Net Loss Per Share

Basic and diluted loss per share have been calculated in accordance with ASC260 for the years ended December 31, 2019,2020 and 2021. Shares issuable for little consideration have been included in the number of outstanding shares used for basic loss per share.

	For the Year Ended December 31,		
	2019	2020	2021
Numerator (RMB in thousands):			
Net loss	(1,004,220)	(517,550)	(1,298,880)
Accretions of preferred shares to redemption value	(426,781)	(680,734)	(170,585)
Net loss attributable to ordinary shareholders	(1,431,001)	(1,198,284)	(1,469,465)
Denominator:			
Weighted average number of ordinary shares outstanding, basic	62,249,946	65,279,970	240,174,108
Weighted average number of ordinary shares outstanding, diluted	62,249,946	65,279,970	240,174,108
Net loss per share, basic (RMB)	(22.99)	(18.36)	(6.12)
Net loss per share, diluted (RMB)	(22.99)	(18.36)	(6.12)

Basic and diluted loss per ordinary share is computed using the weighted average number of ordinary shares outstanding during the year. Both Class A and Class B ordinary shares are included in the calculation of the weighted average number of ordinary shares outstanding, basic and diluted.

The following ordinary shares equivalents were excluded from the computation of dilutive net loss per share to eliminate any antidilutive effect:

	For the Year Ended December 31,		
	2019	2020	2021
Preferred shares	159,625,007	180,336,722	—
Share options	13,994,318	15,922,419	24,368,217
	173,619,325	196,259,141	24,368,217

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. Commitments and Contingencies

Commitments

Upon the adoption of ASC 842, future minimum lease payments for operating lease as of December 31, 2021 are disclosed in Note 8.

Litigation

From time to time, the Group is involved in claims and legal proceedings that arise in the ordinary course of business. Based on currently available information, management does not believe that the ultimate outcome of any unresolved matters, individually and in the aggregate, is reasonably possible to have a material adverse effect on the Group's financial position, results of operations or cash flows. However, litigation is subject to inherent uncertainties and the Group's view of these matters may change in the future. The Group records a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. The Group reviews the need for any such liability on a regular basis. The Group has not recorded any material liabilities in this regard as of December 31, 2020 and 2021.

17. Related Party Transactions

During the years presented, other than disclosed elsewhere, the Company mainly had the following related party transactions:

Names of the major related parties	Nature of relationship
Tencent Holdings Limited and its subsidiaries (the "Tencent Group")	Shareholder of the Company
Baidu, Inc. and its subsidiaries (the "Baidu Group")	Shareholder of the Company
Kuaishou Technology and its subsidiary (the "Kuaishou Group")	Shareholder of the Company

(a) Significant transactions with related parties

	For the Year Ended December 31,		
	2019	2020	2021
	RMB in thousands		
Purchasing service from related parties			
Tencent Group[(i)]	154,256	77,254	110,849
Baidu Group[(ii)]	24,972	48,656	142,345
Kuaishou Group	—	—	2,179
Total	179,228	125,910	255,373

	For the Year Ended December 31,		
	2019	2020	2021
	RMB in thousands		
Providing service to related parties[(iii)]			
Tencent Group	8,411	12,569	10,876
Baidu Group	634	17,171	19,731
Kuaishou Group	—	7,412	7,864
Total	9,045	37,152	38,471

(i) Service purchased from Tencent Group primarily related to cloud and bandwidth services.
(ii) Service purchased from Baidu Group primarily related to marketing services and cloud and bandwidth services.
(iii) Service provided to related parties mainly refer to advertising service provided to Tencent Group, Baidu Group and Kuaishou Group.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Related Party Transactions (Continued)

(b) Balances with related parties

	As of December 31,	
	2020	2021
	RMB in thousands	
Amount due from related parties		
Tencent Group	7,447	8,763
Baidu Group	3,923	6,435
Kuaishou Group	2,473	2,998
Total	13,843	18,196
Amount due to related parties		
Tencent Group	41,523	67,370
Baidu Group	4,460	14,581
Kuaishou Group	—	1,640
Total	45,983	83,591

The transactions and balances with related parties are all trade in nature.

18. Segment Information

The Group's organizational structure is based on a number of factors that the CODM uses to evaluate, view and run its business operations which include, but not limited to, customer base, products and technology. The Group's operating segments are based on such organizational structure and information reviewed by the Group's CODM to evaluate the operating segment results. The Group has internal reporting of revenue, cost and expenses by nature as a whole. Hence, the Group has only one operating segment.

Key revenue streams are as below (in thousands):

	For the Year Ended December 31,		
	2019	2020	2021
	RMB	RMB	RMB
Advertising service	577,424	843,284	1,160,886
Paid membership service	87,997	320,471	668,507
Content-commerce solutions	641	135,813	973,986
Others	4,449	52,628	155,945
Total	670,511	1,352,196	2,959,324

All revenues are derived from China based on the geographical locations where services are provided to customers. In addition, the Group's long-lived assets are all located in China, and the amount of long-lived assets attributable to any individual other country is not material. Therefore, no geographical segments are presented.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Restricted Net Assets

Relevant PRC laws and regulations permit PRC companies to pay dividends only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Additionally, the Company's PRC subsidiaries and VIE can only distribute dividends upon approval of the shareholders after they have met the PRC requirements for appropriation to the general reserve fund and the statutory surplus fund respectively. The general reserve fund and the statutory surplus fund require that annual appropriations of 10% of net after-tax income should be set aside prior to payment of any dividends. As a result of these and other restrictions under PRC laws and regulations, the PRC subsidiaries and VIE are restricted in their ability to transfer a portion of their net assets to the Company either in the form of dividends, loans or advances, which restricted portion amounted to approximately RMB754.4 million and RMB3,573.1 million of the Company's total consolidated net assets, as of December 31, 2020 and 2021, respectively. Even though the Company currently does not require any dividends, loans or advances from the PRC entities for working capital and other funding purposes, the Company may in the future require additional cash resources from them due to changes in business conditions, to fund future acquisitions and development, or merely to declare and pay dividends or distributions to its shareholders. Except for the above, there is no other restriction on use of proceeds generated by the Group's subsidiaries, the VIE and its subsidiaries to satisfy any obligations of the Company.

Furthermore, cash transfers from the Company's PRC subsidiaries to their parent companies outside of China are subject to PRC government control of currency conversion. Shortages in the availability of foreign currency may restrict the ability of the PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to the Company, or otherwise satisfy their foreign currency denominated obligations.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Business combination

Prez Limited, a Cayman Islands company, through its subsidiaries and variable interest entity (collectively referred to as the "Pinzhi"), is a vocational training provider which mainly focuses on Chartered Financial Analyst and Certified Public Accountant examinations in the PRC. In July 2021, the Group acquired 55% of the equity interest in Pinzhi at an aggregate purchase price of RMB83.9 million, comprising cash and contingent consideration at fair value. Contingent consideration is subject to Pinzhi's future operating results and initially and subsequently measured at fair value through profit and loss, which was classified as a liability in consolidated balance sheets. The remaining 45% shares held by the founder is subject to a 5 years' service period. That is, if the founder left the Company within 5 years after the closing of the acquisition, Zhihu has the option to either exercise its redemption right or purchase the remaining 45% shares held by the founder without consideration. As such, the transaction was regarded as the Group has effectively acquired 100% of equity interests at the acquisition date with 45% equity interests granted to the founder as share-based compensation for the future service and a put option which was recognized as financial instruments measured at fair value.

The allocation of the purchase price as of the date of acquisition is summarized as follows (in thousands):

	RMB
Net liabilities acquired	(1,468)
Amortizable intangible assets	
Content	31,500
Brand name	13,000
Technology	1,600
Goodwill	50,833
Deferred tax liabilities	(11,525)
	83,940

Total purchase price comprised of (in thousands):

	RMB
Cash consideration	38,940
Contingent consideration at fair value	45,000
Total	83,940

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Business combination (Continued)

Yincheng Limited, a Cayman Islands company, through its subsidiaries and variable interest entity (collectively referred to as the "Papa"), is a vocational training provider which mainly focuses on vocational language exam preparation courses, under the Papa brand. In November 2021, the Group acquired 55% of the equity interest in Papa at an aggregate purchase price of RMB35.6 million, comprising cash consideration, contingent consideration at fair value, and a direct capital injection. Contingent consideration is subject to Papa's future operating results and initially and subsequently measured at fair value through profit and loss, which was classified as a liability in consolidated balance sheets. The remaining 45% shares held by the founder is subject to a 6 years' service period. That is, if the founder left the Company within 6 years after the closing of the acquisition, Zhihu has the option to either exercise its redemption right or purchase the remaining 45% shares held by the founder without consideration. As such, the transaction was regarded as the Group has effectively acquired 100% of equity interests at the acquisition date with 45% equity interests granted to the founder as share-based compensation for the future service and a put option which was recognized as financial instruments measured at fair value.

The allocation of the purchase price as of the date of acquisition is summarized as follows (in thousands):

	RMB
Net assets acquired	1,945
Amortizable intangible assets	
Brand name	12,000
Technology	2,400
Goodwill	22,830
Deferred tax liabilities	(3,600)
	35,575

Total purchase price comprised of (in thousands):

	RMB
Cash consideration	13,875
Contingent consideration at fair value	15,700
Capital injection	6,000
Total	35,575

Goodwill arising from the above acquisitions was attributable to the synergies expected from the combined operations of Pinzhi and the Company as well as Papa and the Company in the vocational education sector in the PRC. The Company does not expect the goodwill recognized to be deductible for income tax purposes.

Pro forma results of operations for the above acquisitions have not been presented because they were not material to the consolidated statements of operations and comprehensive loss for the year ended December 31, 2021, either individually or in aggregate

21. Subsequent Event

On March 30, 2022, the Group approved to grant a share award of 9,621,477 Class A Ordinary Shares to Mr. Zhou (the "CEO Award Shares"). Mr. Zhou has undertaken and covenanted that, unless and until the performance results targets set by the audit committee of the Board have been met, (a) he (including any intermediary through which he holds the CEO Award Shares) shall not offer, pledge, sell, contract to sell, lend, or otherwise transfer or dispose of, directly or indirectly, any interest in the CEO Award Shares; and (b) he will cast votes of all of the CEO Award Shares at shareholder meetings of the Company or with respect to written resolution of shareholders of the Company in the manner consistent with the views and suggestions of the Board, which shall be determined in the best interest of the Company; he will abstain from voting if no such view or suggestion is formulated by the Board as a whole. In addition, the options granted to Mr. Zhou in December 2020 was approved to be fully vested on March 30, 2022.

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. Additional Information—Parent Company Only Condensed Financial Information

The Company performed a test on the restricted net assets of subsidiaries and VIE in accordance with Securities and Exchange Commission Regulation S-X Rule 4-08 (e) (3), "General Notes to Financial Statements" and concluded that the condensed financial information of the Company is required to be presented. The Company did not have significant capital and other commitments, or guarantees as of December 31, 2020 and 2021.

(a) Condensed balance sheets of Zhihu Inc.

	As of December 31,		
	2020	2021	2021
	RMB in thousands		US$in thousand
ASSETS			
Current assets:			
Cash and cash equivalents	6,834	94,427	14,818
Amounts due from subsidiaries and VIEs and VIEs' subsidiaries	11,530	12,711	1,995
Prepayments and other current assets	183	42,232	6,626
Total current assets	**18,547**	**149,370**	**23,439**
Non-current assets:			
Investments in subsidiaries and VIEs and VIEs' subsidiaries	2,760,778	6,666,713	1,046,153
Total non-current assets	**2,760,778**	**6,666,713**	**1,046,153**
Total assets	**2,779,325**	**6,816,083**	**1,069,592**
LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDER'S (DEFICIT)/EQUITY			
Current liabilities			
Accounts payable and accrued liabilities	5,500	30,828	4,838
Amounts due to subsidiaries and VIEs and VIEs' subsidiaries	26,952	54,601	8,568
Total current liabilities	**32,452**	**85,429**	**13,406**
Total liabilities	**32,452**	**85,429**	**13,406**
Mezzanine equity	**7,891,348**	—	—
Shareholders' (deficit)/equity:			
Ordinary shares, US$0.000125 par value	46	241	37
Additional paid-in capital	—	13,350,347	2,094,961
Accumulated other comprehensive loss	(195,928)	(339,118)	(53,215)
Accumulated deficit	(4,948,593)	(6,280,816)	(985,597)
Total shareholders' (deficit)/equity	**(5,144,475)**	**6,730,654**	**1,056,186**
Total liabilities, mezzanine equity and shareholders' (deficit)/equity	**2,779,325**	**6,816,083**	**1,069,592**

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. Additional Information—Parent Company Only Condensed Financial Information (Continued)

(b) Condensed statements of operations and comprehensive loss of Zhihu Inc.

	For the Year Ended December 31,			
	2019	2020	2021	2021
	RMB in thousand			US$in thousand
Operating expenses:				
General and administrative expenses	(14,369)	(13,914)	(30,019)	(4,711)
Total operating expenses	(14,369)	(13,914)	(30,019)	(4,711)
Loss from operations	**(14,369)**	**(13,914)**	**(30,019)**	**(4,711)**
Other income/(expenses):				
Fair value change of financial instrument	7,132	(68,818)	—	—
Interest income	11,102	3,244	123	19
Exchange (losses)/gains	(7,966)	69,650	(523)	(82)
Share of loss of subsidiaries and VIEs and VIEs' subsidiaries	(1,000,119)	(507,712)	(1,268,461)	(199,049)
Net loss	**(1,004,220)**	**(517,550)**	**(1,298,880)**	**(203,823)**
Accretions of convertible redeemable preferred shares to redemption value	(426,781)	(680,734)	(170,585)	(26,769)
Net loss attributable to Zhihu Inc.'s shareholders	**(1,431,001)**	**(1,198,284)**	**(1,469,465)**	**(230,592)**
Net loss	(1,004,220)	(517,550)	(1,298,880)	(203,823)
Other comprehensive loss:				
Foreign currency translation adjustments	(4,021)	(143,326)	(143,190)	(22,470)
Total other comprehensive loss	**(4,021)**	**(143,326)**	**(143,190)**	**(22,470)**
Total comprehensive loss	**(1,008,241)**	**(660,876)**	**(1,442,070)**	**(226,923)**
Accretions of convertible redeemable preferred shares to redemption value	(426,781)	(680,734)	(170,585)	(26,769)
Comprehensive loss attributable to Zhihu Inc.'s shareholders	**(1,435,022)**	**(1,341,610)**	**(1,612,655)**	**(253,062)**

Zhihu Inc.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. Additional Information—Parent Company Only Condensed Financial Information (Continued)

(c) Condensed statements of cash flows of Zhihu Inc.

	For the Year Ended December 31,			
	2019	2020	2021	2021
	RMB in thousand			US$in thousand
Net cash used in operating activities	(10,722)	(2,606)	(3,182)	(499)
Purchases of term deposits	(354,395)	—	(64,596)	(10,137)
Proceeds from withdrawal of term deposits	335,705	356,580	64,707	10,154
Proceeds from repayment of loans	—	978,735	—	—
Investment in subsidiaries and VIEs and VIEs' subsidiaries	(1,893,991)	(1,407,173)	(4,695,120)	(736,767)
Investment in equity investments	—	—	(19,380)	(3,041)
Net cash used in investing activities (1)	(1,912,681)	(71,858)	(4,714,389)	(739,791)
Proceeds from issuance of convertible redeemable preferred shares, net of issuance cost	1,984,556	—	—	—
Proceeds from issuance of Class A ordinary shares upon the completion of IPO, net of issuance cost	—	—	4,853,293	761,588
Proceeds received from employees in relation to share options	8,583	—	15,544	2,439
Payments for repurchase of share options	(2,416)	—	—	—
Net cash provided by financing activities	1,990,723	—	4,868,837	764,027
Effect of exchange rate changes on cash and cash equivalents (1)	(1,270)	(4,450)	(63,673)	(9,991)
Net increase/(decrease) in cash and cash equivalents	**66,050**	**(78,914)**	**87,593**	**13,746**
Cash and cash equivalents at beginning of year	**19,698**	**85,748**	**6,834**	**1,072**
Cash and cash equivalents at ending of year	**85,748**	**6,834**	**94,427**	**14,818**

Note:

(1) The Parent Company Only Condensed Financial Information of the Company for the year ended December 31, 2020 has been revised to correct an error related to the presentation of cash flows of investment in term deposits. Such cash flows were previously presented in error as an effect of exchange rate changes on cash and cash equivalents of the Parent Company. The Condensed Financial Information has been revised to properly reflect these cash flows in investing activities of the Parent Company.

Exhibit 2.5

Description of Rights of Each Class of Securities Registered under Section 12 of the Securities Exchange Act of 1934 (the "Exchange Act")

American Depositary Shares ("ADSs"), two of which representing one Class A ordinary share of Zhihu Inc. ("we," "our," "our company," or "us") are listed on the New York Stock Exchange and the shares are registered under Section 12(b) of the Exchange Act. This exhibit contains a description of the rights of (i) the holders of Class A ordinary shares and (ii) the holders of ADSs. Class A ordinary shares underlying the ADSs are held by JPMorgan Chase Bank, N.A., as depositary, and holders of ADSs will not be treated as holders of the Class A ordinary shares.

Description of Class A Ordinary Shares

The following is a summary of material provisions of our currently effective tenth amended and restated memorandum and articles of association (the "Memorandum and Articles of Association"), as well as the Companies Act (As Revised) of the Cayman Islands (the "Companies Act") insofar as they relate to the material terms of our ordinary shares. Notwithstanding this, because it is a summary, it may not contain all the information that you may otherwise deem important. For more complete information, you should read the entire Memorandum and Articles of Association, which has been filed with the SEC as an exhibit to our Registration Statement on Form F-1 (File No. 333-253910).

Type and Class of Securities (Item 9.A.5 of Form 20-F)

Each Class A ordinary share has US$0.000125 par value. The number of Class A ordinary shares that have been issued as of the last day of the financial year ended December 31, 2021 is provided on the cover of the annual report on Form 20-F for the fiscal year ended December 31, 2021 (the "2021 Form 20-F"). Our Class A ordinary shares may be held in either certificated or uncertificated form.

Preemptive Rights (Item 9.A.3 of Form 20-F)

Our shareholders do not have preemptive rights.

Limitations or Qualifications (Item 9.A.6 of Form 20-F)

We have a dual-class voting structure such that our ordinary shares consist of Class A ordinary shares and Class B ordinary shares. Each Class A ordinary share shall entitle the holder thereof to one vote on all matters subject to the vote at general meetings of our company, and each Class B ordinary share shall entitle the holder thereof to ten votes on all matters subject to the vote at general meetings of our company. Due to the super voting power of Class B ordinary share holder, the voting power of the Class A ordinary shares may be materially limited.

Rights of Other Types of Securities (Item 9.A.7 of Form 20-F)

Not applicable.

Rights of Class A Ordinary Shares (Item 10.B.3 of Form 20-F)

Classes of Ordinary Shares

Our ordinary shares are divided into Class A ordinary shares and Class B ordinary shares (and a further class of authorized but undesignated shares). Except for conversion rights and voting rights, the Class A ordinary shares and Class B ordinary shares shall carry equal rights and rank pari passu with one another, including but not limited to the rights to dividends (subject to the ability of the board of directors, under our Memorandum and Articles of Association, to determine that a dividend shall be paid wholly or partly by the distribution of specific assets (which may consist of the shares or securities of any other company) and to settle all questions concerning such distribution (including fixing the value of such assets, determining that cash payment shall be made to some shareholders in lieu of specific assets and vesting any such specific assets in trustees on such terms as the directors think fit)) and other capital distributions.

Conversion

Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any sale, transfer, assignment, disposition, or a change of ultimate beneficial ownership of Class B ordinary shares by a holder thereof to any person who is not Mr. Yuan Zhou or any entity which is ultimately controlled by Mr. Yuan Zhou, such Class B ordinary shares shall be automatically and immediately converted into the same number of Class A ordinary shares. If either of the following events occurs and remains unchanged for 20 consecutive days: (i) Mr. Yuan Zhou is neither a director nor the chief executive officer of the Company or (ii) Mr. Yuan Zhou is permanently incapable of acting as a director and the chief executive officer as a result of a legal judgment or incapacity due to his then physical and/or mental condition, all the Class B ordinary shares held by Mr. Yuan Zhou and/or any entity which is ultimately controlled by Mr. Yuan Zhou shall be automatically and immediately converted into the same number of Class A ordinary shares, provided, however, that such triggering event shall not be deemed to take place if Mr. Yuan Zhou is removed as, or otherwise discharged from duty of, either a director or the chief executive officer on an involuntary basis.

Dividends

Our directors may from time to time declare dividends (including interim dividends) and other distributions on our shares in issue and authorize payment of the same out of the funds of our company lawfully available therefor. In addition, our shareholders may declare dividends by ordinary resolution, but no dividend may exceed the amount recommended by our directors. Our Memorandum and Articles of Association provide that dividends may be declared and paid out of the funds of our company lawfully available therefor. Under the laws of the Cayman Islands, our company may pay a dividend out of either profit or share premium account; provided that in

no circumstances may a dividend be paid if that would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights

In respect of all matters subject to a shareholders' vote, each holder of Class A ordinary shares is entitled to one vote per share and each holder of Class B ordinary shares is entitled to ten votes per share on all matters subject to vote at our general meetings. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Voting at any meeting of shareholders is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any one shareholder holding not less than 10% of the votes attaching to the shares present in person or by proxy.

An ordinary resolution to be passed at a meeting by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the ordinary shares cast at a meeting, while a special resolution requires the affirmative vote of no less than two-thirds of the votes cast attaching to the issued and outstanding ordinary shares at a meeting. A special resolution will be required for important matters such as a change of name or making changes to our Memorandum and Articles of Association. Our shareholders may, among other things, divide or combine their shares by ordinary resolution.

Transfer of Ordinary Shares

Subject to the restrictions set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of ordinary shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; and
- a fee of such maximum sum as New York Stock Exchange may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they must, within three months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, on ten calendar days' notice being given by advertisement in such one or more newspapers, by electronic means or by any other means in accordance with the rules of the New York Stock Exchange be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine; provided, however, that the registration of transfers may not be suspended nor the register closed for more than 30 days in any year as our board may determine.

Liquidation

On the winding up of our company, if the assets available for distribution amongst our shareholders will be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus will be distributed amongst our shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay all of the paid-up capital, such assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

Calls on Shares and Forfeiture of Shares.

Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 calendar days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares

We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders of these shares, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by our shareholders by special resolution. Our company may also repurchase any of our shares on such terms and in such manner as have been approved by our board of directors or by an ordinary resolution of our shareholders. Under the Companies Act, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a new issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Requirements to Change the Rights of Holders of Class A Ordinary Shares (Item 10.B.4 of Form 20-F)

Variations of Rights of Shares

Whenever the capital of our company is divided into different classes, the rights attached to any such class may, subject to any rights or restrictions for the time being attached to any class, only be materially adversely varied with the consent in writing of the holders of all of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued will not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation, allotment, or issue of further shares ranking *pari passu* with such existing class of shares.

Limitations on the Rights to Own Class A Ordinary Shares (Item 10.B.6 of Form 20-F)

There are no limitations under the laws of the Cayman Islands or under the Memorandum and Articles of Association that limit the right of non-resident or foreign owners to hold or vote Class A ordinary shares.

Provisions Affecting Any Change of Control (Item 10.B.7 of Form 20-F)

Anti-Takeover Provisions in the Memorandum and Articles of Association. Some provisions of our Memorandum and Articles of Association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preferred shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preferred shares without any further vote or action by our shareholders; and

- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our Memorandum and Articles of Association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

Ownership Threshold (Item 10.B.8 of Form 20-F)

There are no provisions under Cayman Islands law applicable to the Company, or under the Memorandum and Articles of Association, that require the Company to disclose shareholder ownership above any particular ownership threshold.

Differences Between the Law of Different Jurisdictions (Item 10.B.9 of Form 20-F)

The Companies Act is derived, to a large extent, from the older Companies Acts of England but does not follow recent English statutory enactments, and accordingly there are significant differences between the Companies Act and the current Companies Act of England. In addition, the Companies Act differs from laws applicable to U.S. corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Act applicable to us and the laws applicable to companies incorporated in the United States and their shareholders.

Mergers and Similar Arrangements. The Companies Act permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies. For these purposes, (i) "merger" means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company, and (ii) a "consolidation" means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company. In order to effect such a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by (i) a special resolution of the shareholders of each constituent company, and (ii) such other authorization, if any, as may be specified in such constituent company's articles of association. The written plan of merger or consolidation must be filed with the Registrar of Companies of the Cayman Islands together with a declaration as to the solvency of the surviving or consolidated company, a list of the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company and that notification of the merger or consolidation will be published in the Cayman Islands Gazette. Court approval is not required for a merger or consolidation which is effected in compliance with these statutory procedures.

A merger between a Cayman parent company and its Cayman subsidiary or subsidiaries does not require authorization by a resolution of shareholders of that Cayman subsidiary if a copy of the plan of merger is given to every member of that Cayman subsidiary to be merged unless that member agrees otherwise. For this purpose, a company is a "parent" of a subsidiary if it holds issued shares that together represent at least 90% of the votes at a general meeting of the subsidiary.

The consent of each holder of a fixed or floating security interest over a constituent company is required unless this requirement is waived by a court in the Cayman Islands.

Save in certain limited circumstances, a shareholder of a Cayman constituent company who dissents from the merger or consolidation is entitled to payment of the fair value of his shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) upon dissenting to the merger or consolidation; provided that the dissenting shareholder complies strictly with the procedures set out in the Companies Act. The exercise of dissenter rights will preclude the exercise by the dissenting shareholder of any other rights to which he or she might otherwise be entitled by virtue of holding shares, save for the right to seek relief on the grounds that the merger or consolidation is void or unlawful.

Separate from the statutory provisions relating to mergers and consolidations, the Companies Act also contains statutory provisions that facilitate the reconstruction and amalgamation of companies by way of schemes of arrangement; provided that the arrangement is approved by a majority in number of each class of shareholders and creditors with whom the arrangement is to be made, and who must in addition represent three-fourths in value of each such class of shareholders or creditors, as the case may be, that are present and voting either in person or by proxy at a meeting, or meetings, convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder has the right to express to the court the view that the transaction ought not to be approved, the court can be expected to approve the arrangement if it determines that:

- the statutory provisions as to the required majority vote have been met;

- the shareholders have been fairly represented at the meeting in question and the statutory majority are acting bona fide without coercion of the minority to promote interests adverse to those of the class;

- the arrangement is such that may be reasonably approved by an intelligent and honest man of that class acting in respect of his interest; and

- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Act.

The Companies Act also contains a statutory power of compulsory acquisition which may facilitate the "squeeze out" of dissentient minority shareholders upon a tender offer. When a tender offer is made and accepted by holders of 90.0% of the shares affected within four months, the offeror may, within a two-month period commencing on the expiration of such four-month period, require the holders of the remaining shares to transfer such shares to the offeror on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed in the case of an offer which has been so approved unless there is evidence of fraud, bad faith or collusion.

If an arrangement and reconstruction by way of scheme of arrangement is thus approved and sanctioned, or if a tender offer is made and accepted in accordance with the foregoing statutory procedures, a dissenting shareholder would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of Delaware corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Shareholders' Suits. In principle, we will normally be the proper plaintiff and as a general rule a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, the Cayman Islands courts can be expected to follow and apply the common law principles (namely the rule in Foss v. Harbottle and the exceptions thereto) that a non-controlling shareholder may be permitted to commence a class action against, or derivative actions in the name of, our company to challenge actions where:

- a company acts or proposes to act illegally or ultra vires;

- the act complained of, although not ultra vires, could only be effected duly if authorized by more than a simple majority vote that has not been obtained; and

- those who control the company are perpetrating a "fraud on the minority."

Indemnification of Directors and Executive Officers and Limitation of Liability. Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime. Our Memorandum and Articles of Association provide that we shall indemnify our directors and officers, against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by such directors or officer, other than by reason of such person's dishonesty, willful default or fraud, in or about the conduct of our company's business or affairs (including as a result of any mistake of judgment) or in the execution or discharge of his duties, powers, authorities or discretions, including without prejudice to the generality of the foregoing, any costs, expenses, losses or liabilities incurred by such director or officer in defending (whether successfully or otherwise) any civil proceedings concerning our company or its affairs in any court whether in the Cayman Islands or elsewhere. This standard of conduct is generally the same as permitted under the Delaware General Corporation Law for a Delaware corporation.

In addition, we have entered into indemnification agreements with our directors and executive officers that provide such persons with additional indemnification beyond that provided in our Memorandum and Articles of Association.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers or persons controlling us under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Directors' Fiduciary Duties. Under Delaware corporate law, a director of a Delaware corporation has a fiduciary duty to the corporation and its shareholders. This duty has two components: the duty of care and the duty of loyalty. The duty of care requires that a director act in good faith, with the care that an ordinarily prudent person would exercise under similar circumstances. Under this duty, a director must inform himself of, and disclose to shareholders, all material information reasonably available regarding a significant transaction. The duty of loyalty requires that a director acts in a manner he reasonably believes to be in the best interests of the corporation. He must not use his corporate position for personal gain or advantage. This duty prohibits self-dealing by a director and mandates that the best interest of the corporation and its shareholders take precedence over any interest possessed by a director, officer or controlling shareholder and not shared by the shareholders generally. In general, actions of a director are presumed to have been made on an informed basis, in good faith and in the honest belief that the action taken was in the best interests of the corporation. However, this presumption may be rebutted by evidence of a breach of one of the fiduciary duties. Should such evidence be presented concerning a transaction by a director, the director must prove the procedural fairness of the transaction, and that the transaction was of fair value to the corporation.

As a matter of Cayman Islands law, a director of a Cayman Islands company is in the position of a fiduciary with respect to the company and therefore it is considered that he owes the following duties to the company—a duty to act in good faith in the best interests of the company, a duty not to make a personal profit based on his position as director (unless the company permits him to do so), a duty not to put himself in a position where the interests of the company conflict with his personal interest or his duty to a third party and a duty to exercise powers for the purpose for which such powers were intended. A director of a Cayman Islands company owes to the company a duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved toward an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands.

Shareholder Action by Written Consent. Under the Delaware General Corporation Law, a corporation may eliminate the right of shareholders to act by written consent by amendment to its certificate of incorporation. Cayman Islands law and our Memorandum and Articles of Association provide that our shareholders may approve corporate matters by way of a unanimous written resolution signed by or on behalf of each shareholder who would have been entitled to vote on such matter at a general meeting without a meeting being held.

Shareholder Proposals. Under the Delaware General Corporation Law, a shareholder has the right to put any proposal before the annual meeting of shareholders; provided that it complies with the notice provisions in the governing documents. A special meeting may be called by the board of directors or any other person authorized to do so in the governing documents, but shareholders may be precluded from calling special meetings.

The Companies Act provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our Memorandum and Articles of Association allow any one or more of our shareholders holding shares which carry in aggregate not less than one-third of the total number votes attaching to all issued and outstanding shares of our company as of the date of the deposit that are entitled to vote at general meetings to requisition an extraordinary general meeting of our shareholders, in which case our board is obliged to convene an extraordinary general meeting and to put the resolutions so requisitioned to a vote at such meeting. Other than this right to requisition a shareholders' meeting, our Memorandum and Articles of Association do not provide our shareholders with any other right to put proposals before annual general meetings or extraordinary general meetings. As a Cayman Islands exempted company, we are not obliged by law to call shareholders' annual general meetings.

Cumulative Voting. Under the Delaware General Corporation Law, cumulative voting for elections of directors is not permitted unless the corporation's certificate of incorporation specifically provides for it. Cumulative voting potentially facilitates the representation of minority shareholders on a board of directors since it permits the minority shareholder to cast all the votes to which the shareholder is entitled on a single director, which increases the shareholder's voting power with respect to electing such director. There are no prohibitions in relation to cumulative voting under the laws of the Cayman Islands, but our Memorandum and Articles of Association do not provide for cumulative voting. As a result, our shareholders are not afforded any less protections or rights on this issue than shareholders of a Delaware corporation.

Removal of Directors. Under the Delaware General Corporation Law, a director of a corporation with a classified board may be removed only for cause with the approval of a majority of the issued and outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles of Association, directors may be removed by an ordinary resolution of our shareholders. A director will also cease to be a director if he (i) becomes bankrupt or makes any arrangement or composition with his creditors; (ii) dies or is found to be or becomes of unsound mind; (iii) resigns his office by notice in writing; (iv) without special leave of absence from our board, is absent from meetings of our board for three consecutive meetings and our board resolves that his office be vacated; or (v) is removed from office pursuant to any other provision of our articles of association.

Transactions with Interested Shareholders. The Delaware General Corporation Law contains a business combination statute applicable to Delaware corporations whereby, unless the corporation has specifically elected not to be governed by such statute by amendment to its certificate of incorporation, it is prohibited from engaging in certain business combinations with an "interested shareholder" for three years following the date that such person becomes an interested shareholder. An interested shareholder generally is a person or a group who or which owns or owned 15% or more of the target's outstanding voting shares within the past three years. This has the effect of limiting the ability of a potential acquirer to make a two-tiered bid for the target in which all shareholders would not be treated equally. The statute does not apply if, among other things, prior to the date on which such shareholder becomes an interested shareholder, the board of directors approves either the business combination or the transaction which resulted in the person becoming an interested shareholder. This encourages any potential acquirer of a Delaware corporation to negotiate the terms of any acquisition transaction with the target's board of directors.

Cayman Islands law has no comparable statute. As a result, we cannot avail ourselves of the types of protections afforded by the Delaware business combination statute. However, although Cayman Islands law does not regulate transactions between a company and its significant shareholders, the directors of our company are required to comply with fiduciary duties which they owe to our company under Cayman Islands laws, including the duty to ensure that, in their opinion, any such transactions must be entered into bona fide in the best interests of the company and not with the effect of constituting a fraud on the minority shareholders.

Dissolution; Winding up. Under the Delaware General Corporation Law, unless the board of directors approves the proposal to dissolve, dissolution must be approved by shareholders holding 100% of the total voting power of the corporation. Only if the dissolution is initiated by the board of directors may it be approved by a simple majority of the corporation's outstanding shares. Delaware law allows a Delaware corporation to include in its certificate of incorporation a supermajority voting requirement in connection with dissolutions initiated by either an order of the courts of the Cayman Islands or by the board of directors.

Under Cayman Islands law, a company may be wound up by either an order of the courts of the Cayman Islands or by a special resolution of its members or, if the company is unable to pay its debts as they fall due, by an ordinary resolution of its members. The court has authority to order winding up in a number of specified circumstances including where it is, in the opinion of the court, just and equitable to do so. Under the Companies Act and our Memorandum and Articles of Association, our company may be dissolved, liquidated, or wound up by a special resolution of our shareholders.

Variation of Rights of Shares. Under the Delaware General Corporation Law, a corporation may vary the rights of a class of shares with the approval of a majority of the outstanding shares of such class, unless the certificate of incorporation provides otherwise. Under our Memorandum and Articles of Association, if our share capital is divided into more than one class of shares, the rights attached to any such class may only be materially adversely varied with the consent in writing of the holders of all of the issued shares of that class or with the sanction of an ordinary resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class issued with preferred or other rights shall not, subject to any rights or restrictions for the time being attached to the shares of that class, be deemed to be materially adversely varied by the creation, allotment or issue of further shares ranking *pari passu* with or subsequent to them or the redemption or purchase of any shares of any class by our company. The rights of the holders of shares shall not be deemed to be materially adversely varied by the creation or issue of shares with preferred or other rights including, without limitation, the creation of shares with enhanced or weighted voting rights.

Amendment of Governing Documents. Under the Delaware General Corporation Law, a corporation's governing documents may be amended with the approval of a majority of the outstanding shares entitled to vote, unless the certificate of incorporation provides otherwise. Under the Companies Act and our Memorandum and Articles of Association, our memorandum and articles of association may only be amended by a special resolution of our shareholders.

Rights of Non-resident or Foreign Shareholders. There are no limitations imposed by our Memorandum and Articles of Association on the rights of non-resident or foreign shareholders to hold or exercise voting rights on our shares. In addition, there are no provisions in our Memorandum and Articles of Association that require our company to disclose shareholder ownership above any particular ownership threshold.

Changes in Capital (Item 10.B.10 of Form 20-F)

Our shareholders may from time to time by ordinary resolution:

- increase our share capital by such sum, to be divided into shares of such classes and amount, as the resolution shall prescribe;
- consolidate and divide all or any of our share capital into shares of a larger amount than our existing shares;
- sub-divide our existing shares, or any of them into shares of a smaller amount, provided that in the subdivision the proportion between the amount paid and the amount, if any, unpaid on each reduced share shall be the same as it was in case of the share from which the reduced share is derived; or
- cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of our share capital by the amount of the shares so canceled.

Our shareholders may by special resolution, subject to confirmation by the Grand Court of the Cayman Islands on an application by our company for an order confirming such reduction, reduce our share capital or any capital redemption reserve in any manner permitted by law.

Debt Securities (Item 12.A of Form 20-F)

Not applicable.

Warrants and Rights (Item 12.B of Form 20-F)

Not applicable.

Other Securities (Item 12.C of Form 20-F)

Not applicable.

Description of American Depositary Shares (Items 12.D.1 and 12.D.2 of Form 20-F)

JPMorgan Chase Bank, N.A. ("JPMorgan"), as depositary issues the ADSs. Each ADS represents an ownership interest in a designated number of shares which we deposit with the custodian, as agent of the depositary, under the deposit agreement among ourselves, the depositary, yourself as an ADR holder and all other ADR holders, and all beneficial owners of an interest in the ADSs evidenced by ADRs from time to time.

The depositary's office is located at 383 Madison Avenue, Floor 11, New York, NY 10179.

The ADS to share ratio is subject to amendment as provided in the form of ADR (which may give rise to fees contemplated by the form of ADR). In the future, each ADS will also represent any securities, cash or other property deposited with the depositary but which they have not distributed directly to you.

A beneficial owner is any person or entity having a beneficial ownership interest in ADSs. A beneficial owner need not be the holder of the ADR evidencing such ADS. If a beneficial owner of ADSs is not an ADR holder, it must rely on the holder of the ADR(s) evidencing such ADSs in order to assert any rights or receive any benefits under the deposit agreement. A beneficial owner shall only be able to exercise any right or receive any benefit under the deposit agreement solely through the holder of the ADR(s) evidencing the ADSs owned by such beneficial owner. The arrangements between a beneficial owner of ADSs and the holder of the corresponding ADRs may affect the beneficial owner's ability to exercise any rights it may have.

An ADR holder shall be deemed to have all requisite authority to act on behalf of any and all beneficial owners of the ADSs evidenced by the ADRs registered in such ADR holder's name for all purposes under the deposit agreement and ADRs. The depositary's only notification obligations under the deposit agreement and the ADRs is to registered ADR holders. Notice to an ADR holder shall be deemed, for all purposes of the deposit agreement and the ADRs, to constitute notice to any and all beneficial owners of the ADSs evidenced by such ADR holder's ADRs.

Unless certificated ADRs are specifically requested, all ADSs will be issued on the books of our depositary in book-entry form and periodic statements will be mailed to you which reflect your ownership interest in such ADSs. In our description, references to American depositary receipts or ADRs shall include the statements you will receive which reflect your ownership of ADSs.

You may hold ADSs either directly or indirectly through your broker or other financial institution. If you hold ADSs directly, by having an ADS registered in your name on the books of the depositary, you are an ADR holder. This description assumes you hold your ADSs directly. If you hold the ADSs through your broker or financial institution nominee, you must rely on the procedures of such broker or financial institution to assert the rights of an ADR holder described in this section. You should consult with your broker or financial institution to find out what those procedures are.

As an ADR holder or beneficial owner, we will not treat you as a shareholder of ours and you will not have any shareholder rights. Cayman Island law governs shareholder rights. Because the depositary or its nominee will be the shareholder of record for the shares represented by all outstanding ADSs, shareholder rights rest with such record holder. Your rights are those of an ADR holder or of a beneficial owner. Such rights derive from the terms of the deposit agreement to be entered into among us, the depositary and all holders and beneficial owners from time to time of ADRs issued under the deposit agreement and, in the case of a beneficial owner, from the arrangements between the beneficial owner and the holder of the corresponding ADRs. The obligations of the depositary and its agents are also set out in the deposit agreement. Because the depositary or its nominee will actually be the registered owner of the shares, you must rely on it to exercise the rights of a shareholder on your behalf.

The following is a summary of what we believe to be the material terms of the deposit agreement. Notwithstanding this, because it is a summary, it may not contain all the information that you may otherwise deem important. For more complete information, you should read the entire deposit agreement and the form of ADR which contains the terms of your ADSs. You can read a copy of the deposit agreement which is filed as an exhibit to the registration statement of which this prospectus forms a part. You may also obtain a copy of the deposit agreement at the SEC's Public Reference Room which is located at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-732-0330. You may also find the registration statement and the attached deposit agreement on the SEC's website at http://www.sec.gov.

Share Dividends and Other Distributions

How will I receive dividends and other distributions on the shares underlying my ADSs?

We may make various types of distributions with respect to our securities. The depositary has agreed that, to the extent practicable, it will pay to you the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, after converting any cash received into U.S. dollars (if it determines such conversion may be made on a reasonable basis) and, in all cases, making any necessary deductions provided for in the deposit agreement. The depositary may utilize a division, branch or affiliate of JPMorgan to direct, manage, and/or execute any public and/or private sale of securities under the deposit agreement. Such division, branch, and/or affiliate may charge the depositary a fee in connection with such sales, which fee is considered an expense of the depositary. You will receive these distributions in proportion to the number of underlying securities that your ADSs represent.

Except as stated below, the depositary will deliver such distributions to ADR holders in proportion to their interests in the following manner:

- *Cash.* The depositary will distribute any U.S. dollars available to it resulting from a cash dividend or other cash distribution or the net proceeds of sales of any other distribution or portion thereof (to the extent applicable), on an averaged or other practicable basis, subject to (i) appropriate adjustments for taxes withheld, (ii) such distribution being impermissible or impracticable with respect to certain registered ADR holders, and (iii) deduction of the depositary's and/or its agents' expenses in (1) converting any foreign currency to U.S. dollars to the extent that it determines that such conversion may be made on a reasonable basis, (2) transferring foreign currency or U.S. dollars to the United States by such means as the depositary may determine to the extent that it determines that such transfer may be made on a reasonable basis, (3) obtaining any approval or license of any governmental authority required for such conversion or transfer, which is obtainable at a reasonable cost and within a reasonable time, and (4) making any sale by public or private means in any commercially reasonable manner. *If exchange rates fluctuate during a time when the depositary cannot convert a foreign currency, you may lose some or all of the value of the distribution.*

- *Shares.* In the case of a distribution in shares, the depositary will issue additional ADRs to evidence the number of ADSs representing such shares. Only whole ADSs will be issued. Any shares which would result in fractional ADSs will be sold and the net proceeds will be distributed in the same manner as cash to the ADR holders entitled thereto.

- *Rights to Purchase Additional Shares.* In the case of a distribution of rights to subscribe for additional shares or other rights, if we timely provide evidence satisfactory to the depositary that it may lawfully distribute such rights, the depositary will distribute warrants or other instruments in the discretion of the depositary representing such rights. However, if we do not timely furnish such evidence, the depositary may:

  (i) sell such rights if practicable and distribute the net proceeds in the same manner as cash to the ADR holders entitled thereto; or

  (ii) if it is not practicable to sell such rights by reason of the non-transferability of the rights, limited markets therefor, their short duration or otherwise, do nothing and allow such rights to lapse, in which case ADR holders will receive nothing and the rights may lapse.

- *Other Distribution.* In the case of a distribution of securities or property other than those described above, the depositary may either (i) distribute such securities or property in any manner it deems equitable and practicable or (ii) to the extent the depositary deems distribution of such securities or property not to be equitable and practicable, sell such securities or property and distribute any net proceeds in the same way it distributes cash.

If the depositary determines in its discretion that any distribution described above is not practicable with respect to any specific registered ADR holder, the depositary may choose any method of distribution that it deems practicable for such ADR holder, including the distribution of foreign currency, securities or property, or it may retain such items, without paying interest on or investing them, on behalf of the ADR holder as deposited securities, in which case the ADSs will also represent the retained items.

Any U.S. dollars will be distributed by checks drawn on a bank in the United States for whole dollars and cents. Fractional cents will be withheld without liability and dealt with by the depositary in accordance with its then current practices.

The depositary is not responsible if it fails to determine that any distribution or action is lawful or reasonably practicable.

There can be no assurance that the depositary will be able to convert any currency at a specified exchange rate or sell any property, rights, shares or other securities at a specified price, nor that any of such transactions can be completed within a specified time period. All purchases and sales of securities will be handled by the depositary in accordance with its then current policies, which

are currently set forth on the "Disclosures" page (or successor page) of www.adr.com (as updated by the depositary from time to time, "ADR.com").

Deposit, Withdrawal, and Cancellation

How does the depositary issue ADSs?

The depositary will issue ADSs if you or your broker deposit shares or evidence of rights to receive shares with the custodian and pay the fees and expenses owing to the depositary in connection with such issuance. In the case of the ADSs to be issued under this prospectus, we will arrange with the underwriters named herein to deposit such shares.

Shares deposited in the future with the custodian must be accompanied by certain delivery documentation and shall, at the time of such deposit, be registered in the name of JPMorgan Chase Bank, N.A., as depositary for the benefit of holders of ADRs or in such other name as the depositary shall direct.

The custodian will hold all deposited shares (including those being deposited by or on our behalf in connection with the offering to which this prospectus relates) for the account and to the order of the depositary, in each case for the benefit of ADR holders. ADR holders and beneficial owners thus have no direct ownership interest in the shares and only have such rights as are contained in the deposit agreement. The custodian will also hold any additional securities, property and cash received on or in substitution for the deposited shares. The deposited shares and any such additional items are referred to as "deposited securities".

Deposited securities are not intended to, and shall not, constitute proprietary assets of the depositary, the custodian or their nominees. Beneficial ownership in deposited securities is intended to be, and shall at all times during the term of the deposit agreement continue to be, vested in the beneficial owners of the ADSs representing such deposited securities. Notwithstanding anything else contained herein, in the deposit agreement, in the form of ADR and/or in any outstanding ADSs, the depositary, the custodian and their respective nominees are intended to be, and shall at all times during the term of the deposit agreement be, the record holder(s) only of the deposited securities represented by the ADSs for the benefit of the ADR holders. The depositary, on its own behalf and on behalf of the custodian and their respective nominees, disclaims any beneficial ownership interest in the deposited securities held on behalf of the ADR holders.

Upon each deposit of shares, receipt of related delivery documentation and compliance with the other provisions of the deposit agreement, including the payment of the fees and charges of the depositary and any taxes or other fees or charges owing, the depositary will issue an ADR or ADRs in the name or upon the order of the person entitled thereto evidencing the number of ADSs to which such person is entitled. All of the ADSs issued will, unless specifically requested to the contrary, be part of the depositary's direct registration system, and a registered holder will receive periodic statements from the depositary which will show the number of ADSs registered in such holder's name. An ADR holder can request that the ADSs not be held through the depositary's direct registration system and that a certificated ADR be issued.

How do ADR holders cancel an ADS and obtain deposited securities?

When you turn in your ADR certificate at the depositary's office, or when you provide proper instructions and documentation in the case of direct registration ADSs, the depositary will, upon payment of certain applicable fees, charges, and taxes, deliver the underlying shares to you or upon your written order. Delivery of deposited securities in certificated form will be made at the custodian's office. At your risk, expense and request, the depositary may deliver deposited securities at such other place as you may request.

The depositary may only restrict the withdrawal of deposited securities in connection with:

- temporary delays caused by closing our transfer books or those of the depositary or the deposit of shares in connection with voting at a shareholders' meeting, or the payment of dividends;
- the payment of fees, taxes, and similar charges; or
- compliance with any U.S. or foreign laws or governmental regulations relating to the ADRs or to the withdrawal of deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Record Dates

The depositary may, after consultation with us if practicable, fix record dates (which, to the extent applicable, shall be as near as practicable to any corresponding record dates set by us) for the determination of the registered ADR holders who will be entitled (or obligated, as the case may be):

- to receive any distribution on or in respect of deposited securities,
- to give instructions for the exercise of voting rights at a meeting of holders of shares, or
- to pay the fee assessed by the depositary for administration of the ADR program and for any expenses as provided for in the ADR,
- to receive any notice or to act in respect of other matters,

all subject to the provisions of the deposit agreement.

Voting Rights

How do I vote?

If you are an ADR holder and the depositary asks you to provide it with voting instructions, you may instruct the depositary how to exercise the voting rights for the shares which underlie your ADSs. As soon as practicable after receipt from us of notice of any meeting at which the holders of shares are entitled to vote, or of our solicitation of consents or proxies from holders of shares, the depositary shall fix the ADS record date in accordance with the provisions of the deposit agreement, provided that if the depositary receives a written request from us in a timely manner and at least 30 days prior to the date of such vote or meeting, the depositary shall, at our expense, distribute to the registered ADR holders a "voting notice" stating (i) final information particular to such vote and meeting and any solicitation materials, (ii) that each ADR holder on the record date set by the depositary will, subject to any applicable provisions of Cayman Islands law, be entitled to instruct the depositary as to the exercise of the voting rights, if any, pertaining to the deposited securities represented by the ADSs evidenced by such ADR holder's ADRs, and (iii) the manner in which such instructions may be given or deemed to be given pursuant to the terms of the deposit agreement, including instructions for giving a discretionary proxy to a person designated by us. Each ADR holder shall be solely responsible for the forwarding of voting notices to the beneficial owners of ADSs registered in such ADR holder's name. There is no guarantee that ADR holders and beneficial owners generally or any holder or beneficial owner in particular will receive the notice described above with sufficient time to enable such ADR holder or beneficial owner to return any voting instructions to the depositary in a timely manner.

Following actual receipt by the ADR department responsible for proxies and voting of ADR holders' instructions (including, without limitation, instructions of any entity or entities acting on behalf of the nominee for DTC), the depositary shall, in the manner and on or before the time established by the depositary for such purpose, endeavor to vote or cause to be voted the deposited securities represented by the ADSs evidenced by such ADR holders' ADRs in accordance with such instructions insofar as practicable and permitted under the provisions of or governing deposited securities.

To the extent that (i) we have provided the depositary with at least 35 days' notice of the proposed meeting, (ii) the voting notice will be received by all ADR holders and beneficial owners no less than 10 days prior to the date of the meeting and/or the cut-off date for the solicitation of consents, and (iii) the depositary does not receive instructions on a particular agenda item from an ADR holder (including, without limitation, any entity or entities acting on behalf of the nominee for DTC) in a timely manner, such ADR holder shall be deemed, and in the deposit agreement the depositary is instructed to deem such ADR holder, to have instructed the depositary to give a discretionary proxy for such agenda item(s) to a person designated by us to vote the deposited securities represented by the ADSs for which actual instructions were not so given by all such ADR holders on such agenda item(s), provided that no such instruction shall be deemed given and no discretionary proxy shall be given unless (1) we inform the depositary in writing (and we agree to provide the depositary with such instruction promptly in writing) that (a) we wish such proxy to be given with respect to such agenda item(s), (b) there is no substantial opposition existing with respect to such agenda item(s), and (c) such agenda item(s), if approved, would not materially or adversely affect the rights of holders of shares, and (2) the depositary has obtained an opinion of counsel, in form and substance satisfactory to the depositary, confirming that (A) the granting of such discretionary proxy does not subject the depositary to any reporting obligations in the Cayman Islands, (B) the granting of such proxy will not result in a violation of the laws, rules, regulations or permits of the Cayman Islands, (C) the voting arrangement and deemed instruction as contemplated herein will be given effect under the laws, rules, and regulations of the Cayman Islands, and (D) the granting of such discretionary proxy will not under any circumstances result in the shares represented by the ADSs being treated as assets of the depositary under the laws, rules or regulations of the Cayman Islands.

The depositary may from time to time access information available to it to consider whether any of the circumstances described above exist, or request additional information from us in respect thereto. By taking any such action, the depositary shall not in any way be deemed or inferred to have been required, or have had any duty or responsibility (contractual or otherwise), to monitor or inquire whether any of the circumstances described above existed. In addition to the limitations provided for in the deposit agreement, ADR holders and beneficial owners are advised and agree that (a) the depositary will rely fully and exclusively on us to inform it of any of the circumstances set forth above, and (b) neither the depositary, the custodian nor any of their respective agents shall be obliged to inquire or investigate whether any of the circumstances described above exist and/or whether we complied with our obligation to timely inform the depositary of such circumstances. Neither the depositary, the custodian nor any of their respective agents shall incur any liability to ADR holders or beneficial owners (i) as a result of our failure to determine that any of the circumstances described above exist or our failure to timely notify the depositary of any such circumstances or (ii) if any agenda item which is approved at a meeting has, or is claimed to have, a material or adverse effect on the rights of holders of shares. Because there is no guarantee that ADR holders and beneficial owners will receive the notices described above with sufficient time to enable such ADR holders or beneficial owners to return any voting instructions to the depositary in a timely manner, ADR holders and beneficial owners may be deemed to have instructed the depositary to give a discretionary proxy to a person designated by us in such circumstances, and neither the depositary, the custodian nor any of their respective agents shall incur any liability to ADR holders or beneficial owners in such circumstances.

ADR holders are strongly encouraged to forward their voting instructions to the depositary as soon as possible. For instructions to be valid, the ADR department of the depositary that is responsible for proxies and voting must receive them in the manner and on or before the time specified, notwithstanding that such instructions may have been physically received by the depositary prior to such time. The depositary will not itself exercise any voting discretion in respect of deposited securities. The depositary and its agents will not be responsible for any failure to carry out any instructions to vote any of the deposited securities, for the manner in which any voting instructions are given or deemed to be given in accordance with the terms of the deposit agreement, including instructions to give a discretionary proxy to a person designated by us, for the manner in which any vote is cast, including, without limitation, any vote cast by a person to whom the depositary is instructed to grant a discretionary proxy (or deemed to have been instructed pursuant to the terms of the deposit agreement), or for the effect of any such vote. Notwithstanding anything contained in the deposit agreement or any ADR, the depositary may, to the extent not prohibited by any law, regulation, or requirement of the stock exchange on which the ADSs are listed, in lieu of distribution of the materials provided to the depositary in connection with any meeting of or solicitation of consents or proxies from holders of deposited securities, distribute to the registered holders of ADRs a notice that provides such ADR holders with or otherwise publicizes to such ADR holders instructions on how to retrieve such materials or receive such materials upon request (i.e., by reference to a website containing the materials for retrieval or a contact for requesting copies of the materials).

We have advised the depositary that under Cayman Islands law and our constituent documents, each as in effect as of the date of the deposit agreement, voting at any meeting of shareholders is by show of hands unless a poll is (before or on the declaration of the results of the show of hands) demanded. In the event that voting on any resolution or matter is conducted on a show of hands basis in accordance with our constituent documents, the depositary will refrain from voting and the voting instructions received by the depositary from ADR holders shall lapse. The depositary will not demand a poll or join in demanding a poll, whether or not requested to do so by ADR holders or beneficial owners.

There is no guarantee that you will receive voting materials in time to instruct the depositary to vote and it is possible that you, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote.

Reports and Other Communications

Will ADR holders be able to view our reports?

The depositary will make available for inspection by ADR holders at the offices of the depositary and the custodian the deposit agreement, the provisions of or governing deposited securities, and any written communications from us which are both received by the custodian or its nominee as a holder of deposited securities and made generally available to the holders of deposited securities.

Additionally, if we make any written communications generally available to holders of our shares, and we furnish copies thereof (or English translations or summaries) to the depositary, it will distribute the same to registered ADR holders.

Fees and Expenses

What fees and expenses will I be responsible for paying?

The depositary may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities, or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities or whose ADRs are cancelled or reduced for any other reason, $5.00 for each 100 ADSs (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, or upon which a share distribution or elective distribution is made or offered, as the case may be. The depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights, and/or other distribution prior to such deposit to pay such charge.

The following additional charges shall also be incurred by the ADR holders, the beneficial owners, by any party depositing or withdrawing shares or by any party surrendering ADSs and/or to whom ADSs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of US$1.50 per ADR or ADRs for transfers of certificated or direct registration ADRs;
- a fee of US$0.05 or less per ADS held for any cash distribution made, or for any elective cash/stock dividend offered, pursuant to the deposit agreement;
- an aggregate fee of US$0.05 or less per ADS per calendar year (or portion thereof) for services performed by the depositary in administering the ADRs (which fee may be charged on a periodic basis during each calendar year and shall be assessed against holders of ADRs as of the record date or record dates set by the depositary during each calendar year and shall be payable in the manner described in the next succeeding provision);
- a fee for the reimbursement of such fees, charges, and expenses as are incurred by the depositary and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of ADR holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in connection with the servicing of the shares or other deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary's or its custodian's compliance with applicable law, rule or regulation (which fees and charges shall be assessed on a proportionate basis against ADR holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such ADR holders or by deducting such charge from one or more cash dividends or other cash distributions);
- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the $0.05 per ADS issuance fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depositary to those ADR holders entitled thereto;
- stock transfer or other taxes and other governmental charges;
- cable, telex, and facsimile transmission and delivery charges incurred at your request in connection with the deposit or delivery of shares, ADRs or deposited securities;
- transfer or registration fees for the registration of transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities; and
- fees of any division, branch or affiliate of the depositary utilized by the depositary to direct, manage, and/or execute any public and/or private sale of securities under the deposit agreement.

To facilitate the administration of various depositary receipt transactions, including disbursement of dividends or other cash distributions and other corporate actions, the depositary may engage the foreign exchange desk within JPMorgan Chase Bank, N.A. (the "**Bank**") and/or its affiliates in order to enter into spot foreign exchange transactions to convert foreign currency into U.S. dollars. For certain currencies, foreign exchange transactions are entered into with the Bank or an affiliate, as the case may be, acting in a principal capacity. For other currencies, foreign exchange transactions are routed directly to and managed by an unaffiliated local custodian (or other third party local liquidity provider), and neither the Bank nor any of its affiliates is a party to such foreign exchange transactions.

The foreign exchange rate applied to an foreign exchange transaction will be either (a) a published benchmark rate, or (b) a rate determined by a third party local liquidity provider, in each case plus or minus a spread, as applicable. The depositary will disclose which foreign exchange rate and spread, if any, apply to such currency on the "Disclosures" page (or successor page) of

ADR.com. Such applicable foreign exchange rate and spread may (and neither the depositary, the Bank nor any of their affiliates is under any obligation to ensure that such rate does not) differ from rates and spreads at which comparable transactions are entered into with other customers or the range of foreign exchange rates and spreads at which the Bank or any of its affiliates enters into foreign exchange transactions in the relevant currency pair on the date of the foreign exchange transaction. Additionally, the timing of execution of an foreign exchange transaction varies according to local market dynamics, which may include regulatory requirements, market hours and liquidity in the foreign exchange market or other factors. Furthermore, the Bank and its affiliates may manage the associated risks of their position in the market in a manner they deem appropriate without regard to the impact of such activities on the depositary, us, holders or beneficial owners. *The spread applied does not reflect any gains or losses that may be earned or incurred by the Bank and its affiliates as a result of risk management or other hedging related activity.*

Notwithstanding the foregoing, to the extent we provide U.S. dollars to the depositary, neither the Bank nor any of its affiliates will execute a foreign exchange transaction as set forth herein. In such case, the depositary will distribute the U.S. dollars received from us.

Further details relating to the applicable foreign exchange rate, the applicable spread and the execution of foreign exchange transactions will be provided by the depositary on ADR.com. Each holder and beneficial owner by holding or owning an ADR or ADS or an interest therein, and we, each acknowledge and agree that the terms applicable to foreign exchange transactions disclosed from time to time on ADR.com will apply to any foreign exchange transaction executed pursuant to the deposit agreement.

We will pay all other charges and expenses of the depositary and any agent of the depositary (except the custodian) pursuant to agreements from time to time between us and the depositary.

The right of the depositary to receive payment of fees, charges, and expenses survives the termination of the deposit agreement, and shall extend for those fees, charges, and expenses incurred prior to the effectiveness of any resignation or removal of the depositary.

The fees and charges described above may be amended from time to time by agreement between us and the depositary.

The depositary may make available to us a set amount or a portion of the depositary fees charged in respect of the ADR program or otherwise upon such terms and conditions as we and the depositary may agree from time to time. The depositary collects its fees for issuance and cancellation of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions, or by directly billing investors, or by charging the book-entry system accounts of participants acting for them. The depositary will generally set off the amounts owing from distributions made to holders of ADSs. If, however, no distribution exists and payment owing is not timely received by the depositary, the depositary may refuse to provide any further services to ADR holders that have not paid those fees and expenses owing until such fees and expenses have been paid. At the discretion of the depositary, all fees and charges owing under the deposit agreement are due in advance and/or when declared owing by the depositary.

Payment of Taxes

ADR holders or beneficial owners must pay any tax or other governmental charge payable by the custodian or the depositary on any ADS or ADR, deposited security or distribution. If any taxes or other governmental charges (including any penalties and/or interest) shall become payable by or on behalf of the custodian or the depositary with respect to any ADR, any deposited securities represented by the ADSs evidenced thereby or any distribution thereon, including, without limitation, any Chinese Enterprise Income Tax owing if the Circular Guoshuifa [2009] No. 82 issued by the Chinese State Administration of Taxation (SAT) or any other circular, edict, order or ruling, as issued and as from time to time amended, is applied or otherwise, such tax or other governmental charge shall be paid by the ADR holder thereof to the depositary and by holding or owning, or having held or owned, an ADR or any ADSs evidenced thereby, the ADR holder and all beneficial owners thereof, and all prior ADR holders and beneficial owners thereof, jointly and severally, agree to indemnify, defend and save harmless each of the depositary and its agents in respect of such tax or other governmental charge. Notwithstanding the depositary's right to seek payment from current and former beneficial owners, by holding or owning, or having held or owned, an ADR, the ADR holder thereof (and prior ADR holder thereof) acknowledges and agrees that the depositary has no obligation to seek payment of amounts owing from any current or former beneficial owner. If an ADR holder owes any tax or other governmental charge, the depositary may (i) deduct the amount thereof from any cash distributions, or (ii) sell deposited securities (by public or private sale) and deduct the amount owing from the net proceeds of such sale. In either case the ADR holder remains liable for any shortfall. If any tax or governmental charge is unpaid, the depositary may also refuse to effect any registration, registration of transfer, split-up or combination of deposited securities or withdrawal of deposited securities until such payment is made. If any tax or governmental charge is required to be withheld on any cash distribution, the depositary may deduct the amount required to be withheld from any cash distribution or, in the case of a non-cash distribution, sell the distributed property or securities (by public or private sale) in such amounts and in such manner as the depositary deems necessary and practicable to pay such taxes and distribute any remaining net proceeds or the balance of any such property after deduction of such taxes to the ADR holders entitled thereto.

As an ADR holder or beneficial owner, you will be agreeing to indemnify us, the depositary, its custodian and any of our or their respective officers, directors, employees, agents and affiliates against, and hold each of them harmless from, any claims by any governmental authority with respect to taxes, additions to tax, penalties or interest arising out of any refund of taxes, reduced rate of withholding at source or other tax benefit obtained.

Reclassifications, Recapitalizations, and Mergers

If we take certain actions that affect the deposited securities, including (i) any change in par value, split-up, consolidation, cancellation or other reclassification of deposited securities or (ii) any distributions of shares or other property not made to holders of ADRs or (iii) any recapitalization, reorganization, merger, consolidation, liquidation, receivership, bankruptcy or sale of all or substantially all of our assets, then the depositary may choose to, and shall if reasonably requested by us:

- amend the form of ADR;

- distribute additional or amended ADRs;
- distribute cash, securities or other property it has received in connection with such actions;
- sell any securities or property received and distribute the proceeds as cash; or
- none of the above.

If the depositary does not choose any of the above options, any of the cash, securities or other property it receives will constitute part of the deposited securities and each ADS will then represent a proportionate interest in such property.

Amendment and Termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the ADSs without your consent for any reason. ADR holders must be given at least 30 days' notice of any amendment that imposes or increases any fees or charges (other than stock transfer or other taxes and other governmental charges, transfer or registration fees, SWIFT, cable, telex or facsimile transmission costs, delivery costs or other such expenses), or otherwise prejudices any substantial existing right of ADR holders or beneficial owners. Such notice need not describe in detail the specific amendments effectuated thereby, but must identify to ADR holders and beneficial owners a means to access the text of such amendment. If an ADR holder continues to hold an ADR or ADRs after being so notified, such ADR holder and any beneficial owner are deemed to agree to such amendment and to be bound by the deposit agreement as so amended. No amendment, however, will impair your right to surrender your ADSs and receive the underlying securities, except in order to comply with mandatory provisions of applicable law.

Any amendments or supplements which (i) are reasonably necessary (as agreed by us and the depositary) in order for (a) the ADSs to be registered on Form F-6 under the Securities Act of 1933 or (b) the ADSs or shares to be traded solely in electronic book-entry form and (ii) do not in either such case impose or increase any fees or charges to be borne by ADR holders, shall be deemed not to prejudice any substantial rights of ADR holders or beneficial owners. Notwithstanding the foregoing, if any governmental body or regulatory body should adopt new laws, rules or regulations which would require amendment or supplement of the deposit agreement or the form of ADR to ensure compliance therewith, we and the depositary may amend or supplement the deposit agreement and the ADR at any time in accordance with such changed laws, rules or regulations. Such amendment or supplement to the deposit agreement in such circumstances may become effective before a notice of such amendment or supplement is given to ADR holders or within any other period of time as required for compliance.

Notice of any amendment to the deposit agreement or form of ADRs shall not need to describe in detail the specific amendments effectuated thereby, and failure to describe the specific amendments in any such notice shall not render such notice invalid, provided, however, that, in each such case, the notice given to the ADR holders identifies a means for ADR holders and beneficial owners to retrieve or receive the text of such amendment (i.e., upon retrieval from the SEC's, the depositary's or our website or upon request from the depositary).

How may the deposit agreement be terminated?

The depositary may, and shall at our written direction, terminate the deposit agreement and the ADRs by mailing notice of such termination to the registered holders of ADRs at least 30 days prior to the date fixed in such notice for such termination; provided, however, if the depositary shall have (i) resigned as depositary under the deposit agreement, notice of such termination by the depositary shall not be provided to registered ADR holders unless a successor depositary shall not be operating under the deposit agreement within 60 days of the date of such resignation, and (ii) been removed as depositary under the deposit agreement, notice of such termination by the depositary shall not be provided to registered holders of ADRs unless a successor depositary shall not be operating under the deposit agreement on the 60th day after our notice of removal was first provided to the depositary.

If the shares are not listed or quoted for trading on a stock exchange or in a securities market as of the date so fixed for termination, then after such date fixed for termination (i) all direct registration ADRs shall cease to be eligible for the direct registration system and shall be considered ADRs issued on the ADR register maintained by the depositary and (ii) the depositary shall use its reasonable efforts to ensure that the ADSs cease to be DTC eligible so that neither DTC nor any of its nominees shall thereafter be a holder of ADRs. At such time as the ADSs cease to be DTC eligible and/or neither DTC nor any of its nominees is a holder of ADRs, the depositary shall (i) instruct its custodian to deliver all shares and/or deposited securities to us along with a general stock power that refers to the names set forth on the ADR register maintained by the depositary and (ii) provide us with a copy of the ADR register maintained by the depositary. Upon receipt of such shares and/or deposited securities and the ADR register maintained by the depositary, we have agreed to use our best efforts to issue to each register ADR holder a share certificate representing the shares represented by the ADSs reflected on the ADR register maintained by the depositary in such registered ADR holder's name and to deliver such share certificate to the registered ADR holder at the address set forth on the ADR register maintained by the depositary. After providing such instruction to the custodian and delivering a copy of the ADR register to us, the depositary, and its agents will perform no further acts under the deposit agreement or the ADRs and shall cease to have any obligations under the deposit agreement and/or the ADRs. After we receive the copy of the ADR register and the shares and/or deposited securities from the depositary, we shall be discharged from all obligations under the deposit agreement except (i) to distribute the shares to the registered ADR holders entitled thereto and (ii) for its obligations to the depositary and its agents.

If the shares are listed or quoted for trading on a stock exchange or in a securities market as of the date so fixed for termination, then instead of the provisions in the prior paragraph, after the date so fixed for termination, the depositary and its agents will perform no further acts under the deposit agreement or the ADRs, except to receive and hold (or sell) distributions on shares and/or deposited securities and deliver shares and/or deposited securities being withdrawn. As soon as practicable after the date so fixed for termination, the depositary has agreed to use its reasonable efforts to sell the shares and/or deposited securities and shall thereafter (as long as it may lawfully do so) hold in an account (which may be a segregated or unsegregated account) the net proceeds of such sales, together with any other cash then held by it under the deposit agreement, without liability for interest, in trust for the pro rata benefit of the registered ADR holders not theretofore surrendered. After making such sale, the depositary shall be discharged from all obligations in respect of the deposit agreement and the ADRs, except to account for such net proceeds and other cash. After the

date so fixed for termination, we shall be discharged from all obligations under the deposit agreement except for our obligations to the depositary and its agents.

Notwithstanding anything to the contrary, in connection with any such termination, the depositary may, in its sole discretion and without notice to us, establish an unsponsored American depositary share program (on such terms as the depositary may determine) for our shares and make available to ADR holders a means to withdraw the shares represented by the ADSs issued under the deposit agreement and to direct the deposit of such shares into such unsponsored American depositary share program, subject, in each case, to receipt by the depositary, at its discretion, of the fees, charges, and expenses provided for under the deposit agreement and the fees, charges, and expenses applicable to the unsponsored American depositary share program.

Limitations on Obligations and Liability to ADR holders

Limits on our obligations and the obligations of the depositary; limits on liability to ADR holders and holders of ADSs

Prior to the issue, registration, registration of transfer, split-up, combination, or cancelation of any ADRs, or the delivery of any distribution in respect thereof, and from time to time in the case of the production of proofs as described below, we or the depositary or its custodian may require:

- payment with respect thereto of (i) any stock transfer or other tax or other governmental charge, (ii) any stock transfer or registration fees in effect for the registration of transfers of shares or other deposited securities upon any applicable register and (iii) any applicable fees and expenses described in the deposit agreement;

- the production of proof satisfactory to it of (i) the identity of any signatory and genuineness of any signature and (ii) such other information, including without limitation, information as to citizenship, residence, exchange control approval, beneficial or other ownership of, or interest in, any securities, compliance with applicable law, regulations, provisions of or governing deposited securities and terms of the deposit agreement and the ADRs, as it may deem necessary or proper; and

- compliance with such regulations as the depositary may establish consistent with the deposit agreement.

The issuance of ADRs, the acceptance of deposits of shares, the registration, registration of transfer, split-up or combination of ADRs or the withdrawal of shares, may be suspended, generally or in particular instances, when the ADR register or any register for deposited securities is closed or when any such action is deemed advisable by the depositary; provided that the ability to withdraw shares may only be limited under the following circumstances: (i) temporary delays caused by closing transfer books of the depositary or our transfer books or the deposit of shares in connection with voting at a shareholders' meeting, or the payment of dividends, (ii) the payment of fees, taxes, and similar charges, and (iii) compliance with any laws or governmental regulations relating to ADRs or to the withdrawal of deposited securities.

The deposit agreement expressly limits the obligations and liability of the depositary, ourselves and our respective agents, provided, however, that no disclaimer of liability under the Securities Act of 1933 is intended by any of the limitations of liabilities provisions of the deposit agreement. The deposit agreement provides that each of us, the depositary and our respective agents will:

- incur or assume no liability (including, without limitation, to holders or beneficial owners) if any present or future law, rule, regulation, fiat, order or decree of the Cayman Islands, Hong Kong, the People's Republic of China, the United States or any other country or jurisdiction, or of any governmental or regulatory authority or securities exchange or market or automated quotation system, the provisions of or governing any deposited securities, any present or future provision of our charter, any act of God, war, terrorism, epidemic, pandemic, nationalization, expropriation, currency restrictions, work stoppage, strike, civil unrest, revolutions, rebellions, explosions, computer failure, or circumstance beyond our, the depositary's, or our respective agents' direct and immediate control shall prevent or delay, or shall cause any of them to be subject to any civil or criminal penalty in connection with, any act which the deposit agreement or the ADRs provide shall be done or performed by us, the depositary or our respective agents (including, without limitation, voting);

- incur or assume no liability (including, without limitation, to holders or beneficial owners) by reason of any non-performance or delay, caused as aforesaid, in the performance of any act or things which by the terms of the deposit agreement it is provided shall or may be done or performed or any exercise or failure to exercise discretion under the deposit agreement or the ADRs including, without limitation, any failure to determine that any distribution or action may be lawful or reasonably practicable;

- incur or assume no liability (including, without limitation, to holders or beneficial owners) if it performs its obligations under the deposit agreement and ADRs without gross negligence or willful misconduct;

- in the case of the depositary and its agents, be under no obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any deposited securities the ADSs or the ADRs;

- in the case of us and our agents, be under no obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any deposited securities the ADSs or the ADRs, which in our or our agents' opinion, as the case may be, may involve it in expense or liability, unless indemnity satisfactory to us or our agent, as the case may be against all expense (including fees and disbursements of counsel) and liability be furnished as often as may be requested;

- not be liable (including, without limitation, to holders or beneficial owners) for any action or inaction by it in reliance upon the advice of or information from any legal counsel, any accountant, any person presenting shares for deposit, any registered holder of ADRs, or any other person believed by it to be competent to give such advice or information and/or, in the case of the depositary, us; or

- may rely and shall be protected in acting upon any written notice, request, direction, instruction or document believed by it to be genuine and to have been signed, presented or given by the proper party or parties.

Neither the depositary nor its agents have any obligation to appear in, prosecute or defend any action, suit or other proceeding in respect of any deposited securities, the ADSs or the ADRs. We and our agents shall only be obligated to appear in, prosecute or

defend any action, suit or other proceeding in respect of any deposited securities, the ADSs or the ADRs, which in our opinion may involve us in expense or liability, if indemnity satisfactory to us against all expense (including fees and disbursements of counsel) and liability is furnished as often as may be required. The depositary and its agents may fully respond to any and all demands or requests for information maintained by or on its behalf in connection with the deposit agreement, any registered holder or holders of ADRs, any ADRs or otherwise related to the deposit agreement or ADRs to the extent such information is requested or required by or pursuant to any lawful authority, including without limitation laws, rules, regulations, administrative or judicial process, banking, securities or other regulators. The depositary shall not be liable for the acts or omissions made by, or the insolvency of, any securities depository, clearing agency or settlement system. Furthermore, the depositary shall not be responsible for, and shall incur no liability in connection with or arising from, the insolvency of any custodian that is not a branch or affiliate of JPMorgan. Notwithstanding anything to the contrary contained in the deposit agreement or any ADRs, the depositary shall not be responsible for, and shall incur no liability in connection with or arising from, any act or omission to act on the part of the custodian except to the extent that any registered ADR holder has incurred liability directly as a result of the custodian having (i) committed fraud or willful misconduct in the provision of custodial services to the depositary or (ii) failed to use reasonable care in the provision of custodial services to the depositary as determined in accordance with the standards prevailing in the jurisdiction in which the custodian is located. The depositary and the custodian(s) may use third party delivery services and providers of information regarding matters such as, but not limited to, pricing, proxy voting, corporate actions, class action litigation, and other services in connection with the ADRs and the deposit agreement, and use local agents to provide services such as, but not limited to, attendance at any meetings of security holders of issuers. Although the depositary and the custodian will use reasonable care (and cause their agents to use reasonable care) in the selection and retention of such third party providers and local agents, they will not be responsible for any errors or omissions made by them in providing the relevant information or services. The depositary shall not have any liability for the price received in connection with any sale of securities, the timing thereof or any delay in action or omission to act nor shall it be responsible for any error or delay in action, omission to act, default or negligence on the part of the party so retained in connection with any such sale or proposed sale.

The depositary has no obligation to inform ADR holders or beneficial owners about the requirements of the laws, rules or regulations or any changes therein or thereto of the Cayman Islands, Hong Kong, the People's Republic of China, the United States or any other country or jurisdiction or of any governmental or regulatory authority or any securities exchange or market or automated quotation system.

Additionally, none of the depositary, the custodian or us, or any of their or our respective directors, officers, employees, agents or affiliates shall be liable for the failure by any registered holder of ADRs or beneficial owner therein to obtain the benefits of credits or refunds of non-U.S. tax paid against such ADR holder's or beneficial owner's income tax liability. The depositary is under no obligation to provide the ADR holders and beneficial owners, or any of them, with any information about our tax status. Neither the depositary or us shall incur any liability for any tax or tax consequences that may be incurred by registered ADR holders or beneficial owners on account of their ownership or disposition of ADRs or ADSs.

Neither the depositary nor its agents will be responsible for any failure to carry out any instructions to vote any of the deposited securities, for the manner in which any voting instructions are given or deemed to be given pursuant to the terms of the deposit agreement, including instructions to give a discretionary proxy to a person designated by us, for the manner in which any vote is cast, including, without limitation, any vote cast by a person to whom the depositary is instructed to grant a discretionary proxy (or deemed to have been instructed pursuant to the terms of the deposit agreement), or for the effect of any such vote. The depositary may rely upon instructions from us or our counsel in respect of any approval or license required for any currency conversion, transfer or distribution. The depositary shall not incur any liability for the content of any information submitted to it by us or on our behalf for distribution to ADR holders or for any inaccuracy of any translation thereof, for any investment risk associated with acquiring an interest in the deposited securities, for the validity or worth of the deposited securities, for the credit-worthiness of any third party, for allowing any rights to lapse upon the terms of the deposit agreement or for the failure or timeliness of any notice from us. The depositary shall not be liable for any acts or omissions made by a successor depositary whether in connection with a previous act or omission of the depositary or in connection with any matter arising wholly after the removal or resignation of the depositary. Neither the depositary nor any of its agents shall be liable for any indirect, special, punitive or consequential damages (including, without limitation, legal fees and expenses) or lost profits, in each case of any form incurred by any person or entity (including, without limitation holders or beneficial owners of ADRs and ADSs), whether or not foreseeable and regardless of the type of action in which such a claim may be brought.

In the deposit agreement each party thereto (including, for avoidance of doubt, each ADR holder and beneficial owner) irrevocably waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any suit, action or proceeding against the depositary and/or us directly or indirectly arising out of or relating to the shares or other deposited securities, the ADSs or the ADRs, the deposit agreement or any transaction contemplated therein, or the breach thereof (whether based on contract, tort, common law or any other theory). No provision of the deposit agreement or the ADRs is intended to constitute a waiver or limitation of any rights which an ADR holder or any beneficial owner may have under the Securities Act of 1933 or the Securities Exchange Act of 1934, to the extent applicable.

The depositary and its agents may own and deal in any class of securities of our company and our affiliates and in ADRs.

Disclosure of Interest in ADSs

To the extent that the provisions of or governing any deposited securities may require disclosure of or impose limits on beneficial or other ownership of, or interest in, deposited securities, other shares and other securities and may provide for blocking transfer, voting or other rights to enforce such disclosure or limits, you as ADR holders or beneficial owners agree to comply with all such disclosure requirements and ownership limitations and to comply with any reasonable instructions we may provide in respect thereof. We reserve the right to instruct you to deliver your ADSs for cancellation and withdrawal of the deposited securities so as to permit us to deal with you directly as a holder of shares and, by holding an ADS or an interest therein, you and beneficial owners will be agreeing to comply with such instructions.

Books of Depositary

The depositary or its agent will maintain a register for the registration, registration of transfer, combination, and split-up of ADRs, which register shall include the depositary's direct registration system. Registered holders of ADRs may inspect such records at the depositary's office at all reasonable times, but solely for the purpose of communicating with other ADR holders in the interest

of the business of our company or a matter relating to the deposit agreement. Such register may be closed at any time or from time to time, when deemed expedient by the depositary.

The depositary will maintain facilities for the delivery and receipt of ADRs.

Appointment

In the deposit agreement, each registered holder of ADRs and each beneficial owner, upon acceptance of any ADSs or ADRs (or any interest in any of them) issued in accordance with the terms and conditions of the deposit agreement will be deemed for all purposes to:

- be a party to and bound by the terms of the deposit agreement and the applicable ADR or ADRs,
- appoint the depositary its attorney-in-fact, with full power to delegate, to act on its behalf and to take any and all actions contemplated in the deposit agreement and the applicable ADR or ADRs, to adopt any and all procedures necessary to comply with applicable laws and to take such action as the depositary in its sole discretion may deem necessary or appropriate to carry out the purposes of the deposit agreement and the applicable ADR and ADRs, the taking of such actions to be the conclusive determinant of the necessity and appropriateness thereof; and
- acknowledge and agree that (i) nothing in the deposit agreement or any ADR shall give rise to a partnership or joint venture among the parties thereto, nor establish a fiduciary or similar relationship among such parties, (ii) the depositary, its divisions, branches and affiliates, and their respective agents, may from time to time be in the possession of non-public information about us, ADR holders, beneficial owners and/or their respective affiliates, (iii) the depositary and its divisions, branches and affiliates may at any time have multiple banking relationships with us, ADR holders, beneficial owners and/or the affiliates of any of them, (iv) the depositary and its divisions, branches and affiliates may, from time to time, be engaged in transactions in which parties adverse to us, ADR holders, beneficial owners and/or their respective affiliates may have interests, (v) nothing contained in the deposit agreement or any ADR(s) shall (A) preclude the depositary or any of its divisions, branches or affiliates from engaging in any such transactions or establishing or maintaining any such relationships, or (B) obligate the depositary or any of its divisions, branches or affiliates to disclose any such transactions or relationships or to account for any profit made or payment received in any such transactions or relationships, (vi) the depositary shall not be deemed to have knowledge of any information held by any branch, division or affiliate of the depositary and (vii) notice to an ADR holder shall be deemed, for all purposes of the deposit agreement and the ADRs, to constitute notice to any and all beneficial owners of the ADSs evidenced by such ADR holder's ADRs. For all purposes under the deposit agreement and the ADRs, the ADR holders thereof shall be deemed to have all requisite authority to act on behalf of any and all beneficial owners of the ADSs evidenced by such ADRs.

Governing Law

The deposit agreement, the ADSs and the ADRs are governed by and construed in accordance with the internal laws of the State of New York. In the deposit agreement, we have submitted to the non-exclusive jurisdiction of the courts of the State of New York and appointed an agent for service of process on our behalf. Any action based on the deposit agreement, the ADSs, the ADRs or the transactions contemplated therein or thereby may also be instituted by the depositary against us in any competent court in the Cayman Islands, Hong Kong, the People's Republic of China, the United States and/or any other court of competent jurisdiction.

Under the deposit agreement, by holding or owning an ADR or ADS or an interest therein, ADR holders and beneficial owners each irrevocably agree that any legal suit, action or proceeding against or involving ADR holders or beneficial owners brought by us or the depositary, arising out of or based upon the deposit agreement, the ADSs, the ADRs or the transactions contemplated thereby, may be instituted in a state or federal court in New York, New York, irrevocably waive any objection which you may have to the laying of venue of any such proceeding, and irrevocably submit to the non-exclusive jurisdiction of such courts in any such suit, action or proceeding. By holding or owning an ADR or ADS or an interest therein, ADR holders and beneficial owners each also irrevocably agree that any legal suit, action or proceeding against or involving the depositary brought by ADR holders or beneficial owners, arising out of or based upon the deposit agreement, the ADSs, the ADRs or the transactions contemplated thereby, may only be instituted in a state or federal court in New York, New York.

Notwithstanding the foregoing, (i) the depositary may, in its sole discretion, elect to institute any dispute, suit, action, controversy, claim or proceeding directly or indirectly based on, arising out of or relating to the deposit agreement, the ADSs, the ADRs or the transactions contemplated therein or thereby, including without limitation any question regarding its or their existence, validity, interpretation, performance or termination, against any other party or parties to the deposit agreement (including, without limitation, against ADR holders and beneficial owners of interests in ADSs), by having the matter referred to and finally resolved by an arbitration conducted under the terms described below, and (ii) the depositary may in its sole discretion require, by written notice to the relevant party or parties, that any dispute, suit, action, controversy, claim or proceeding against the depositary by any party or parties to the deposit agreement (including, without limitation, by ADR holders and beneficial owners of interests in ADSs) shall be referred to and finally settled by an arbitration conducted under the terms described below. Any such arbitration shall be conducted in the English language either in New York, New York in accordance with the Commercial Arbitration Rules of the American Arbitration Association or in Hong Kong following the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL).

Jury Trial Waiver

In the deposit agreement, each party thereto (including, for the avoidance of doubt, each holder and beneficial owner of, and/or holder of interests in, ADSs or ADRs) irrevocably waives, to the fullest extent permitted by applicable law, any right it may have to a trial by jury in any suit, action or proceeding against the depositary and/or us directly or indirectly arising out of, based on or relating in any way to the shares or other deposited securities, the ADSs or the ADRs, the deposit agreement or any transaction contemplated therein, or the breach thereof (whether based on contract, tort, common law or any other theory), including any claim under the U.S. federal securities laws.

If we or the depositary were to oppose a jury trial demand based on such waiver, the court would determine whether the waiver was enforceable in the facts and circumstances of that case in accordance with applicable state and federal law, including whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. The waiver to right to a jury trial in the deposit

agreement is not intended to be deemed a waiver by any holder or beneficial owner of ADSs of our or the depositary's compliance with the U.S. federal securities laws and the rules and regulations promulgated thereunder.

Jurisdiction

We have agreed with the depositary that the United States District Court for the Southern District of New York (or, if the United States District Court for the Southern District of New York lacks subject matter jurisdiction over a particular dispute, state courts in New York County, New York) shall have jurisdiction to hear and determine any suit, action, or proceeding and to settle any dispute between the depositary bank and us that does not involve any other person or party that may arise out of or relate in any way to the deposit agreement, including claims under the Securities Act or the Exchange Act.

The deposit agreement provides that, by holding an ADS or an interest therein, you irrevocably agree that any legal suit, action or proceeding against or involving us or the depositary arising out of or related in any way to the deposit agreement, the ADSs, or the transactions contemplated thereby or by virtue of ownership thereof, may only be instituted in the United States District Court for the Southern District of New York (or, if the Southern District of New York lacks jurisdiction or such designation of the exclusive forum is, or becomes, invalid, illegal, or unenforceable, in the state courts of New York County, New York), and by holding an ADS or an interest therein you irrevocably waive any objection which you may now or hereafter have to the laying of venue of any such proceeding, and irrevocably submit to the exclusive jurisdiction of such courts in any such suit, action or proceeding. The deposit agreement also provides that the foregoing agreement and waiver shall survive your ownership of ADSs or interests therein.

Exclusive Business Cooperation Agreement

This Exclusive Business Cooperation Agreement (hereinafter referred to as this "**Agreement**") is made and entered into by and between the following parties in Beijing, China on December 21, 2021.

Party A: Zhizhe Sihai (Beijing) Technology Co., Ltd.
Address: 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing

Party B: Beijing Zhizhe Tianxia Technology Co., Ltd.
Address: 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing

Party A and Party B are hereinafter individually referred to as a "**party**", and collectively referred to as "**both parties**".

WHEREAS:

1. Party A, a wholly foreign-owned enterprise incorporated in the People's Republic of China (hereinafter referred to as "**China**"), owns the resources necessary for providing various technical and consultant services. Party A is 100% directly owned by Zhihu Technology (HK) Limited (a company registered under the laws of Hong Kong) (the "**Hong Kong Company**"), and the Hong Kong Company is 100% directly owned by Zhihu Inc. (a company registered under the laws of Cayman) (the "**Cayman Company**").

2. Party B is a limited liability company incorporated in China and mainly engages in: technical development, technology transfer, technology consulting and technical services; computer system services; computer technology research and test development; Internet information service and so on. All the business activities carried out and developed by Party B at present and at any time during the term hereof are hereinafter collectively referred to as the "**Principal Operations**";

3. Party A agrees to provide Party B with the relevant exclusive technical services, technology consulting and other services (as for the specific scope, please refer to the following provisions) by its human resource, technology and information advantages during the term hereof, and Party B agrees to accept such services provided by Party A or the designees thereof (the designees shall be the Cayman Company or a subsidiary wholly controlled by the Cayman Company directly or indirectly, or other entities approved by all the directors of the Cayman Company) (hereinafter referred to as the "**Designees**") in accordance with the terms of this Agreement; and

4. Party A and Party B propose to enter into this Agreement with regard to the business cooperation between Party A and Party B.

Now, therefore, upon consensus, Party A and Party B have reached the following agreements:

1. **Provision of Services by Party A**

1.1 In accordance with the terms and conditions hereof, Party B hereby entrusts Party A to provide Party B with the relevant comprehensive business support, technical services and consultant services as the exclusive service provider of Party B during the term hereof, including all or part of services determined by Party A from time to time and included in the business scope of Party B, including but not limited to: technical services, network support, business consulting, license of intellectual property rights, equipment and lease, market consultation, system integration, product research and development and system maintenance, management consultant services regarding the business operation of Party B, and to the extent permitted by the PRC laws, other consultations and services for the foregoing items provided from time to time at the request of Party B (hereinafter referred to as the "**Services**").

1.2 Party B agrees to accept the consultations and services provided by Party A. Party B further agrees that, without the prior written consent of Party A, during the term hereof, for the matters set forth herein, Party B shall not and shall cause the subsidiaries controlled by Party B not to accept any consultation and/or service provided by any third party, nor cooperate with any third party. Party A may designate other Designees (the Designees may enter into the agreements required in Article 1.4 hereof wholly or partly), to provide Party B with the consultations and/or services hereunder.

1.3 To make sure that Party B satisfies the cash flow requirements in the daily operation and (or) set off any loss arising from its operation, no matter whether Party B has actually incurred any such operating loss, Party A may, at its own discretion, provide Party B with financial support (only to the extent permitted by the PRC laws). Party A may provide Party B with financial support in the form of the loan permitted by PRC Laws (as defined below), and shall otherwise enter into a loan contract therefor.

1.4 Way of service provision

(1) Party A and Party B agree that during the term of this Agreement, both parties may, directly or through their respective related parties mastering the corresponding service abilities and resources, enter into other technical service agreements and consultant service agreements for the service provision by Party A to Party B, specifying the specific contents, methods, personnel and charges of the specific Services.

(2) To perform this Agreement, Party A and Party B agree that during the term hereof, both parties may, directly or through their respective related parties, enter into a license agreement for intellectual property rights (including but not limited to: software, trademarks, patent, know-how), permitting Party B to use the intellectual property rights of Party A at any time for the business needs of Party B.

(3) To perform this Agreement, Party A and Party B agree that during the term hereof, both parties may, directly or through their respective related parties, enter into a lease agreement for devices or plants (if any), permitting Party B to use the devices or plants (if any) of Party A at any time for the business needs of Party B.

(4) To perform this Agreement, Party A and Party B agree that during the term hereof, both parties may, directly or through their respective related parties, enter into other agreements, for the services provided by Party A to Party B.

(5) Party A may, at its discretion, wholly or partly subcontract the Services to be provided to Party B hereunder to any third party mastering the corresponding service abilities and resources.

1.5 For the service provision hereunder, Party A and Party B shall timely communicate and exchange various information related to their business and/or customers.

The Services provided by Party A in this Agreement shall be exclusive. In terms of the services provided by any existing third party to Party B, which are the same or similar to the Services provided by Party A, with the written approval of Party A, Party B may continue to perform the relevant agreement; if Party A disagrees with Party B to continue to perform any relevant agreement, Party B shall forthwith rescind such an agreement with the third party and assume any expense and liability arising from the rescission of the agreement. In terms of other contracts which are being performed by Party B or other legal instruments setting forth the obligations of Party B, Party B shall continue to perform them. Without the written consent of Party A, Party B shall not alter, modify or terminate such contracts or legal instruments.

1.6 To define the rights and obligations of both parties, and cause the forgoing service agreements to be performed actually, both parties agree that to the extent permitted by the PRC laws:

(1) Party B must carry out business by following the opinions or suggestions on the Services provided by Party A in Article 1.1 hereof.

(2) unless Party A agrees that the original directors and supervisors of Party B may remain in office, Party B will appoint the persons recommended by Party A as the directors of Party B as per the PRC laws (including any law, regulation, rule, notice, interpretation or other binding documents issued by any central or local legislative, administrative or judicial department before or after the execution hereof, hereinafter referred to as the "**PRC Laws**"), and to the extent permitted by the PRC Laws, appoint the senior executives recommended by Party A and employed by Party A as the general manager, financial director and other senior executives of Party B, responsible for supervision of the business and operation of Party B; to the extent permitted by the PRC Laws, unless the directors recommended by Party A are retired, resign, are incompetent or die, without the prior written consent of Party A, Party B shall not remove them for any other reason.

(3) Party B agrees to cause its directors and senior executives to exercise the powers granted by the relevant laws and regulations and articles of association as instructed by Party A.

(4) Party A shall set and adjust the organization of Party B, and manage the human resources.

(5) Party A shall be entitled to carry on the business related to the Services in the name of Party B, and Party B shall provide all the necessary support and convenience so that Party A may smoothly carry on the business, including but not limited to the provision of all the necessary powers of attorney required for the Services to Party A.

(6) To the extent permitted by the PRC Laws, Party A shall have the right to regularly and at any time check the account of Party B, and Party B shall timely and accurately charge to an account and provide Party A with the relevant accounting information as required by Party A. During the term hereof, Party B agrees to cooperate with Party A and its shareholders (including direct or indirect shareholders) in an audit (including but not limited to the audit for various related transactions and other kinds of audits) and provide Party A, its shareholders (including direct or indirect shareholders) and/or entrusted auditors with the operation, business, customer, financial, and employee information and materials of Party B and agrees that the shareholders of Party A may disclose such information and materials to satisfy the requirements on securities regulation.

(7) Party B agrees to hand over the relevant certificates and official seals important for the daily operation of Party B, including the business license, organization code certificate (if any), official seal, contract seal, special seal for finance and seal of the legal representative of Party B to the directors, legal representative, general manager, financial director and other senior executives of Party B recommended by Party A and appointed by Party B as per the statutory procedures for keeping.

1.7 Both parties agree that the Services provided by Party A to Party B hereunder shall also apply to the subsidiaries controlled by Party B and Party B shall cause the subsidiaries controlled by Party B to exercise the rights and perform the obligations as per this Agreement.

2. **Calculation and Mode of Payment of the Service Fees, Financial Statements, Audit and Tax**

2.1 In terms of the Services provided by Party A hereunder, without prejudice to the mandatory provisions of the PRC Laws, during the term hereof, Party B and the subsidiaries controlled by Party B shall fully pay the gains of Party B and the subsidiaries controlled by Party B (including the accumulated gains from the previous fiscal year), namely the net profit to Party A as the service fees (hereinafter referred to as the "**Service Fees**") on schedule as required by Party A after the loss of the previous year is recovered (if necessary), the necessary costs, expenses and taxes arising from the corresponding fiscal year are deducted, and the statutory surplus reserve, reserve fund, staff bonus and welfare fund and enterprise development fund which must be withdrawn are withdrawn after a fiscal year is ended; Party A shall have the right to define the foregoing deductible items. The amount of the Service Fees shall be defined by Party A and the following factors (including but not limited to) shall be considered for the calculation and adjustment of the Service Fees. Party A shall have the right to, without the consent of Party B, at its own discretion, adjust the Service Fees: (a) the technical difficulty of the Services provided by Party A and the complexity of the technology consulting and other services provided; (b) the time required for the technicians of Party A to provide such software development, technology consulting and other services; (c) the specific content and business value of the software development, technology consulting and other services provided by Party A; (d) the market value of the same type of services. The foregoing Service Fees shall be remitted or transferred in other forms approved by both parties to the bank account of Party A or the Designees provided by Party A after Party A offers instruction for payment to Party B. Party A may change the instruction for payment from time to time. Both parties agree that in principle, the payment of the foregoing Service Fees shall not embarrass the operation of either party for that year. For the above purpose, to the extent of realizing the foregoing principle, Party A shall have the

right to agree to the deferred payment of Party B, avoiding any financial difficulty of Party B; Party A shall also have the right to make any other adjustment for the Service Fess that Party A considers reasonable, with prior written notice to Party B.

2.2 Party A agrees that, during the term hereof, Party A will enjoy and assume all the economic benefits and risks arising from any business of Party B; in the event of any operating loss or significant economic difficulty of Party B, Party A will provide Party B with its financial support; under one of the foregoing circumstances, nobody other than Party A shall have the right to determine whether Party B may continue its operating and Party B shall unconditionally accept and agree to the foregoing decision of Party A.

2.3 Party B shall formulate various financial statements to the satisfaction of Party A as per the relevant applicable laws, generally recognized accounting standards and business practices.

2.4 With the prior notice of Party A, Party A and/or its designated auditors shall have the right to review the relevant accounts and records of Party B in the main office location of Party B and copy part of the accounts and records required, for the purpose of verifying whether the revenue amounts and statements of Party B are accurate. Party B shall, at the request of Party A, provide the operating, business, customer, financial and employee information and materials of Party B and agree with Party A or its direct or indirect shareholders to disclose or make public the information and materials if necessary.

2.5 Both parties shall respectively assume their taxes arising from the performance hereof.

3. **Intellectual Property Rights, Confidentiality Provisions and Competition Prohibition**

3.1 Party A will enjoy an exclusive title, right and interest for any and all the intellectual property rights arising from or created by the performance of this Agreement by Party A (including but not limited to: software, trademarks, patents, know-how, trade secrets and others) and shall have the right to use such a title, right and interest for free.

3.2 To perform this Agreement, Party A and Party B agree that during the term hereof, both parties may enter into a license agreement for intellectual property rights, permitting Party B to use the intellectual property rights of Party A without any charge for the business needs of Party B, or if necessary, Party A agrees to assign part of intellectual property rights of Party A to Party B or register the part of intellectual property rights in the name of Party B. Nonetheless, at the request of Party A, Party B shall

assign the foregoing intellectual property rights registered in the name of Party B to Party A for free or at the lowest price permitted by laws, and Party B must execute all the appropriate documents, adopt all the appropriate actions, submit all the documents and/or applications, offer all the appropriate assistance, and take any other actions that Party A at its own discretion considers necessary, to grant any title, right and interest of the intellectual property rights to Party A, and/or perfect the protection of the intellectual property rights by Party A. Party A shall have the right to use any intellectual property right registered in the name of Party B without any charge.

3.3 Unless otherwise agreed by Party A, Party A shall, based on the provision of the consultant services to Party B and the subsidiaries controlled by Party B, enjoy exclusive and proprietary rights and interests for all the rights, titles, interests, and intellectual property rights arising from or created during the operation of Party B and the subsidiaries controlled by Party B during the term hereof, including but not limited to all the existing and future copyrights, patents (including various patents for an invention, patents for utility models and design patents), patent applications, trademarks, trade names, brands, software, know-how, trade secrets, all the relevant goodwill, domain names and any other similar right (hereinafter referred to as the "**Rights**"), whether developed by Party A or Party B. Party B shall not claim any right against Party A. Party B shall execute all the documents and take all the actions necessary for Party A to become the owner of the Rights. Party B shall make sure that the Rights are free from any defect and indemnify Party A against any loss arising from the defect (if any).

3.4 Without the written consent of Party A, Party B shall not and shall cause the subsidiaries controlled by Party B not to transfer, assign, mortgage, grant a license for or dispose of the Rights in other manners.

3.5 Party B shall dispose of the Rights as instructed by Party A from time to time, including but not limited to the assignment or license of the Rights to Party A or the Designees without any prejudice to the PRC Laws.

3.6 Both parties acknowledge that any oral or written material exchanged for this Agreement shall be deemed as confidential information. Each party shall keep all such information confidential and shall not disclose any such information to any third party without the written consent of the other party, except in the following cases: (a) such information is known to the public (but it is not disclosed to the public by the party receiving the information); (b) such information is required to be disclosed by applicable law or the rules or regulations of any stock exchange; or (c) such information shall be disclosed by any Party to its legal adviser or financial adviser in connection with the transaction contemplated hereunder, provided that such legal or financial advisor shall also be bound by the

confidentiality obligations similar to those set out in this Article. Any disclosure of any confidential information by any employee or agency engaged by any party shall be deemed a disclosure of such party, and such party shall be legally liable for breach of this Agreement. This provision shall survive the termination of this Agreement for any reason.

3.7 Party B shall not execute any document which has a conflict of interest with any legal instrument executed by Party A and its Designees and being performed or make any relevant promise therefor; Party B shall not cause by act or omission any conflict of interest between Party B and Party A and its shareholders. In the event of such a conflict of interest (Party A shall have the right to unilaterally determine whether such a conflict of interest has occurred), Party B shall timely adopt various measures as far as possible to eliminate the conflict of interest, with the consent of Party A or its Designees. If Party B rejects adopting such measures, Party A shall have the right to exercise the purchase right under the *Exclusive Option Agreement*.

3.8 During the term hereof, all the customer information and other relevant materials regarding the business of Party B and the Services provided by Party A are owned by Party A.

3.9 Both parties agree that Article 3 shall survive any change, rescission or termination of this Agreement.

4. **Representations, Warranties and Undertakings**

4.1 Party A makes the following representations, warranties and undertakings that:

(1) Party A is a wholly foreign-owned enterprise legally incorporated and validly existing in accordance with the PRC Laws, is an independent legal entity, masters a complete and independent legal status and legal capacity, has acquired an appropriate authorization to execute, deliver and perform this Agreement, and is able to independently act as the subject of any litigation.

(2) the execution and performance of this Agreement by Party A are not beyond its legal entity and business operation scope, and Party A has acquired any permit, filing and qualification necessary for providing the Services set forth herein; Party A has taken various necessary corporate actions and acquired various appropriate authorizations and the consent and approval of any relevant third party and government bodies to complete the transaction hereunder, and will not be against the legal or other restrictions binding on or influencing Party A.

(3) after this Agreement is executed and delivered by Party A, this Agreement shall constitute a legal, effective and binding obligation of Party A and be enforced as per the provisions hereof.

4.2 Party B makes the following representations, warranties and undertakings that:

(1) Party B is a company legally incorporated and validly existing in accordance with the PRC Laws, is an independent legal entity, masters a complete and independent legal status and legal capacity, has acquired an appropriate authorization to execute, deliver and perform this Agreement, and is able to independently act as the subject of any litigation.

(2) the acceptance of the Services provided by Party A by Party B will not be against any PRC law; the execution and performance of this Agreement by Party B are not beyond its legal entity and business operation scope; Party B has taken various necessary corporate actions and acquired various appropriate authorizations and the consent, approval or filing of any relevant third party and government bodies to complete the transaction hereunder, and will not be against the legal or other restrictions binding on or influencing Party B.

(3) after this Agreement is executed and delivered by Party B, this Agreement shall constitute a legal, effective and binding obligation of Party B and be enforced as per the provisions hereof.

(4) Party B is not involved in any outstanding litigation, arbitration or other judicial or administrative proceedings impairing the ability of Party B to perform the obligations hereunder, and to its knowledge, no other parties threaten to adopt the foregoing actions. If any litigation, arbitration or other judicial or administrative punishments occur or may occur due to the assets, business or incomes of Party B, Party B shall give notice to Party A immediately after being informed of the litigation, arbitration or other judicial or administrative punishments.

(5) Party B has disclosed all the contracts, government approval documents, permits or other documents binding upon its assets or business which possibly impose a material adverse effect on the ability of Party B to comprehensively perform the obligations hereunder to Party A, and the documents provided by Party B to Party A previously do not have any misrepresentation or omission for any material fact.

(6) Party B shall timely pay the Service Fees to Party A fully as per this Agreement, maintain the permits and qualifications related to the business of Party B and its subsidiaries to be continuously effective during the Services, assist Party A in and provide Party A with sufficient cooperation for all the affairs necessary for Party A to effectively perform the duties and obligations hereunder, actively cooperate in the service provision of Party A and accept the reasonable opinions and suggestions raised by Party A for the business of Party B and its subsidiaries.

(7) Without the prior written consent of Party A, since the date hereof, Party B shall not and shall cause its subsidiaries not to sell, assign, mortgage or dispose of in other manners its legal interests in any asset (excluding the assets necessary for the daily business and valued below RMB1 million (or any other amount otherwise agreed by Party A and Party B)), business, management right or revenue.

(8) Without the prior written consent of Party A, except for the reasonable expenditures arising from the normal operation, Party B shall not pay any amount to a third party in any name, exempt any third party from its debt, borrow or lend a loan from or to any third party, provide a guarantee or warranty, nor allow any third party to set any other security interest on the assets or interests of Party B.

(9) Without the prior written consent of Party A, since the date hereof, Party B shall not and shall cause its subsidiaries not to incur, inherit, provide a guarantee for or allow the existence of any debt (excluding the debts necessary for the daily business and valued below RMB1 million (or any other amount otherwise agreed by Party A and Party B)).

(10) Without the prior written consent of Party A, since the date hereof, Party B shall not and shall cause its subsidiaries not to enter into any material contract (excluding the contracts necessary for the daily business and valued below RMB1 million (or any other amount otherwise agreed by Party A and Party B)) or any other contract, agreement or arrangement in conflict with this Agreement or possibly impairing the interests of Party A hereunder.

(11) Party B shall not cause by act or omission any conflict of interest between Party B and Party A and its shareholders. In the event of such a conflict of interest (Party A shall have the right to unilaterally determine whether such a conflict of interest has occurred), Party B shall timely adopt various measures as far as possible to eliminate the conflict of interest, with the consent of Party A or its Designees.

(12) Without the prior written consent of Party A, since the date hereof, Party B shall not and shall cause its subsidiaries not to merge or combine with any third party to form a joint entity, invest or purchase any third party, be invested, purchased or controlled, increase or decrease its registered capital, or change its corporation form or registered capital structure in other manners, accept the investment or capital increase of the existing shareholders or any third party to Party B, or carry out a liquidation or dissolution.

(13) To the extent permitted by the relevant PRC Laws, Party B will appoint the persons recommended by Party A as its directors; without the prior written consent of Party A or any statutory ground, Party B shall not reject appointing the persons recommended by Party A for any other reason.

(14) Party B shall maintain any and all the government permits, licenses, authorizations and approvals necessary for its business during the term hereof, and shall make sure that all the foregoing government permits, licenses, authorizations and approvals will remain in force, legal and effective during the term hereof. If during the term hereof, any and all the government permits, licenses, authorizations and approvals necessary for the business of Party B are required to be changed and/or supplemented due to any change made to the regulations of the relevant government department, Party B shall implement such a change and/or supplement as per the relevant laws.

(15) Party B shall timely notify Party A of any circumstance which may bring any material adverse effect on the business and operation of Party B, and try its best to prevent the occurrence of the circumstance and/or any further loss.

(16) Without the prior written consent of Party A, Party B and/or its subsidiaries shall not modify their articles of associations, change their Principal Operations, nor significantly adjust their business scope, mode, profit model, marketing strategies, operation policies or customer relationships.

(17) Without the prior written consent of Party A, Party B and/or its subsidiaries shall not enter into an arrangement for partnership or joint venture or profit sharing or other arrangements realizing benefit transfer or profit sharing in the forms of the charge for use, service fee, or consultant fee with any third party.

(18) At the request made by Party A from time to time, Party B shall provide Party A with the information of the business management and financial condition of Party B.

(19) Without the prior written consent of Party A, Party B shall not declare or allocate bonuses, dividends or any other benefit to its shareholders.

(20) Party B shall provide Party A with any technology or other materials which Party A considers necessary or useful for the provision of the Services hereunder, and allow Party A to use the facilities, materials or information of Party B which Party A considers necessary or useful for the provision of the Services hereunder.

(21) Without the prior written consent of Party A, Party B shall not change, replace or remove any director and senior executive.

4.3 Party A and Party B respectively warrant to the other party that both parties will forthwith rescind this Agreement once the PRC Laws permit Party A to at its own discretion directly hold the equity of Party B and Party A and/or its subsidiaries and branches to legally carry on the business of Party B.

5. **Effect and Term**

This Agreement shall come into force with the signatures of both parties. This Agreement will remain in force until it is terminated under the circumstances set forth in Article 6.1 hereof.

6. **Termination**

6.1 This Agreement may be terminated under the following circumstances:

(a) If Party B goes bankrupt, is liquidated, terminated or dissolved legally during the term hereof, this Agreement may be terminated on the day when the bankruptcy, liquidation, termination or legal dissolution comes into force;

(b) This Agreement may be terminated on the day when all the equities and assets of Party B are fully assigned to Party A as per the *Exclusive Option Agreement* entered into by and between Party A and Party B and the existing shareholders of Party B on the date hereof (including the revisions made from time to time);

(c) This Agreement may be terminated on the day when Party A is formally registered as the sole shareholder of Party B once the PRC Laws permit Party A to directly hold all the equities of Party B and Party A and/or its subsidiaries and branches to legally carry on the business of Party B;

(d) This Agreement may be terminated on the day when the written notice sent by Party A to Party B at any time thirty (30) days in advance during the term hereof, requiring to terminate this Agreement, is expired;

(e) This Agreement may be terminated as per Article 7 hereof.

6.2 If Party A terminates this Agreement as per Article 6.1(d), it is not necessary to assume any liability for breach of contract for the unilateral rescission of this Agreement.

6.3 The rights and obligations of both parties under Articles 3, 5, 7, 8, 10, 11 and 16.3 shall survive the termination hereof.

6.4 The termination hereof for any reason shall not exempt either party from all the obligations for paying the amounts due and payable before the termination hereof under this Agreement (including but not limited to the Service Fees), nor from any liability for breach of contract occurring before the termination hereof. The payable Service Fees generated before the termination hereof shall be paid by Party B to Party A within fifteen (15) working days after the termination hereof.

7. Liability for Breach of Contract

7.1 Except as otherwise provided in this Agreement, if Party B (the "**Defaulting Party**") fails to perform any of its obligations under this Agreement or otherwise breaches this Agreement, Party A (the "**Aggrieved Parties**") may: (a) give a written notice to the Defaulting Party stating the nature and extent of the default and requiring the Defaulting Party to remedy it at its own expense within a reasonable period set forth in the notice (the "**Remedy Period**"); and if the Defaulting Party fails to remedy within the Remedy Period, the Aggrieved Parties shall have the right to require the Defaulting Party to bear the liability arising from its default, and to compensate the Aggrieved Parties for all actual economic losses caused thereby, including, but not limited to, attorney's fees, litigation or arbitration fees incurred in connection with litigation or arbitration proceedings relating to such default; in addition, the Aggrieved Parties also have the right to require the Defaulting Party to perform this Agreement compulsorily and the right to request the relevant arbitration organization or court to order the actual performance and/or enforcement of the provisions of this Agreement; (b) terminate this Agreement and require the Defaulting Party to assume all liabilities caused by its default and compensate for all damages incurred as a result; (c) discount, auction or sell the pledged equity interests in accordance with the *Share Pledge Agreement*, entered into by and between Party A and Party B as well as the existing shareholders of Party B on the date hereof (including the revisions

made from time to time), and have the priority to gain compensation from the price of the discount, auction or sale, and require the Defaulting Party to bear all the losses caused thereby. The Aggrieved Parties' exercise of the aforementioned remedies shall not affect their exercise of other remedies in accordance with this Agreement and legal provisions.

7.2 Both parties agree and acknowledge that, unless otherwise specified compulsorily by the PRC Laws, the Aggrieved Parties shall have the right to unilaterally and forthwith terminate this Agreement and require damages from the Defaulting Party, provided that Party B is the Defaulting Party.

8. **Governing Law, Dispute Resolution and Law Change**

8.1 The execution, effectiveness, interpretation, performance, amendment and termination of this Agreement and the resolution of disputes hereunder shall be governed by the laws of the PRC.

8.2 In case of any dispute arising from the interpretation and performance of the provisions hereof, both parties shall resolve the dispute through negotiation in good faith. If both parties fail to reach an agreement on the resolution of such dispute within thirty (30) days after either party requests for resolution through negotiation, either party may submit the dispute to the Beijing Arbitration Commission for arbitration in accordance with its arbitration rules in effect at that time. The arbitration shall be conducted in Beijing and the arbitration language shall be Chinese. The arbitration award shall be final and binding upon both parties. The arbitration tribunal may award compensation or indemnity to Party A for the loss caused to Party A by the default of Party B in respect of Party B's equity interests, assets or property interests, award compulsory relief or order Party B to go bankrupt in respect of relevant business or compulsory asset transfer. After the arbitration award becomes effective, any Party shall have the right to apply to the court having jurisdiction for enforcement of the arbitration award. Where necessary, before making a final decision on the dispute among the Parties, the arbitration organization shall have the right to rule that the Defaulting Party shall immediately stop the default or rule that the Defaulting Party shall not take any action that may further increase the losses suffered by Party A. Courts in Hong Kong, the Cayman Islands or any other court having jurisdiction (including the court at the location of Party B's domicile, or the court at the location of Party B's or Party A's prime assets, which shall be deemed to have jurisdiction) shall also have the power to grant or enforce the award of the arbitration tribunal and to award or enforce interim relief in respect of Party B's equity interests or property interests, and shall have the power to give provisional relief to the party bringing the arbitration while waiting for the formation of the arbitration tribunal or under other appropriate circumstances, such as ruling or deciding that the Defaulting Party shall immediately stop the

default or ruling that the Defaulting Party shall not take any action that may further increase the losses suffered by Party A.

8.3 In the event of any dispute arising from the interpretation and performance of this Agreement or any dispute being arbitrated, both parties hereto shall continue to exercise their respective rights and perform their respective obligations hereunder, except those involved in the dispute.

8.4 At any time following the execution date of this Agreement, in the event of any enactment or change in the PRC laws, regulations or rules, or any change in the interpretation or application of such laws, regulations or rules, the following provisions shall apply: to the extent permitted by the PRC laws, (a) if a change in the law or a newly promulgated regulation is more favorable to any party than the relevant law, regulation, decree or rules in force at the execution date of this Agreement (and the other party(ies) is/are not seriously and adversely affected), both parties shall promptly apply to get the change or the benefits of new regulation and use their best efforts to get the application approved; or (b) if the economic interests of any party hereunder are seriously and adversely affected directly or indirectly as a result of such change in law or newly promulgated regulation, this Agreement shall continue to be implemented in accordance with the original terms. Both parties shall acquire an exemption for compliance with the change or regulations through all the legal channels. If the adverse impact on the economic interests of any party cannot be resolved in accordance with this Agreement, after the affected party notifies the other party, both parties shall promptly negotiate and make all necessary amendments to this Agreement to maintain the economic interests of the affected party hereunder.

9. **Force Majeure**

9.1 "**Force Majeure**" shall refer to any unforeseeable, unavoidable, and insurmountable event that causes a Party hereto to fail in part or in whole to perform this Agreement. Such events include but are not limited to, earthquakes, typhoons, floods, inundation, wars, strikes, riots, government action, changes in a law or regulation or its application.

9.2 In the event of a Force Majeure event, the obligations of any party affected by the Force Majeure hereunder shall be automatically suspended during the delay caused by the Force Majeure event, and its performance period shall be automatically extended. The extended period shall be the period of suspension for which the party shall not be penalized or held liable as a result. Upon the occurrence of a Force Majeure event, both parties shall consult immediately to seek a just solution and use all reasonable efforts to minimize the effects of the Force Majeure.

10. **Indemnification**

Party B shall indemnify Party A against and hold Party A harmless from any loss, damages, liability or expense arising from any litigation, claim or other requirements against Party A caused by the consultations and services provided by Party A at the request of Party B, unless the loss, damages, liability or expense is caused by any gross negligence or deliberate misconduct of Party A.

11. **Notice**

11.1 All notices and other communications required or permitted hereunder shall be delivered by hand, by postage prepaid registered mail, or by commercial courier service to the address of such party listed in Annex I. The date on which such notice is deemed to have been effectively served shall be determined in the following ways:

(1) If the notice is delivered by hand or by courier service, it shall be deemed to have been effectively served at the designated pick-up address on the date of delivery or rejection.

(2) If the notice is sent by postage prepaid registered mail, it shall be deemed to have been effectively served on the fifteenth (15th) day following the date marked on the receipt of the registered mail.

11.2 Either party may change the address to which notice is to be served at any time under this article by giving notice to the other party.

12. **Assignment**

12.1 Without the prior written consent of Party A, Party B shall not assign its rights and obligations hereunder to any third party.

12.2 Party B agrees that Party A may assign the rights and obligations hereunder to any Designee with prior written notice to Party B, but without the consent of Party B.

13. **Severability**

If one or more provisions hereof are held to be invalid, illegal or unenforceable in any respect under any law or regulation, the validity, legality or enforceability of the remaining provisions hereof shall not be affected or impaired in any respect. Both parties shall, through sincere negotiation, seek to replace such invalid, illegal or unenforceable provisions with the provisions that are valid to the maximum extent desired by both parties and are permitted by laws. The economic benefits resulting from such valid provisions shall, to the extent possible, be similar to those resulting from such invalid, illegal or unenforceable provisions.

14. **Modification and Supplement**

14.1 Any modification or supplement to this Agreement shall be made in writing. Any modification agreement or supplementary agreement signed by both parties in connection with this Agreement shall be an integral part of this Agreement and shall have the same legal effect as this Agreement.

14.2 In the event of any amendments to this Agreement proposed by the Stock Exchange of Hong Kong Limited or other regulatory authorities or any amendments of this Agreement and arrangements thereof in accordance with the provisions of the listing rules or other related regulations, rules, codes and guidance of the Stock Exchange of Hong Kong Limited in connection with this Agreement, both parties shall amend this Agreement reasonably accordingly.

15. **Text**

This Agreement is made in two (2) copies, with each signatory holding one (1) copy. These two copies shall have the same legal effect.

16. **Miscellaneous**

16.1 This Agreement shall constitute the entire agreement between both parties with respect to the subject matter hereof, except as amended, supplemented or modified in writing after execution hereof, and shall supersede all prior oral and written negotiations, representations and contracts with respect to the subject matter hereof.

16.2 This Agreement shall be binding on the respective successors of both parties and the permitted transferees of such parties.

16.3 Any party may waive its rights under this Agreement, provided that such waiver must be made in writing and signed by both parties. A waiver by any party in respect of a default by another party under a certain circumstance shall not be deemed to be a waiver by such party in respect of a similar default in another circumstance.

16.4 The headings in this Agreement are for convenience of reading only and shall not be used to interpret, explain or otherwise affect the meaning of the provisions of this Agreement.

[The remainder of the page is intentionally left blank]

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Business Cooperation Agreement*)

IN WITNESS WHEREOF, this Exclusive Business Cooperation Agreement has been executed by both parties as of the date and in the place first above written.

Zhizhe Sihai (Beijing) Technology Co., Ltd.
(/s/ Seal)

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Business Cooperation Agreement*)

IN WITNESS WHEREOF, this Exclusive Business Cooperation Agreement has been executed by both parties as of the date and in the place first above written.

Beijing Zhizhe Tianxia Technology Co., Ltd.
(/s/ Seal)

Exhibit 4.4

Annex I

For the purpose of the notice, the contact details of both parties are as follows:

Party A:
Address: 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
To: Yuan Zhou

Party B:
Address: 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
To: Yuan Zhou

Shareholders' Rights Entrustment Agreement

This Shareholders' Rights Entrustment Agreement (hereinafter referred to as this "**Agreement**") is made and entered into by and between the following parties in Beijing, China on December 21, 2021:

Party A: **Zhizhe Sihai (Beijing) Technology Co., Ltd.,** a limited liability company established and existing in accordance with the PRC laws, with its address at 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing.

Party B: **Yuan Zhou,** ID No.: **********;

Dahai Li, ID No.: **********;

Party C: **Beijing Zhizhe Tianxia Technology Co., Ltd.,** a limited liability company established and existing in accordance with the PRC laws, with its address at 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing.

Whereas:

1. Party B, as the current shareholders of Party C, collectively holds 100% of the equity interests of Party C (hereinafter referred to as "**Party C's Equity**") as of the date of signing this Agreement. Party A is a wholly foreign-owned enterprise registered in Beijing, China;

2. Party A is 100% directly owned by Zhihu Technology (HK) Limited (a company registered under Hong Kong laws) (the "**Hong Kong Company**"), while the Hong Kong Company is 100% directly owned by Zhihu Inc. (a company registered under the laws of Cayman Islands) (the "**Cayman Islands Company**").

3. On the signing date of this Agreement, the parties signed an *Exclusive Option Agreement* (including its amendments from time to time, hereinafter referred to as the "**Exclusive Option Agreement**"). If Party A makes a purchase request on its independent judgment, as permitted by the PRC laws and in accordance with the corresponding conditions, (a) Party B shall, as requested, transfer all or part of its equity in Party C to Party A and/or its designated party (hereinafter referred to as the "**Designee**", which shall be the Cayman Islands Company or its directly or indirectly wholly-owned subsidiary) according to its requirements; (b) Party C shall transfer all or part of its assets to Party A and/or the Designee according to its requirements;

4. The parties signed a *Share Pledge Agreement* (including its amendments from time to time, hereinafter referred to as the "**Share Pledge Agreement**") on the signing date of this Agreement, according to which Party B pledges all its equity in Party C (i.e., Party C's Equity) to Party A to provide pledge guarantee for the contractual obligations and secured debts mentioned in the Share Pledge Agreement;

5. Party A and Party C signed an *Exclusive Business Cooperation Agreement* (including its amendments from time to time, hereinafter referred to as the "**Business Cooperation Agreement**") on the date of signing this Agreement, according to which Party A provides relevant exclusive technical services, technical consultation and other services to Party C;

6. In order to ensure the performance of the Business Cooperation Agreement and the legitimate rights and interests of Party A, the parties intend to sign this Agreement on matters such as entrusting the voting rights of shareholders by Party B to Party A. Party B intends to entrust the individuals or entities designated by Party A to exercise its entrustment rights in Party C (as defined below), and Party A also intends to designate such individuals or entities to accept the entrustment.

Now, therefore, through amicable negotiation, the parties have reached the following agreements:

1. Entrustment rights

1.1 Party B severally but not jointly, unconditionally and irrevocably promises that it shall sign the Power of Attorney (hereinafter referred to as the "**Power of Attorney**") with the content and format as Annex I on the date of signing this Agreement, and authorize Party A or, as required by Party A, the directors selected by the board of directors of its overseas parent company designated by Party A and the liquidator or other successors (hereinafter referred to as the "**Trustee**") acting for these directors to exercise their rights as shareholders of Party C, who enjoy all shareholders' rights and exercise corresponding shareholders' rights in all matters of Party C on behalf of Party B according to Party C's then effective articles of association and transaction agreements (as defined in the Share Pledge Agreement) and applicable laws and regulations, but such Trustee shall not be Party B itself or other shareholders of Party C. Such shareholder rights (hereinafter referred to as the "**entrustment rights**") include but are not limited to:

1) Exercising all shareholders' rights and shareholders' voting rights enjoyed by Party B in accordance with the PRC laws (including any laws,

regulations, rules, notices, interpretations or other binding documents issued by any central or local legislative, administrative or judicial department before or after the signing of this Agreement, hereinafter referred to as the "**PRC laws**") and transaction agreements (as defined in the Share Pledge Agreement) and the articles of association of Party C (including any other shareholders' voting rights stipulated after the amendment of the articles of association), including but not limited to the right to dividends, sell, transfer, pledge or dispose of part or all of Party C's Equity (subject to the terms of the transaction agreements (as defined in the Share Pledge Agreement));

2) Acting as the legal representative of Party C, or the chairman (if applicable), director or manager of Party C, and/or designating, appointing or replacing the legal representative, chairman (if applicable), directors, supervisors, chief executive officer (or manager) and other senior executives of Party C on behalf of Party B according to the specific terms in the generation of legal representative recorded in the articles of association of Party C, and bringing a lawsuit or taking other legal actions against the directors or senior executives, when the behavior of the directors, supervisors or senior executives of Party C harms the interests of Party C or its shareholders;

3) Signing documents for exercising shareholders' rights related to Party C's Equity (but not including signing the transaction agreements (as defined in the Share Pledge Agreement) or any amendment thereof) and filing documents in the relevant company registry;

4) Putting forward suggestions, convening and attending the shareholders' meeting, and signing any relevant shareholders' meeting minutes, resolutions or other legal documents;

5) Making decisions on major issues related to Party C's business, and reviewing and approving all relevant reports and plans;

6) Representing the registered shareholders of Party C to exercise their voting rights in case of bankruptcy, liquidation, dissolution or termination of Party C;

7) Obtaining the remaining assets after Party C's bankruptcy, liquidation, dissolution or termination;

8) Deciding to submit and register documents related to Party C to government departments;

9) Exercising any shareholder's rights to deal with Party C's assets, including but not limited to the right to manage its asset-related business, the right to access its revenue and the right to acquire its assets; and

10) Other rights of any shareholder as stipulated by other applicable PRC laws and regulations and the articles of association of Party C (and its amendments from time to time).

1.2 Without limiting the generality of the rights granted under this Agreement, Party A shall have the rights and authorization under this Agreement to sign the transfer contract agreed and defined in the Exclusive Option Agreement on behalf of Party B (when Party B is required to be a party to the contract), and perform the terms of the Share Pledge Agreement and the Exclusive Option Agreement signed by Party B on the same day as this Agreement.

1.3 Party B shall not abuse its rights as a shareholder of Party C to harm the interests of Party C. If Party B abuses the rights as a shareholder, Party A has the right to exercise the option under the Exclusive Option Agreement.

1.4 Party B hereby promises that, in case of bankruptcy, liquidation, dissolution or termination of Party C, all assets including Party C's Equity obtained by Party B after bankruptcy, liquidation, dissolution or termination of Party C will be transferred to Party A free of charge or at the lowest price allowed by PRC laws at that time, or all assets, including equity of Party C, will be disposed of by the liquidator at that time to protect the interests of Party A's direct or indirect shareholders and/or creditors.

1.5 With the consent of Party B, Party A has the right to sub-entrust other parties to handle matters under Article 1.1. The Trustee and/or Party A shall exercise the entrustment rights just as Party B personally exercises the shareholders' rights. The premise of authorization and entrustment of the entrustment rights is that the Trustee is a Chinese citizen appointed by Party A's members of the board of directors (or executive directors) or the board of directors (or executive directors) through consultation, and Party B agrees with the above authorization and entrustment. When Party A sends a written notice to Party B to replace the Trustee, Party B shall immediately designate other Designees or Trustees appointed by Party A that meet the conditions agreed in this Agreement to exercise the above entrustment rights, and sign the Power of Attorney with the content and format as Annex I. Once the new Power of Attorney is made, it will replace the original Power of Attorney. At the same time, Party B shall also announce or explain that the original Power of Attorney has been abolished by sending a notice to relevant persons or other forms of publicity. In addition, Party B shall not revoke the entrustment and authorization made to the Trustee and/or Party A.

1.6 Subject to other articles of this Agreement (including but not limited to Article 12.1), Party B shall confirm and recognize any legal consequences arising from the Trustee and/or Party A's exercise of the above-mentioned entrustment rights and assume corresponding legal responsibilities.

1.7 The Trustee and/or Party A's exercise of all shareholders' rights and/or entrustment rights related to Party C's Equity shall be regarded as Party B's own behavior, and all signed documents about the exercise of shareholders' rights related to Party C's Equity (but not including the transaction agreements (as defined in the Share Pledge Agreement) or any amendment thereof) shall be

regarded as signed by Party B. The Trustee and/or Party A can act according to their own intention during the above-mentioned behaviors, without prior consent of Party B. Party B hereby acknowledges and approves the acts and/or documents of the Trustee and/or Party A.

1.8 During the validity period of this Agreement, Party B agrees and confirms that without the prior written consent of Party A, it is not allowed to exercise all shareholder's rights related to Party C's Equity that have been authorized to Party A and/or the Trustee in this Agreement.

1.9 In case of death, incapacity, marriage, divorce, bankruptcy or other events of Party B that may affect Party B's exercise of Party C's Equity held by Party B, Party B's successors (including spouses, children, parents, brothers and sisters, grandparents and maternal grandparents) or shareholders or assignees of Party C's Equity at that time will be regarded as the signatories of this Agreement, and inherit/assume all rights and obligations of Party B under this Agreement.

2. Right to information

2.1 For the purpose of exercising the entrustment rights under this Agreement, Party A and/or the Trustee have the right to know all kinds of relevant information of Party C's company operation, business, customers, finance, employees and so on, and consult relevant information of Party C, and Party C shall fully cooperate with it.

3. Exercise of entrustment rights

3.1 Party B will provide full assistance to the Trustee and/or Party A in exercising the entrustment rights, such as timely signing relevant legal documents, including but not limited to the Power of Attorney with detailed scope of authorization (if required by relevant laws, regulations or articles of association and/or other normative documents) when necessary (for example, to meet the requirements of documents submission to government departments for approval, registration and filing, or the requirements of laws, regulations, normative documents, articles of association or other government departments' instructions or orders).

3.2 Party B irrevocably agrees that when Party A puts forward a written request related to the exercise of entrustment rights, Party B shall take actions in accordance with the provisions within three (3) days after receiving the written request to meet Party A's requirements on the exercise of entrustment rights.

3.3 If at any time during the term of this Agreement, the grant or exercise of entrustment rights under this Agreement cannot be realized for any reason

(except for the default by Party B or Party C), the parties shall immediately seek the closest alternatives to the unfulfillable provisions, and sign supplementary agreements to modify or adjust the terms of this Agreement when necessary, so as to ensure the realization of the purpose of this Agreement.

4. Exemption and compensation

4.1 The parties confirm that under no circumstances shall Party A be required to assume any responsibility or make any financial or other compensation to other parties or any third party for its exercise and/or its designated Trustee's exercise of the entrustment rights under this Agreement.

4.2 Subject to other provisions of this Agreement (including but not limited to Article 12.1), Party B and Party C agree to compensate and prevent all losses that Party A has suffered or may suffer as a result of its exercise and/or its designated Trustee's exercise of entrustment rights, including but not limited to any losses caused by any third party's lawsuit, recovery, arbitration, claim or administrative investigation and punishment by government agencies. However, if the losses are caused by intentional or serious negligence of Party A and/or the Trustee, such losses are not included in the compensation.

5. Representations and warranties

5.1 Party B hereby severally but not jointly makes the following representations and warranties:

5.1.1 Party B has complete and independent legal status and legal capacity, has been duly authorized to sign, deliver and perform this Agreement, and can independently be the litigation subject as a party.

5.1.2 Party B has the full right and authorization to sign and deliver this Agreement and all other documents related to the transactions described in this Agreement that Party B will sign, and it has the full right and authorization to complete the transactions described in this Agreement. This Agreement is legally and properly signed and delivered by Party B. This Agreement constitutes a legal and binding obligation for Party B and can be enforced according to the terms of this Agreement.

5.1.3 Upon the effectiveness of this Agreement, Party B is the legal shareholder of Party C registered by the industrial and commercial authorities and recorded in the register of shareholders. Except for the

rights set in this Agreement, the Share Pledge Agreement, the Exclusive Option Agreement and the transaction agreements (as defined in the Share Pledge Agreement), there is no third party right in the entrustment rights. According to this Agreement, Party A and/or the Trustee can fully exercise the entrustment rights according to the then effective articles of association of Party C.

5.1.4 The signing, delivery and performance of this Agreement and the completion of the transactions under this Agreement do not violate the provisions of PRC laws, and do not violate any binding agreements, contracts or other arrangements that it has reached with any third party.

5.2 Party A and Party C hereby represent and warrant as follows:

5.2.1 Party A and Party C are limited liability companies duly registered and legally existing according to the laws of their place of registration, with independent legal personality, have complete and independent legal status and legal capacity to sign, deliver and perform this Agreement, and can independently be the litigation subject as a party.

5.2.2 Party A and Party C have full rights and authorization within the company to sign and deliver this Agreement and all other documents related to the transactions described in this Agreement which they will enter into, and they have full rights and authorization to complete the transactions described in this Agreement.

5.3 Party C further represents and warrants as follows:

5.3.1 Party B is the legal shareholder of Party C when this Agreement comes into effect. Except for the rights set in this Agreement, the Share Pledge Agreement, the Exclusive Option Agreement and transaction agreements (as defined in the Share Pledge Agreement), there is no third party right in the entrustment rights. According to this Agreement, Party A and/or the Trustee can fully exercise the entrustment rights according to the then effective articles of association of Party C.

5.3.2 The signing, delivery and performance of this Agreement and the completion of the transactions under this Agreement do not violate the provisions of PRC laws, or any of its articles of association, rules and bylaws or other charter documents, and do not violate any binding agreements, contracts or other arrangements that it has reached with any third party.

6. Assignment

Party A has the right to decide on its own to delegate or assign this Agreement and/or its rights related to this Agreement to other Designees without prior notice to Party B or Party C, or the consent of Party B or Party C.

7. Term of agreement

7.1 On the premise that Party B or Party B's successor or transferee of Party C's Equity at that time is a shareholder of Party C, this Agreement will come into force, be irrevocable and continue to be valid as of the date of signing, unless Party A gives a written instruction to the contrary, or terminates this Agreement in advance according to Article 7.2 or Article 8 of this Agreement. Once Party A notifies Party B in writing to terminate this Agreement in whole or in part or change the Trustee, Party B will immediately withdraw the entrustment and authorization made to Party A and the Trustee here, and immediately sign the Power of Attorney with the same format as the Power of Attorney in Annex I of this Agreement under the written instruction of Party A, and make authorization and entrustment with the same content as this Agreement to other persons or entities nominated by Party A.

7.2 This Agreement will automatically terminate under the following circumstances: (a) When PRC law allows Party A or the Designee to directly hold the equity of Party C and legally engage in the business of Party C, and Party A or the Designee is officially registered as the sole shareholder of Party C; or (b) Party A or the Designee purchases all the assets of Party C according to the Exclusive Option Agreement, and uses the assets of Party C to legally engage in the business of Party C.

8. Default liability

8.1 Subject to other articles of this Agreement (including but not limited to Article 12.1), the parties agree and confirm that if either party (hereinafter referred to as the "**Defaulting Party**") violates any agreement under this Agreement, or fails to perform or delays in performing any obligation under this Agreement, it will constitute a default (hereinafter referred to as "**default**"), and any one of the other non-defaulting parties (hereinafter referred to as "**Observant Party**") has the right to require the Defaulting Party to make corrections or take remedial measures within a reasonable period. If the Defaulting Party fails to make corrections or take remedial measures within a reasonable period of time or within ten (10) days after the other party's notification in writing to the Defaulting Party for corrections, then

8.1.1 The Observant Party has the right to unilaterally and immediately terminate this Agreement and ask the Defaulting Party to pay damages when Party B or Party C is the Defaulting Party;

8.1.2 The Observant Party shall exempt Party A from its obligation of compensation for damages, when Party A is the Defaulting Party, and have no right to terminate or dissolve this Agreement under any circumstances, unless otherwise provided by law.

8.2 Notwithstanding other provisions of this Agreement, the validity of the provisions of Article 8 will not be affected by the termination of this Agreement.

9. Confidentiality

The parties acknowledge that any oral or written information exchanged by the parties in connection with this Agreement is confidential. Each party shall keep all such information confidential, and shall not disclose any relevant information to any third party without the written consent of other parties, except for the following situations: (a) such information that is known to the public (but it is not disclosed to the public by the receiving party); (b) information required to be disclosed by applicable laws or rules or regulations of any stock exchange; or (c) the information that any party needs to disclose to its legal adviser or financial adviser on the transactions stipulated in this Agreement, and the legal adviser or financial adviser is also bound by the similar confidentiality obligation in this article. The disclosure of any confidential information by the staff or institutions employed by any party shall be regarded as the disclosure of such confidential information by such party, and such party shall be legally liable for the violation of this Agreement. This article shall continue to be valid regardless of the termination of this Agreement for any reason.

10. Governing laws and dispute resolution

10.1 The signing, entry into force, interpretation, performance, modification and termination of this Agreement and the resolution of disputes under this Agreement shall be governed by PRC laws.

10.2 In case of any dispute arising from the interpretation and performance of this Agreement, the parties shall first resolve the dispute through friendly negotiation. If the parties fail to reach an agreement on the resolution of such disputes within thirty (30) days after a party requests the other parties to resolve the disputes through negotiation, any party may submit the relevant disputes to Beijing Arbitration Commission for arbitration and resolution according to its then effective arbitration rules. The arbitration shall be conducted in Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding on the parties. After the arbitration award comes into effect, any party has the right to apply to the court with jurisdiction to enforce the arbitration award. The arbitration tribunal may rule that Party C's equity interests, assets or properties shall be used to compensate or offset the losses caused to Party A due to other parties'

breach of this Agreement, award compulsory relief for relevant business or compulsory asset transfer, or order Party C to go bankrupt. If necessary, the arbitration institution shall have the right to decide that the Defaulting Party immediately stops the breach of agreement or shall not engage in any behavior that may further expand the losses suffered by Party A before making a final decision on the disputes between the parties. Courts in Hong Kong, Cayman Islands or other courts with jurisdiction (including the court where Party C resides, or the court where Party A or Party C's main assets are located shall be deemed to have jurisdiction) also have the right to award or enforce the award of the arbitration tribunal, and have the right to award or enforce temporary relief for Party C's equity interests or properties, and also have the right to make a ruling or judgment to give temporary relief to the party who initiates the arbitration while waiting for the formation of the arbitration tribunal or under other appropriate circumstances, such as ruling or judging that the Defaulting Party immediately stops the breach of agreement, or ruling that the Defaulting Party shall not conduct any behavior that may further expand the losses suffered by Party A.

10.3 In case of any dispute arising from the interpretation and performance of this Agreement or when any dispute is being arbitrated, the parties shall continue to exercise their respective rights and perform their respective obligations under this Agreement, except for the disputed matters.

10.4 After the signing date of this Agreement, if there is any promulgation or change of any Chinese laws, regulations or rules at any time, or the change of interpretation or application of such laws, regulations or rules, the following agreements shall apply: To the extent permitted by PRC laws, (a) if the change of laws or newly promulgated regulations are more favorable to a party than the relevant laws, regulations, decrees or regulations in force on the date of signing this Agreement (while the other parties are not seriously adversely affected), each party shall apply for the benefits brought by the changed or new regulations in time and try its best to get the application approved; or (b) if the economic interests of either party under this Agreement are seriously adversely affected directly or indirectly due to the above-mentioned legal changes or newly promulgated regulations, this Agreement shall continue to be implemented in accordance with the original terms. Each party shall use all legal means to obtain the exemption from complying with the change or regulation. If the adverse impact on the economic interests of either party cannot be solved according to the provisions of this Agreement, after the affected party notifies other parties, the parties shall negotiate in time and make all necessary amendments to this Agreement to maintain the economic interests of the affected party under this Agreement.

11. Notice

11.1 All notices and other communications required or allowed to be sent

according to this Agreement shall be delivered by special person or sent to the address of such party listed in Annex II by registered mail with prepaid postage and commercial express service. The date when such notices are deemed to be effectively served shall be determined as follows:

11.1.1 If the notice is delivered by special person or express delivery service, it shall be deemed to have been effectively served at the designated receiving address of the notice on the date of delivery or rejection.

11.1.2 If the notice is sent by registered mail with prepaid postage, it shall be deemed to have been effectively served on the fifteenth (15th) day after the date on the receipt of the registered mail.

11.2 Each party may change the receiving address of its notice at any time by sending a notice to other parties according to this article.

12. Miscellaneous

12.1 Despite any other provisions in this Agreement or other transaction agreements (as defined in the Share Pledge Agreement) or any other documents or laws, Party B's obligations and responsibilities under this Agreement are several but not joint. This article shall continue to be valid regardless of the termination of this Agreement for any reason.

12.2 Any amendment, change and supplement to this Agreement shall be made in writing and shall come into effect after being signed or sealed by the parties and the government registration procedures (if applicable) are completed.

12.3 Party A can decide at its own discretion to unconditionally terminate this Agreement at any time by sending a written notice to Party B and Party C unilaterally without assuming any responsibility. Party B and Party C have no right to unilaterally terminate this Agreement.

12.4 If the Stock Exchange of Hong Kong Limited or other regulatory agencies put forward any amendment opinions to this Agreement, or if there are any changes related to this Agreement in the securities listing rules or related requirements of the Stock Exchange of Hong Kong Limited, the parties shall make reasonable amendments to this Agreement accordingly.

12.5 All fees and actual expenses related to this Agreement, including but not limited to attorney fees, production costs, stamp duty and any other taxes and expenses, shall be borne by Party C.

12.6 This Agreement is made in four (4) copies, with one (1) copy for each signatory, all of which have the same legal effect.

[The remainder of this page is intentionally left blank.]

(This page is intentionally left blank, and serves as the signature page for the *Shareholders' Rights Entrustment Agreement*)

In witness whereof, this Shareholders' Rights Entrustment Agreement is signed by the parties as of the date and in the place first above written.

Zhizhe Sihai (Beijing) Technology Co., Ltd.
(Seal)

/s/ Yuan Zhou

Exhibit 4.5

(This page is intentionally left blank, and serves as the signature page for the *Shareholders' Rights Entrustment Agreement*)

In witness whereof, this Shareholders' Rights Entrustment Agreement is signed by the parties as of the date and in the place first above written.

Beijing Zhizhe Tianxia Technology Co., Ltd.
(Seal)

/s/ Dahai Li

(This page is intentionally left blank, and serves as the signature page for the *Shareholders' Rights Entrustment Agreement*)

In witness whereof, this Shareholders' Rights Entrustment Agreement is signed by the parties as of the date and in the place first above written.

Yuan Zhou

Signature: /s/ Yuan Zhou

(This page is intentionally left blank, and serves as the signature page for the *Shareholders' Rights Entrustment Agreement*)

In witness whereof, this Shareholders' Rights Entrustment Agreement is signed by the parties as of the date and in the place first above written.

Dahai Li

Signature: /s/ Dahai Li

Exhibit 4.5

Annex I: Power of Attorney

Date:__, 2021

___ (the "**Shareholder**") is registered to hold ___% equity of Beijing Zhizhe Tianxia Technology Co., Ltd. (the "**Company**"). The Shareholder hereby irrevocably and exclusively authorizes Zhizhe Sihai (Beijing) Technology Co., Ltd. (the "**Trustee**") and its appointed representative trustee to exercise the entrustment rights defined in the Shareholders' Rights Entrustment Agreement (the "**Agreement**") signed by the Shareholder, the Company and the Trustee on __, 2021.

This Power of Attorney is effective at the same time as the Agreement, and is irrevocable.

Shareholder: __
Signature: _____

Exhibit 4.5

Annex II

For the purpose of notification, the contact details of each party are as follows:

Party A:

Address: 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
Recipient: Yuan Zhou

Party B:

Yuan Zhou
Address: **********

Dahai Li
Address: **********

Party C:

Address: 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
Recipient: Yuan Zhou

Exhibit 4.5

Power of Attorney

Date: December 21, 2021

Mr. Yuan Zhou (the "**Shareholder**") is registered to hold 99.31% equity of Beijing Zhizhe Tianxia Technology Co., Ltd. (the "**Company**"). The shareholder hereby irrevocably and exclusively authorizes Zhizhe Sihai (Beijing) Technology Co., Ltd. (the "**Trustee**") and its appointed representative trustee to exercise the entrustment rights defined in the Shareholders' Rights Entrustment Agreement (the "**Agreement**") signed by the Shareholder, the Company and the Trustee on December 21, 2021.

This Power of Attorney is effective at the same time as the Agreement and is irrevocable.

Shareholder: Yuan Zhou
Signature: /s/ Yuan Zhou

Exhibit 4.5

Power of Attorney

Date: December 21, 2021

Mr. Dahai Li (the "**Shareholder**") is registered to hold 0.69% equity of Beijing Zhizhe Tianxia Technology Co., Ltd. (the "**Company**"). The shareholder hereby irrevocably and exclusively authorizes Zhizhe Sihai (Beijing) Technology Co., Ltd. (the "**Trustee**") and its appointed representative trustee to exercise the entrustment rights defined in the Shareholders' Rights Entrustment Agreement (the "**Agreement**") signed by the Shareholder, the Company and the Trustee on December 21, 2021.

This Power of Attorney is effective at the same time as the Agreement and is irrevocable.

Shareholder: Dahai Li
Signature: /s/ Dahai Li

Share Pledge Agreement

This Share Pledge Agreement (this "**Agreement**") is made and entered into by and between the following parties in Beijing, China on December 21, 2021:

Party A: **Zhizhe Sihai (Beijing) Technology Co., Ltd.,** a limited liability company established and validly existing in accordance with the PRC laws, with its registered address at 3-011, Workshop 1, 3F, Building 1, A5 Xueyuan Road, Haidian District, Beijing (the "**Pledgee**").

Party B: **Yuan Zhou**, ID No.: **********;

Dahai Li, ID No.: **********;

(All Party B hereinafter collectively referred to as the "**Pledgor**")

Party C: **Beijing Zhizhe Tianxia Technology Co., Ltd.**, a limited liability company established and validly existing in accordance with the PRC laws, with its registered address at 3-010, Workshop 1, 3F, Building 1, A5 Xueyuan Road, Haidian District, Beijing.

In this Agreement, the Pledgee, the Pledgor and Party C are hereinafter referred to as a "**Party**" respectively and as the "**Parties**" collectively.

Whereas:

1. The Pledgor is shareholder of Party C on the signing date of this Agreement, and collectively holds 100% equity of Party C, of which Yuan Zhou holds 99.31% equity of Party C (representing RMB 1,680,200 in the registered capital) and Dahai Li holds 0.69% equity of Party C (representing RMB 11,730 in the registered capital). Party C is a limited liability company registered in Beijing, China;

2. The Pledgee is 100% directly held by Zhihu Technology (HK) Limited (a company registered under the laws of Hong Kong) (the "**Hong Kong Company**"), which is 100% directly held by Zhihu Inc. (a company registered under the laws of Cayman Islands) (the "**Cayman Islands Company**").

3. The Pledgee is a wholly foreign-owned enterprise registered in Beijing, China. The Pledgee and Party C signed an *Exclusive Business Cooperation Agreement* (including its amendments from time to time, hereinafter referred to as the "**Business Cooperation Agreement**") on the date of signing this Agreement, according to which the Pledgee provides relevant exclusive technical services, technical consultation and other services to Party C;

4. The Parties hereto signed an *Exclusive Option Agreement* (including its amendments from time to time, hereinafter referred to as the "**Exclusive Option Agreement**") on the date of signing this Agreement. If the Pledgee decides to

make a purchase request at its own discretion under the conditions permitted by PRC laws and corresponding conditions, (a) the Pledgor shall transfer all or part of its equity in Party C to the Pledgee and/or its designated party (hereinafter referred to as the "**Designee**", which needs to be the Cayman Islands Company or its direct or indirect wholly-owned subsidiary) according to its requirements; (b) Party C shall transfer all or part of its assets to the Pledgee and/or the Designee according to its requirements;

5. On the date of signing this Agreement, the Parties signed an *Shareholders' Rights Entrustment Agreement* (including its amendments from time to time, hereinafter referred to as "Shareholders' Rights Entrustment Agreement"), and the Pledgor has irrevocably and fully entrusted the person designated by the Pledgee at that time to exercise all the shareholders' entrustment and voting rights of Party C on behalf of the Pledgor;

6. As a guarantee for the Pledgor to fulfill its contractual obligations (as defined below) and pay off the secured obligations (as defined below), each Party intends to sign this Agreement on the equity pledge provided by Party B to Party A. The Pledgor severally but not jointly pledges all its equity in Party C to the Pledgee to provide pledge guarantee for these obligations and debts, and Party C agrees to such equity pledge arrangements.

1. Definition

Unless otherwise provided herein, the terms below shall be explained as follows:

1.1 "**pledge right**" shall refer to the secured interest granted by the Pledgor to the Pledgee according to Article 2, that is, the Pledgee's right to be paid in priority with the amount from the discount, conversion, auction or sale of the pledged equity by the Pledgor to the Pledgee.

1.2 "**equity**" shall refer to all the Party C's equities that the Pledgor legally holds in Party C and has the right to dispose of, and will be pledged to the Pledgee as the guarantee for it and Party C to fulfill their contractual obligations and secured obligations according to the provisions herein (including all registered capital of Party C and all related equity interests owned by the Pledgor respectively, that is, the Pledgor's present and future rights, interests, income, claims, as well as the money and compensation due from now on or in the future on its Party C's equity and the dividends and other amounts distributed by Party C to the Pledgor from time to time) and the additional equity added according to Article 6.7.

1.3 "**term of the pledge**" shall refer to the term specified in Article 3.

1.4 "**event of default**" shall refer to any situation listed in Article 7.

1.5 "**notice of default**" shall refer to the notice issued by the Pledgee to announce the event of default according to this Agreement.

1.6 "**contractual obligations**" shall refer to all contractual obligations undertaken by the Pledgor under the Exclusive Option Agreement and the Shareholders' Rights Entrustment Agreement; all contractual obligations of Party C under the transaction agreement; and all contractual obligations of the Pledgor and Party C under this Agreement.

1.7 "**transaction agreement**" shall refer to this Agreement, the Business Cooperation Agreement, the Exclusive Option Agreement and Shareholders' Rights Entrustment Agreement, or one or more of such agreements.

1.8 "**secured obligation(s)**" shall refer to (a) all payments owed by Party C to the Pledgee (including but not limited to the consulting and service fees (whether on the specified due date, through prepayment or otherwise) payable to the Pledgee according to the Business Cooperation Agreement) and the interest, liquidated damages (if any), compensation, legal fees, arbitration fees, equity evaluation and auction, and other expenses for realizing the pledge; (b) All direct, indirect, derivative losses and loss of predictable benefits suffered by the Pledgee due to any default by the Pledgor and Party C. The amount basis of these losses includes but is not limited to the Pledgee's reasonable business plan and profit forecast; (c) All expenses incurred by the Pledgee to force the Pledgor and/or Party C to perform its contractual obligations; and (d) any loan provided by the Pledgee to Party C according to Article 6.9.

1.9 "**PRC laws**" shall include any laws, regulations, rules, notices, explanations or other binding documents issued by any central or local legislative, administrative or judicial department before or after the signing of this Agreement.

1.10 "**secured interests**" shall include guarantees, mortgages, third-party rights or interests, any options, purchase rights, pre-emptive rights, set-off rights, ownership retention or other guarantee arrangements, etc.

2. Pledge Right

2.1 As a guarantee for the immediate and complete payment of the secured obligation and the performance of contractual obligations, the Pledgor hereby severally but not jointly pledges their respective equities to the Pledgee in the way of first priority pledge according to this Agreement. Party C agrees that the Pledgor will pledge the equity to the Pledgee in accordance with this Agreement.

2.2 The Parties understand and agree that the monetary valuation arising from or related to the secured obligation is a variable and floating valuation until the final account date (as defined in Article 2.4). The Pledgor and the Pledgee may adjust and confirm the maximum amount of the secured obligation of the total equity from time to time before the final account date by the way that the Parties agree to amend and supplement this Agreement due to the change of the secured obligation and the monetary valuation of the equity.

2.3 In case of any of the following events ("**causes of final accounts**"), the value of the secured obligation shall be determined according to the total amount of the secured obligation payable to the Pledgee due and unpaid on the latest date before or on the day of the causes of final accounts ("**determined debts**"):

(a) The Business Cooperation Agreement expires or is terminated according to relevant agreements under it;

(b) The event of default specified in Article 7 has occurred and has not been resolved, which causes the Pledgee to serve a notice of default to the Pledgor according to Article 7.3;

(c) The Pledgee reasonably believes that Party B and/or Party C have lost their solvency or may be placed in a state of insolvency through proper investigation; or

(d) Any other event required to determine the secured obligation according to PRC laws and regulations.

2.4 For the avoidance of doubt, the date of the causes of final accounts should be the final account date (the "**final account date**"). The Pledgee has the right to realize the pledge right according to Article 8 with its discretion on or after the final account date.

2.5 During the term of the pledge (as defined in Article 3.1), the Pledgee has the right to deposit any dividend or other distributable benefits arising from equity and use it to repay the Pledgee in priority. The Pledgor shall, after receiving the written request of the Pledgee, deposit the yields (or the Pledgor shall urge Party C to deposit them) into the account designated by the Pledgee in writing and be supervised by the Pledgee; without the written consent of the Pledgee, the Pledgor shall not withdraw the above yields deposited into the account designated by the Pledgee in writing.

2.6 During the validity period of this Agreement, the Pledgee will not be responsible for any reduction of equity value unless the Pledgee has intentional or gross negligence, and the Pledgor has no right to pursue any form of recourse or make any request against the Pledgee.

2.7 Without violating the agreement in Article 2.6 of this Agreement, if there is any possibility that the value of equity decreases significantly enough to endanger the rights of the Pledgee, the Pledgor agrees that the Pledgor can auction or sell the equity on behalf of the Pledgor at any time, and agree with the Pledgor to use the proceeds from the auction or sale to pay off the secured obligation in advance or deposit with the notary office where the Pledgee is located (any expenses incurred therefrom shall be paid by the proceeds from the auction or sale).

2.8 The equity pledge established under this Agreement is a continuous guarantee,

and its validity shall continue until the contractual obligations are fully fulfilled and the secured obligations are fully paid off. The Pledgee's exemption or grace for any default by the Pledgor or the Pledgee's delay in exercising any of its rights under the transaction agreement and this Agreement shall not affect the Pledgee's right to ask the Pledgor and Party C to strictly implement the transaction agreement and this Agreement, or the Pledgee's rights due to the Pledgor and Party C's subsequent violation of the transaction agreement and/or this Agreement at any time in the future under this Agreement, relevant PRC laws and the transaction agreement.

3. Term of the Pledge

3.1 The pledge right shall come into effect from the date when the equity pledge under this Agreement is registered with the administration for market regulation department (hereinafter referred to as "**Registration Authority**") where Party C is located, and the validity period of the pledge (hereinafter referred to as "**term of the pledge**") shall be from the above effective date until: (a) the last secured obligation and contractual obligations secured by the pledge right are fully paid and fulfilled; or (b) the Pledgee and/or the Designee decide to purchase all the equities of Party C held by the Pledgor according to the Exclusive Option Agreement under the premise of PRC laws, and all the equities of Party C have been transferred to the Pledgee and/or the Designee, and the Pledgee and the Designee can legally engage in the business of Party C; or (c) the Pledgee and/or the Designee decide to purchase all the assets of Party C according to the Exclusive Option Agreement under the premise of PRC laws, and all the assets of Party C have been transferred to the Pledgee and/or the Designee, and the Pledgee and the Designee can legally engage in the business of Party C by using the above assets; or (d) the Pledgee unilaterally requests to terminate this Agreement (the Pledgee's right to terminate this Agreement has no restrictive conditions, this right is only enjoyed by the Pledgee, and the Pledgor or Party C does not have the right to unilaterally terminate this Agreement); or (e) it terminates in accordance with the relevant applicable PRC laws and regulations.

3.2 During the term of the pledge, if Party B and/or Party C fail to fulfill their contractual obligations or pay the secured obligations (including paying exclusive consulting or service fees according to the Business Cooperation Agreement or failing to fulfill any other aspects of the transaction agreement), the Pledgee shall have the right but not the obligation to dispose of the pledge right according to the provisions of this Agreement.

4. Registration of Pledge Right

4.1 The Pledgor and Party C agree and promise that after the signing of this Agreement, Party C shall, and the Pledgor shall urge Party C to, immediately record the equity pledge arrangement under this Agreement in Party C's register of shareholders on the day of signing this Agreement; and go through all the registration procedures of equity pledge according to the *Measures for the*

Registration of Equity Pledge within thirty (30) days after the signing date of this Agreement or a longer period agreed by the Pledgee, and obtain the registration notice issued by the Registration Authority, and the Registration Authority will completely and accurately record the equity pledge matters in the equity pledge register.

4.2 Within the term of the pledge stipulated in this Agreement, the Pledgor shall deliver the original equity contribution certificate and the register of shareholders recording the pledge right (and other documents reasonably required by the Pledgee, including but not limited to the pledge registration notice issued by the market supervision and administration department) to the Pledgee for safekeeping within one week from the date of completing the pledge registration according to Article 4.1 above. The Pledgee shall keep these documents throughout the term of the pledge stipulated in this Agreement.

5. Representation and Warranty of the Pledgor and Party C

The Pledgor severally but not jointly represents and warrants the following Articles 5.1 to 5.13 to the Pledgee:

5.1 The Pledgor has complete and independent legal status and legal capacity under PRC laws, and has been duly authorized to sign, deliver and perform this Agreement, and can independently act as a litigant as one party.

5.2 The Pledgor is the sole legal owner and beneficial owner of the equity it holds. The Pledgor has full rights and powers to pledge the equity it holds to the Pledgee according to the provisions of this Agreement, and the Pledgor also has the right to dispose of the equity it holds or any part thereof. Unless otherwise agreed by the Pledgor and the Pledgee, the Pledgor enjoys legal and complete ownership of the equity it holds.

5.3 Unless otherwise stipulated in the transaction agreement, the Pledgee shall have the right to dispose of and transfer the equity according to the provisions specified in this Agreement.

5.4 Unless otherwise stipulated in the pledge right or transaction agreement, the Pledgor has not set any secured interest or other encumbrances on the equity held by the Pledgor. There is no dispute over the ownership of the equity held by the Pledgor, or any payable and unpaid taxes and fees related to the equity held by the Pledgor, or restriction by seizure or other legal procedures or similar threats, and can be used for pledge and transfer according to applicable laws.

5.5 The Pledgor will sign this Agreement, exercise its rights or perform its obligations under this Agreement, and will not violate or contradict any laws, regulations, court decisions, awards of any arbitration organs, decisions of any administrative organs, any agreements or contracts to which the Pledgor is a party or binding on its assets, or any promises made by the Pledgor to any third

party.

5.6 All documents, materials, statements and vouchers provided by the Pledgor to the Pledgee are accurate, true, complete and effective, whether provided before or after this Agreement takes effect, or during the term of the pledge.

5.7 After this Agreement is properly signed by the Pledgor and comes into effect according to the terms of this Agreement, it constitutes a legal, effective and binding obligation for the Pledgor.

5.8 The Pledgor has the full right and authorization to sign and deliver this Agreement and all other documents related to the transactions mentioned in this Agreement, and has the full right and authorization to complete the transactions mentioned in this Agreement.

5.9 Except for the registration of equity pledge establishment that needs to be handled with the Registration Authority, the Pledgor has obtained or handled the consent, permission, waiver and authorization of any third party or the approval, permission and exemption of any government agency or the registration or filing procedures with any government agency (if required by law) for the signing and performance of this Agreement and the effectiveness of the equity pledge under this Agreement, and will be fully and continuously valid within the validity period of this Agreement.

5.10 The pledge under this Agreement constitutes the first-order secured interest of the equity held by the Pledgor.

5.11 All taxes and fees due to the acquisition of equity held by the Pledgor have been paid in full by the Pledgor.

5.12 There is no pending or, to the knowledge of the Pledgor, threatening lawsuit, legal procedure or claim against the Pledgor, its property, or the equity held by the Pledgor in any court or arbitration tribunal, or any government agency or administrative organ, which could have a significant or adverse impact on the economic situation of the Pledgor or its ability to fulfill its obligations and guarantee responsibilities under this Agreement.

5.13 Unless otherwise stipulated in this Agreement, once the Pledgee exercises the Pledgee's rights against the Pledgor according to this Agreement at any time, there should be no interference from any other party.

5.14 The Pledgor hereby severally but not jointly warrants to the Pledgee that the representations and warranties from Articles 5.1 to 5.13 above are true, correct, accurate and complete at any time and under any circumstances before the contractual obligations are fully performed or the secured obligations are fully paid off, and will be fully observed.

Party C represents and warrants to the Pledgee as follows:

5.15 Party C is a limited liability company registered and validly existing in accordance with PRC laws, with independent legal personality, and can independently act as a litigant as one party, has formally registered with the competent administration for market regulation department, and passed annual inspection or submitted annual report; and has complete and independent legal status and legal capacity, and has been duly authorized to sign, deliver and perform this Agreement.

5.16 After this Agreement is properly signed by Party C and comes into effect according to the terms of this Agreement, it constitutes a legal, effective and binding obligation for Party C.

5.17 Party C has full rights and authorization within Party C to sign and deliver this Agreement and all other documents related to the transactions described in this Agreement, and has full rights and authorization to complete the transactions described in this Agreement.

5.18 The assets owned by Party C do not have any significant secured interests or other encumbrances that may affect the rights and interests of the Pledgee in the equity (including but not limited to the transfer of any intellectual property rights of Party C or any assets with a value of RMB 500,000 or more (or any amount otherwise agreed by the Pledgor and the Pledgee), or any property rights or use rights burdens attached to such assets).

5.19 There is no lawsuit, arbitration, administrative procedure, administrative penalty or other legal procedure against the equity, Party C or its assets that are pending or known by Party C to be threatening in any court or arbitration tribunal, or any government agency or administrative organ, which could have a significant or adverse impact on the economic situation of Party C or the ability of the Pledgor or Party C to fulfill its obligations and guarantee responsibilities under this Agreement.

5.20 Party C hereby agrees to bear joint and several liabilities to the Pledgee for the representations and warranties made by the Pledgor under this Agreement.

5.21 Party C's signing of this Agreement, exercise of its rights or performance of its obligations under this Agreement will not violate or conflict with any laws, regulations, court decisions, rulings of any arbitration organs, decisions of any administrative organs, any agreements or contracts to which Party C is a party or which are binding on its assets, or any promises made by Party C to any third party.

5.22 All documents, materials, statements and vouchers provided by Party C to the Pledgee are accurate, true, complete and effective, whether provided before or after this Agreement takes effect or during the term of the pledge.

5.23 Except for the registration of equity pledge establishment that needs to be handled with the Registration Authority, the consent, permission, waiver and authorization of any third party or the approval, permission and exemption of any government agency or the registration or filing procedures with any government agency (if required by law) that need to be obtained or handled for the signing and performance of this Agreement and the effectiveness of the equity pledge under this Agreement have been obtained or handled, and are fully and continuously valid within the validity period of this Agreement.

5.24 The pledge under this Agreement constitutes the first-order secured interest of equity.

5.25 Party C hereby warrants to the Pledgee that the above representations and warranties are true and correct at any time and under any circumstances before the contractual obligations are fully performed or the secured obligations are fully paid off, and will be fully observed.

6. Pledgor and Party C's Promise and Further Consent

6.1 During the validity period of this Agreement, the Pledgor hereby severally but not jointly promises to the Pledgee that:

6.1.1 Except for the fulfilment of the Exclusive Option Agreement or other transaction agreements, the Pledgor shall not transfer, or allow others to transfer all or any part of the equity held by the Pledgor, or set up or allow any secured interest or other encumbrance that may affect the Pledgee's rights and interests in the equity held by the Pledgor without the Pledgee's prior written consent. In case of equity transfer held by the Pledgor with the written consent of the Pledgee, the Pledgor shall first use the proceeds from the transfer of equity to pay off the secured obligation in advance to the Pledgee or deposit with a third party agreed with the Pledgee;

6.1.2 The Pledgor shall abide by and implement all laws and regulations applicable to pledge of rights, present to the Pledgee the notice, order or suggestion issued or made by the relevant competent authority (or any other relevant party) on pledge right within five (5) days after receiving any notice, order or suggestion, and shall abide by the above notice, order or suggestion or raise objections and statements on the above matters according to the reasonable requirements of the Pledgee or with the consent of the Pledgee;

6.1.3 The Pledgor will immediately notify the Pledgee of any event or notice received by the Pledgor that may affect the rights of the Pledgee to the equity held by the Pledgor or any part thereof (including but not limited to any lawsuit, arbitration, other claim, ownership dispute of any third

party over the equity, or other adverse effects on the pledge rights from any third party that the Pledgee has suffered or may suffer, or any civil or criminal lawsuit, administrative lawsuit, arbitration or any other legal procedure against the Pledgor or the equity held by the Pledgor, or the knowledge by the Pledgor to be threatened by any of the above lawsuits, arbitration or other legal procedures), or the interests of the Pledgee under the transaction agreement and this Agreement, and any event or notice received by the Pledgor that may affect any warranty and other obligations of the Pledgor arising from this Agreement, and take all reasonable and necessary measures to ensure the Pledgee's pledge rights and interests of the equity held by the Pledgor according to the reasonable requirements of the Pledgee.

6.2 If the Pledgor agrees severally but not jointly that the Pledgee's right to pledge under this Agreement shall not be interrupted or impaired by the Pledgor or any representative of the Pledgor or any other person through legal procedures.

6.3 In order to protect or improve the secured interests granted by this Agreement for the payment of secured obligations and the performance of contractual obligations, and to ensure the Pledgee's rights and interests in equity pledge and the exercise and realization of these rights, Party C shall, and the Pledgor shall urge Party C to, immediately register the equity pledge under this Agreement with the relevant registration authority within thirty (30) days after the signing of this Agreement or within a longer period agreed by the Pledgee, sincerely sign, and urge other parties with interests in the pledge right to sign all documents (including but not limited to the supplementary agreement of this Agreement), certificates, agreements, deeds and/or promises reasonably required by the Pledgee. The Pledgor also promises to do and urge other parties with interests in the pledge right to do what the Pledgee reasonably requires, to facilitate the Pledgee to exercise its rights and authorizations granted by this Agreement, and to sign all relevant documents on equity ownership with the Pledgee or its designated person. The Pledgor promises to provide the Pledgee with all notices, orders and decisions about the pledge required by the Pledgee within a reasonable period.

6.4 The Pledgor hereby severally but not jointly promises to the Pledgee that it will abide by and perform all the warranties, promises, agreements, representations and conditions applicable to it under this Agreement. Subject to other provisions of this Agreement, if the Pledgor fails to fulfill its warranties, promises, agreements, representations and conditions in whole or in part, the Pledgor shall severally but not jointly compensate the Pledgee for all losses caused thereby.

6.5 If the pledged equity under this Agreement is subject to any compulsory measures implemented by the court or other government departments for any reason, the Pledgor (severally but not jointly) shall make all reasonable efforts, including (but not limited to) providing other warranties to the court or taking

other measures to relieve the compulsory measures taken by the court or other departments on the equity held by the Pledgor.

6.6 Subject to other provisions of this Agreement (including but not limited to Article 19.1), if the equity involves any property preservation or enforcement, or if the equity has any possibility of value reduction or loss, which is enough to endanger the rights of the Pledgee, the Pledgor shall immediately notify the Pledgee in writing of the situation and cooperate with the Pledgee to take effective measures to protect the rights and interests of the Pledgee. The Pledgee may auction or sell the equity at any time, and use the proceeds from auction or sale to pay off the secured obligation or deposit in advance. Any expenses incurred therefrom shall all be borne by the Pledgee.

6.7 Without the Pledgee's prior written consent, the Pledgor (severally but not jointly) and/or Party C shall not increase, decrease or transfer the registered capital of Party C (or its capital contribution to Party C) or set any encumbrance on it (including equity) by itself (or assist others). On the premise of complying with this provision, the equity of Party C registered and acquired by a Pledgor after the date of this Agreement (hereinafter referred to as "**additional equity**") and the share capital corresponding to the equity in the registered capital of Party C shall also be pledged by the Pledgor to the Pledgee according to this Agreement. The Pledgor and Party C shall immediately sign a supplementary share pledge agreement with the Pledgee on the additional equity when it is obtained by the Pledgor, so as to urge the board of directors (or executive directors) of Party C to approve the supplementary share pledge agreement, and shall submit all documents required for the supplementary share pledge agreement to the Pledgee, including but not limited to the original shareholder contribution certificate on the additional equity issued by Party C. The Pledgor and Party C shall register the pledge establishment (or change) of additional equity in accordance with Article 4.1 and deliver relevant documents to the Pledgee for safekeeping in accordance with Article 4.2 of this Agreement.

6.8 Unless written instructions to the contrary are given by the Pledgee in advance, the Pledgor (severally but not jointly) and/or Party C agree that if part or all of the equity is transferred between a Pledgor and any third party (hereinafter referred to as "**Equity Assignee**") in violation of this Agreement, the Pledgor and/or Party C shall ensure that the Equity Assignee unconditionally recognizes the pledge right and performs the necessary registration procedures for pledge change (including but not limited to signing relevant documents) to ensure the existence of the pledge right.

6.9 If the Pledgee provides a loan to Party C, the Pledgor (severally but not jointly) and/or Party C agree to grant the Pledgee with the equity as the pledge to guarantee the further loan, and perform the relevant formalities as soon as possible according to the requirements of laws, regulations or local practices (if any), including but not limited to signing relevant documents and handling the registration procedures for the establishment (or change) of the pledge.

6.10 The Pledgor shall not conduct or allow any behavior or action that may adversely affect the rights or equity of the Pledgee under the transaction agreement and this Agreement. The Pledgor hereby irrevocably waives the right of preemption when the Pledgee realizes the pledge right.

6.11 If any equity assignment is caused by the exercise of pledge right under this Agreement, the Pledgor warrants to take all measures to realize such assignment within the scope permitted by PRC laws.

6.12 The Pledgor shall ensure that Party C will not lend or borrow loans, or provide warranties or make other forms of guarantees, or undertake any major obligations outside normal business activities.

6.13 The Pledgor shall ensure that the procedure, voting method and content of the meeting of Party C's board of directors convened or resolution made by the executive director for the purpose of signing this Agreement, setting pledge right and exercising pledge right do not violate laws, administrative regulations or the articles of association of Party C.

6.14 Before the contractual obligations are fulfilled and the secured obligations are fully paid off, the Pledgor shall not give up the equity it holds pledged to the Pledgee according to this Agreement, and/or give up the yields arising from holding the above equity, including but not limited to dividends.

6.15 Before the contractual obligations are fulfilled and the secured obligations are fully paid off, the Pledgor shall ensure that the directors appointed by the Pledgor to Party C shall not agree to Party C's assignment, sale or disposal of any of its assets by any resolution without the Pledgee's prior written consent.

6.16 As a shareholder of Party C, the Pledgor shall not abuse its shareholder rights to harm the interests of Party C. If this happens, the Pledgee has the right to exercise the option under the Exclusive Option Agreement.

6.17 If, according to applicable laws, any amendment, supplement or update to this Agreement can only come into effect after the corresponding pledge change approval and/or registration procedures are completed, Party C and Party B shall take all necessary measures to cooperate with Party C to go through the registration procedures for such changes in relevant registration authorities within five (5) days from the date of completion of such amendment, supplement or update.

Party C promises and further agrees as follows:

6.18 If it is necessary to obtain the consent, permission, waiver or authorization of any third party or the approval, permission or exemption of any government agency or go through registration or filing procedures with any government

agency (such as required by law) for the signing and performance of this Agreement and the equity pledge under this Agreement, then Party C will take all measures to assist in obtaining and keeping the pledge fully effective within the validity period of this Agreement. If the business term of Party C expires within the validity period of this Agreement, Party C shall complete the registration formalities for extending the business term before its expiration, so as to ensure the continued validity of this Agreement.

6.19 Without the prior written consent of the Pledgee, Party C will not assist or allow the Pledgor to set up any new pledge or grant any other secured interest in the equity, nor will it assist or allow the Pledgor to assign the equity.

6.20 Party C agrees to strictly abide by its obligations under Article 6.3, 6.7, 6.8, 6.9, 6.11, 6.12, 6.14, 6.15 and 6.17 of this Agreement.

6.21 Without the Pledgee's prior written consent, Party C shall not assign or sell the assets of Party C, or set or allow any secured interests or other encumbrances that may affect the Pledgee's rights and interests in the equity (including but not limited to the transfer of any intellectual property rights of Party C or any assets with a value of RMB 500,000 or more (or any amount otherwise agreed by the Pledgor and the Pledgee), or any property rights or use rights burdens attached to such assets).

6.22 When any lawsuit, arbitration or other claim occurs, which may adversely affect the interests of Party C, the equity or the Pledgee under the transaction agreement and this Agreement, Party C warrants that it will notify the Pledgee in writing as soon as possible and in a timely manner, and take all necessary measures to ensure the Pledgee's pledge rights and interests of the equity according to the reasonable requirements of the Pledgee.

6.23 Party C shall not conduct or allow any behavior or action that may adversely affect the interests or equity of the Pledgee under the transaction agreement and this Agreement.

6.24 Party C will provide the Pledgee with the financial statements of Party C for the previous calendar quarter, including but not limited to the balance sheet, income statement and cash flow statement, in the first month of each calendar quarter.

6.25 Party C warrants to take all necessary measures and sign all necessary documents according to the reasonable requirements of the Pledgee, so as to ensure the Pledgee's pledge rights and interests of equity and the exercise and realization of these rights and interests.

6.26 If any equity assignment is caused by the exercise of pledge right under this Agreement, Party C warrants to take all measures to complete such assignment.

6.27 In case of death, incapacity, marriage, divorce, bankruptcy or other events that

may affect the Pledgor's exercise of Party C's equity, the Pledgor's successors or shareholders or assignees of Party C's equity at that time will be regarded as the signatories of this Agreement, and inherit/assume all rights and obligations of the Pledgor under this Agreement.

6.28 In case of dissolution or liquidation of Party C at the request of PRC laws, this Agreement will be terminated, and Party C shall (and Party B shall agree to allow Party C to) transfer all assets including equity of Party C to Party A at the lowest price allowed by Chinese law for free or at the lowest price allowed by the then PRC laws, or the then liquidator will dispose all assets including equity of Party C in order to protect the interests of shareholders and/or creditors of Party A's overseas direct or indirect parent company.

6.29 Each Party separately warrants to the other Parties that once PRC laws permit and the Pledgee decides to purchase all the equities of Party C held by the Pledgor according to the Exclusive Option Agreement, each party will immediately dissolve this Agreement.

7. Event of Default

7.1 The following situations shall be regarded as an event of default:

7.1.1 The Pledgor violates or fails to perform any of its contractual obligations under the Exclusive Option Agreement, Shareholders' Rights Entrustment Agreement and/or this Agreement, or Party C violates or fails to perform any of its contractual obligations under the transaction agreement and/or this Agreement;

7.1.2 Any representation or warranty made by the Pledgor in Article 5 of this Agreement contains serious misrepresentation or error, and/or the Pledgor violates any warranty in Article 5 and/or any promise in Article 6;

7.1.3 Party C fails, or Party B fails to cooperate with Party C, to complete the registration of equity pledge by the Registration Authority as stipulated in Article 4.1;

7.1.4 The Pledgor and Party C violate any provision or article of this Agreement;

7.1.5 Except as specified in Article 6.1.1, the Pledgor assigns or intends to assign or give up the pledged equity or concedes the pledged equity without the written consent of the Pledgee;

7.1.6 The Pledgor's own loan, warranty, compensation, promise or other liabilities to any third party (a) is required to be repaid or performed in advance due to breach of contract by the Pledgor; or (b) has expired but

cannot be repaid or performed as scheduled;

7.1.7 The Pledgor cannot repay general debts or other debts;

7.1.8 Any approval, license, consent, permission or authorization of government agencies that make this Agreement enforceable, legal and effective is withdrawn, suspended, invalidated or substantially changed;

7.1.9 The promulgation of applicable laws makes this Agreement illegal or makes the Pledgor unable to continue to perform its obligations under this Agreement;

7.1.10 The property owned by the Pledgor is adversely changed, which causes the Pledgee to believe that the Pledgor's ability to fulfill its obligations under this Agreement has been affected;

7.1.11 Party C or its successors or custodians can only partially fulfill or refuse to fulfill the payment obligations under the Business Cooperation Agreement, or the Pledgor and/or Party C can only partially pay off or refuse to pay off the secured obligations; and

7.1.12 Any other circumstances in which the Pledgee cannot or may not be able to exercise its rights against the pledge right.

7.2 Once the Pledgor and Party C know or discover that any situation mentioned in Article 7.1 or any event that may lead to the above situation has occurred, they shall immediately notify the Pledgee in writing accordingly.

7.3 Subject to other provisions of this Agreement (including but not limited to Article 19.1), unless the event of default listed in Article 7.1 has been resolved to the satisfactory of the Pledgee within thirty (30) days from the date of the Pledgee's notice, the Pledgee may issue a notice of default to the Pledgor at any time after the occurrence of the event of default, and exercise all the rights and powers of relief for default that it enjoys according to PRC laws, transaction agreements and the provisions of this Agreement, including but not limited to:

(a) Requiring Party C to immediately pay all outstanding payments due and payable under the Business Cooperation Agreement, all arrears under the transaction agreement and all other payments due and payable to the Pledgee, and/or repay the loan; and/or

(b) Dispose of the pledge right according to Article 8 and/or dispose of the pledged equity in other ways within the scope permitted by law (including but not limited to being compensated with priority from the proceeds by discounting all or part of the equity, or auction or sale of the equity).

Subject to other provisions of this Agreement (including but not limited to

Article 19.1), the Pledgee has the right to choose to exercise any of the above rights at its own discretion. In this case, other Parties shall unconditionally agree to give full cooperation. The Pledgee is not responsible for any losses caused by its reasonable exercise of these rights and powers.

7.4 The Pledgee has the right to appoint its lawyer or other agent in writing to exercise any and all rights and powers mentioned above, and neither the Pledgor nor Party C shall raise any objection to this.

7.5 Subject to other provisions of this Agreement (including but not limited to Article 19.1), the Pledgee has the right to choose to exercise any remedies for default that it enjoys at the same time or successively, and the Pledgee does not need to exercise other remedies for default before exercising the rights of auction or sale of equity under this Agreement.

8. Exercise of Pledge Right

8.1 Unless stipulated in the Exclusive Option Agreement or other transaction agreements, the Pledgor shall not transfer the pledge right or the equity in Party C without the written consent of the Pledgee before the contractual obligations are fully fulfilled and the secured obligations are fully repaid.

8.2 When exercising the pledge right, the Pledgee may issue a notice of default to the Pledgor according to Article 7.3.

8.3 Subject to the provisions of Article 7.3, the Pledgee may exercise the right to enforce the pledge right at the same time as or at any time after the notice of default is issued according to Article 7.3. Once the Pledgee chooses to enforce the pledge right, the Pledgor shall no longer have any rights or interests related to equity.

8.4 When the Pledgee exercises the pledge right, the Pledgee has the right to dispose of the pledged equity in accordance with the law within the permitted scope and according to applicable laws. All the amount received by the Pledgee for exercising its pledge right shall be handled in the following order:

(a) Pay all expenses (including the lawyer's fees and the agent's fees) arising from the disposal of equity and the Pledgee's exercise of its rights and powers;

(b) Pay the taxes payable due to the disposal of equity;

(c) Repay the secured obligation to the Pledgee.

If there is any amount remained after deducting the above amount, the remaining amount (without interest) shall be paid to the Pledgor or other persons who have the right to receive the amount according to the relevant PRC laws or deposited with the notary office where the Pledgee is located (any expenses incurred therefrom shall be paid from the remaining amount).

8.5 When the Pledgee disposes of the pledge right according to this Agreement, the Pledgor and Party C shall provide necessary assistance to enable the Pledgee to enforce the pledge right.

8.6 All the actual expenses, taxes and all legal fees related to the setting of equity pledge and the realization of the Pledgee's rights under this Agreement shall be borne by Party C, except those that are borne by the Pledgee according to the law, and the Pledgee has the right to deduct these fees from the amount obtained by exercising its rights and powers according to the amount actually incurred.

8.7 When the Pledgee exercises its pledge right to equity according to this Agreement, the amount of the secured obligation that it has determined by itself shall be taken as the final evidence of the secured obligation under this Agreement.

9. Assignment

9.1 Without the prior written consent of the Pledgee, the Pledgor shall not assign or delegate its rights and obligations under this Agreement.

9.2 The Pledgor and Party C agree that, without the violation of the then PRC laws, the Pledgee can delegate or assign any rights that it can exercise under this Agreement, the transaction agreement and other security documents to any designated person in any way on terms and conditions that it deems appropriate (including the right to delegate again) after informing the Pledgor and Party C.

9.3 This Agreement shall be binding on the Pledgor and Party C and their respective successors and permitted assignees (if any), and shall be valid for the Pledgee and each successor and assignee.

9.4 If at any time the Pledgee assigns any and all of its rights and obligations under the transaction agreement to its designated person, the assignee shall enjoy and assume the rights and obligations of the Pledgee under this Agreement as if it were the original party of this Agreement. When the Pledgee assigns the rights and obligations under the transaction agreement, the Pledgor and/or Party C shall sign the relevant agreement or other documents related to the assignment at the request of the Pledgee.

9.5 If the Pledgee is changed due to the assignment of transaction agreement and/or this Agreement, the Pledgor and Party C shall sign a new share pledge agreement with the new pledgee at the request of the Pledgee on the same terms and conditions as this Agreement and handle the corresponding pledge registration.

9.6 The Pledgor shall strictly abide by the provisions of this Agreement and other contracts signed by the Pledgor, including the transaction agreement, fulfill its obligations under this Agreement and other contracts (including the transaction agreement), and refrain from any action/omission that may affect its effectiveness and enforceability. Unless instructed in writing by the Pledgee, the

Pledgor shall not exercise any remaining rights of the equity pledged under this Agreement.

10. Termination

At the expiration of the term of the pledge, this Agreement shall be terminated, the Pledgee shall cancel or terminate this Agreement as soon as reasonably practicable, and cancel the equity pledge under this Agreement, the Pledgor and Party C shall record the cancellation of equity pledge in the register of shareholders of Party C, and go through the cancellation registration at the relevant registration authority, and the reasonable expenses arising from the cancellation of equity pledge shall be borne by Party C. Articles 12, 13 and 19.1 shall remain valid after the termination of this Agreement.

11. Handling Fees and Other Expenses

All expenses and actual costs related to this Agreement, including but not limited to attorney fees, production costs, stamp duty and any other taxes and expenses, shall be borne by Party C. If the applicable law requires the Pledgee to bear some related taxes and fees, Party C shall fully repay the taxes and fees already paid by the Pledgee.

12. Confidentiality

The Parties acknowledge that any oral or written information exchanged by the Parties in connection with this Agreement is confidential. Each party shall keep all such information confidential, and shall not disclose any relevant information to any third party without the written consent of other Parties, except for the following situations: (a) such information that is known to the public (but it is not disclosed to the public by the receiving party); (b) information required to be disclosed by applicable laws or rules or regulations of any stock exchange; or (c) the information that any party needs to disclose to its legal adviser or financial adviser on the transactions stipulated in this Agreement, and the legal adviser or financial adviser is also bound by the similar confidentiality obligation in this article. The disclosure of any confidential information by the staff or institutions employed by any party shall be regarded as the disclosure of such confidential information by such party, and such party shall be legally liable for the violation of this Agreement. This article shall continue to be valid regardless of the invalidity or termination of this Agreement for any reason.

13. Governing Law and Dispute Resolution

13.1 The signing, entry into force, interpretation, performance, modification and termination of this Agreement and the resolution of disputes under this Agreement shall be governed by PRC laws.

13.2 In case of any dispute arising from the interpretation and performance of the provisions of this Agreement, the Parties shall resolve the dispute through sincere negotiation. If the Parties fail to reach an agreement on the resolution of such disputes within thirty (30) days after a Party requests the Parties to resolve the disputes through negotiation, any Party may submit the relevant disputes to Beijing Arbitration Commission for arbitration and resolution according to its then effective arbitration rules. The arbitration shall be conducted in Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding on the Parties. The arbitration tribunal may rule that Party C's equity interests, assets or properties shall be used to compensate or offset the losses caused to the Pledgee due to other Parties' breach of this Agreement, award compulsory relief for relevant business or compulsory asset transfer, or order Party C to go bankrupt. After the arbitration award comes into effect, any Party has the right to apply to the court with jurisdiction to enforce the arbitration award. If necessary, the arbitration institution shall have the right to decide that the defaulting Party immediately terminates the defaults or shall not engage in any behavior that may further expand the losses suffered by the Pledgee before making a final decision on the disputes between the Parties. Courts in Hong Kong, Cayman Islands or other courts with jurisdiction (including the court where Party C resides, or the court where the Party C or Pledgee's principal assets are located shall be deemed to have jurisdiction) also have the right to award or enforce the award of the arbitration tribunal, and have the right to award or enforce temporary relief for Party C's equity interests or property interests, and also have the right to make a ruling or judgment to give temporary relief to the Party initiating arbitration while waiting for the formation of the arbitration tribunal or under other appropriate circumstances, such as ruling or judging that the defaulting Party immediately terminates the defaults, or ruling that the defaulting Party shall not engage in any behavior that may further expand the losses suffered by the Pledgee.

13.3 In case of any dispute arising from the interpretation and performance of this Agreement or when any dispute is being arbitrated, the Parties shall continue to exercise their respective rights and perform their respective obligations under this Agreement, except for the disputed matters.

13.4 After the signing date of this Agreement, if there is any promulgation or change of any Chinese laws, regulations or rules at any time, or the change of interpretation or application of such laws, regulations or rules, the following agreements shall apply: (a) if the change of laws or newly promulgated regulations are more favorable to a Party than the relevant laws, regulations, decrees or regulations in force on the date of signing this Agreement (while the other Parties are not seriously adversely affected), each Party shall apply for the benefits brought by the change or new regulations in time and try its best to get the application approved; or (b) if the economic interests of any Party under this Agreement are seriously adversely affected directly or indirectly due to the above-mentioned legal changes or newly promulgated regulations, this Agreement shall continue to be implemented in accordance with the original

terms. Each Party shall use all legal means to obtain the exemption from complying with the change or regulation. If the adverse impact on the economic interests of any Party cannot be solved according to the provisions of this Agreement, after the affected Party notifies other Parties, the Parties shall negotiate in time and make all necessary amendments to maintain the economic interests of the affected party under this Agreement.

14. Force Majeure

14.1 "**Force majeure**" refers to the unforeseeable, unavoidable and insurmountable events that make one Party of this Agreement partially or completely unable to perform this Agreement. Such events include, but are not limited to, earthquakes, typhoons, floods, wars, strikes, riots, government actions, changes in laws and regulations or their application.

14.2 If an event of force majeure occurs, one Party's obligations under this Agreement affected by force majeure will be automatically suspended during the delay period caused by force majeure, and its performance period should be automatically extended, and the extended period is the period of suspension, so that the Party does not need to be punished or take responsibility for it. In case of force majeure, the Parties should immediately negotiate to find a just solution, and make every reasonable effort to minimize the impact.

15. Notice

15.1 All notices and other communications required or allowed to be sent according to this Agreement shall be delivered by special person or sent to the address of such party listed in Annex I by registered mail with prepaid postage and commercial express service. The date when such notices are deemed to be effectively served shall be determined as follows:

15.1.1 If the notice is delivered by special person or express delivery service, it shall be deemed to have been effectively served at the designated receiving address of the notice on the date of delivery or rejection.

15.1.2 If the notice is sent by registered mail with prepaid postage, it shall be deemed to have been effectively delivered on the fifteenth (15th) day after the date on the receipt of the registered mail.

15.2 Each Party may change the receiving address of its notice at any time by sending a notice to other parties according to this article.

16. Severability

If one or more provisions of this Agreement are judged to be invalid, illegal or unenforceable in any aspect according to any laws or regulations, the validity, legality or enforceability of the remaining provisions of this Agreement shall

not be affected or damaged in any aspect. The Parties should negotiate in good faith, and strive to replace such invalid, illegal or unenforceable provisions with effective provisions to the maximum extent permitted by law and expected by the Parties, and the economic effects produced by such effective provisions should be as similar as those produced by such invalid, illegal or unenforceable provisions as possible.

17. Annex

The annexes attached hereto shall be an integral part of this Agreement.

18. Effectiveness, Amendment, Change, Supplement and Text

18.1 This Agreement shall come into effect as of the date when the Parties sign it, and the equity pledge under this Agreement shall come into effect as of the date when the Registration Authority completes the relevant registration procedures. The term of this Agreement will expire when the contractual obligations are fully fulfilled or the term of the pledge is terminated according to Article 3.

18.2 Any amendment, change and supplement to this Agreement shall be made in writing and shall come into effect after being signed or sealed by the parties and the government registration procedures (if applicable) are completed.

18.3 If the Stock Exchange of Hong Kong Limited or other regulatory agencies put forward any amendments to this Agreement, or if there are any changes related to this Agreement in the securities listing rules or related requirements of the Stock Exchange of Hong Kong Limited, the Parties shall make reasonable amendments to this Agreement accordingly.

18.4 This Agreement is made in five (5) copies, with one (1) copy for each signatory, and one (1) copy for the Registration Authority, all of which have the same legal effect.

19. Miscellaneous

19.1 Despite any other provisions in this Agreement or other transaction agreements or any other documents or laws, the Pledgor's obligations and responsibilities under this Agreement are several and not joint.

19.2 Except for the written amendments, supplements or changes made after the signing of this Agreement, this Agreement shall constitute the complete agreement reached by the Parties on the subject matter of this Agreement, and shall replace all oral and written negotiations, statements and contracts previously reached.

19.3 This Agreement shall be binding on and beneficial to the successors of each Party and the assignee allowed by these Parties.

19.4 Any Party may waive its rights under this Agreement, but such waiver must be made in writing and signed by the Parties. The waiver of any Party for other Parties' default under certain circumstances shall not be deemed as the waiver of such Party for similar defaults under other circumstances.

19.5 The title of this Agreement is for convenience of reading only, and should not be used to interpret, explain or otherwise influence the meaning of the provisions of this Agreement.

19.6 The Parties agree to sign in time the documents reasonably needed or beneficial to implement the provisions and purposes of this Agreement, and take further actions reasonably needed or beneficial to implement the provisions and purposes of this Agreement.

19.7 Without violating the transaction agreement and other articles of this Agreement, if at any time the Pledgee believes that maintaining the validity of this Agreement, holding the pledge right under this Agreement and/or disposing the equity in the way specified in this Agreement becomes illegal or violates the laws, regulations or rules, due to the promulgation or change of any PRC laws, regulations or rules, or the change of interpretation or application of such laws, regulations or rules, or the change of relevant registration procedures, the Pledgor and Party C shall immediately take any reasonable actions and/or sign any reasonable agreement or other documents according to the Pledgee's reasonable requirements, so as to: (a) maintain this Agreement and the validity of the pledge right under this Agreement. (b) facilitate the disposal of equity in the manner specified in this Agreement; and/or (c) hold or realize the guarantee established or intended to be established in this Agreement.

19.8 This Agreement is a legal document independent of the transaction agreement and other security documents, the invalidity of which will not affect the rights and obligations of the parties under this Agreement. If the transaction agreement or other security documents are declared invalid, but the Pledgor still has outstanding contractual obligations and/or Party C still owes the Pledgee the secured obligations, the equity under this Agreement shall still be used as the pledge guarantee for the contractual obligations and secured obligations until all the secured obligations are paid off and all the contractual obligations are fulfilled.

[The remainder of this page is intentionally left blank.]

(This page is intentionally left blank, and serves as the signature page for the *Share Pledge Agreement*.)

In witness whereof, this Share Pledge Agreement is signed by the Parties as of the date and in the place first above written.

Zhizhe Sihai (Beijing) Technology Co., Ltd.
(Seal)

/s/ Yuan Zhou

(This page is intentionally left blank, and serves as the signature page for the *Share Pledge Agreement*.)

In witness whereof, this Share Pledge Agreement is signed by the Parties as of the date and in the place first above written.

Beijing Zhizhe Tianxia Technology Co., Ltd.
(Seal)

/s/ Dahai Li

(This page is intentionally left blank, and serves as the signature page for the *Share Pledge Agreement*.)

In witness whereof, this Share Pledge Agreement is signed by the Parties as of the date and in the place first above written.

Yuan Zhou

Signature: /s/ Yuan Zhou

(This page is intentionally left blank, and serves as the signature page for the *Share Pledge Agreement*.)

In witness whereof, this Share Pledge Agreement is signed by the Parties as of the date and in the place first above written.

Dahai Li

Signature: /s/ Dahai Li

Exhibit 4.6

Annex I

For the purpose of notification, the contact details of each Party are as follows:

Party A:

Address: 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
Recipient: Yuan Zhou

Party B:

Yuan Zhou
Address: **********

Dahai Li
Address: **********

Party C:

Address: 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
Recipient: Yuan Zhou

Exclusive Option Agreement

This Exclusive Option Agreement (this "**Agreement**") is made and entered into by and among the following parties on December 21, 2021 in Beijing, the People's Republic of China:

Party A: Zhizhe Sihai (Beijing) Technology Co., Ltd., a limited liability company legally established and validly existing in accordance with the laws of the PRC, with its registered address at 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing.

Party B: Yuan Zhou, ID Number: **********;

Dahai Li, ID Number: **********;

Party C: Beijing Zhizhe Tianxia Technology Co., Ltd., a limited liability company legally established and validly existing in accordance with the laws of the PRC, with its registered address at 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing.

In this Agreement, Party A, Party B and Party C shall be hereinafter referred to as a "**Party**" individually, and as the "**Parties**" collectively.

WHEREAS:

1 Party B collectively holds 100% of the equity interests in Party C;

2 Party A is 100% directly owned by Zhihu Technology (HK) Limited (a company registered under the laws of Hong Kong) (the "**Hong Kong Company**"), and the Hong Kong Company is 100% directly owned by Zhihu Inc. (a company registered under the laws of Cayman) (the "**Cayman Company**").

3 Party B and Party C respectively contemplate to grant Party A (or its Designee(s)) an irrevocable and exclusive option to purchase all or part of the equity interests held by Party B in Party C and all or part of Party C's assets;

4 Party A, Party B and Party C hereby enter into this Agreement with respect to the granting of the exclusive option to Party A by Party B and Party C.

Now, therefore, upon amicable negotiation, the Parties hereby agree as follows:

1. Equity Interests and Asset Sales

1.1 Grant of the option

Party B agrees severally but not jointly to hereby irrevocably and unconditionally grant Party A an irrevocable and exclusive right to purchase, or

designate one or more persons (each, a "**Designee**", which shall be the Cayman Company or its directly or indirectly wholly controlled subsidiary) to purchase the equity interests in Party C then held by Party B once or at multiple times at any time in part or in whole, in accordance with the exercise procedure as determined by Party A in its sole discretion, to the extent permitted by PRC laws (including any laws, regulations, rules, notices, interpretations or other binding documents issued by any central or local legislative, administrative or judicial authority before or after the execution of this Agreement, hereinafter referred to as the "**PRC laws**") and at the price described in Article 1.3 herein during the term of this Agreement (the "**Purchase Option of Equity**"). Party C hereby agrees to the grant by Party B of the Share Option to Party A. Party C hereby irrevocably and unconditionally grants Party A an irrevocable and exclusive right to purchase, or cause its Designee(s) to purchase Party C's assets once or at multiple times at any time in part or in whole, in accordance with the exercise procedure as determined by Party A in its sole discretion, to the extent permitted by PRC laws and at the price described in Article 1.3 herein during the term of this Agreement (the "**Purchase Option of Assets**", which is collectively referred to as the "**Option**" with the Purchase Option of Equity). Party B hereby agrees to the grant by Party C of the Purchase Option of Assets to Party A. Except for Party A and the Designee(s), no other third party shall be entitled to the Option or other rights in relation to the equity interests in Party C held by Party B and assets in Party C. "**Person**" as mentioned in this Article and this Agreement refers to an individual, corporation, joint venture, partnership, enterprise, trust or non-corporate organization.

1.2 Exercise Procedure of the Option

Subject to the provisions of the laws and regulations of the PRC, Party A may exercise the Option. Upon the exercise of the Option in accordance with Article 1.1, Party A shall issue a written notice for the purchase of the equity interests or assets to Party B and/or Party C (the "**Equity Purchase Notice**" or "**Asset Purchase Notice**"), in which the following issues shall be specified: (a) Party A's decision to exercise the Option; (b) the portion of equity interests contemplated to be purchased by Party A and/or the Designee(s) from Party B (the "**Purchased Equity**") and/or assets contemplated to be purchased by Party A and/or the Designee(s) from Party C (the "**Purchased Assets**"); and (c) the date of purchase/the date of transfer for the Purchased Equity and/or the Purchased Assets. Party B and/or Party C shall, upon receipt of the Equity Purchase Notice and/or Asset Purchase Notice, transfer the Purchased Equity and/or the Purchased Assets to Party A and/or the Designee(s) in accordance with the terms and conditions set forth in Article 1.4 herein.

1.3 Purchase Price and its payment

When Party A decides to exercise the Option under this Agreement, the purchase price of the Purchased Equity and/or the Purchased Assets (the "**Purchase Price**") shall be the nominal price, provided that if the Purchase

Price is otherwise required by the relevant government department or the PRC laws, the Purchase Price shall be the lowest price that conforms to such requirements. However, in any case, subject to the provisions and requirements of the PRC laws then applicable, the amount paid by Party A and/or the Designee(s) to Party B and/or Party C at any such price shall be returned to Party A and/or the Designee(s) by Party B and/or Party C severally but not jointly (provided that taxes, if any, incurred in exercising the Option shall be deducted from such returned amount). After the necessary tax withholding of the Purchase Price in accordance with the PRC laws, Party A and/or the Designee(s) shall pay the Purchase Price to the account designated by Party B and/or Party C within seven (7) days from the date on which the Purchased Equity and/or the Purchased Assets are formally transferred to Party A and/or the Designee(s).

1.4 Transfer of the Purchased Equity and/or the Purchased Assets

For each exercise of the Option by Party A:

1.4.1 Party B shall cause Party C to promptly convene a shareholders' general meeting, at which a resolution shall be adopted approving Party B's and/or Party C's transfer of the Purchased Equity and/or Purchased Assets to Party A and/or the Designee(s);

1.4.2 Party B and/or Party C shall enter into an interest transfer contract and/or asset transfer contract and other relevant legal documents with Party A and/or the Designee(s) (if applicable) in respect of each transfer in accordance with the provisions of this Agreement and the Equity Purchase Notice and/or Asset Purchase Notice;

1.4.3 The Parties concerned shall execute all other necessary contracts, agreements or documents (including but not limited to Party C's articles of association) and obtain all necessary internal approvals, authorizations, governmental approvals, licenses, consents and permits (including but not limited to Party C's business license), and take all necessary actions to transfer valid ownership of the Purchased Equity and/or the Purchased Assets to Party A and/or the Designee(s) without any security interest attached thereon, and cause Party A and/or the Designee(s) to become the registered owner(s) of the Purchased Equity and/or Purchased Assets (subject to completion of the relevant industrial and commercial registration and filing with the commercial authority (if applicable)). For the purposes of this Article and this Agreement, "**security interest**" includes a guarantee, mortgage, third party right or interest, any share option, acquisition right, right of first refusal, set-off right, retention of ownership or other security arrangement. However, for the purpose of clarity, it does not include any security interest arising under this Agreement and the Share Pledge Agreement or other transaction agreements (as defined in the Share Pledge Agreement). "**Share Pledge Agreement**" as provided in this Article and this

Agreement refers to the *Share Pledge Agreement* (as amended from time to time) executed by and among Party A, Party B and Party C on the execution date of this Agreement. According to the Share Pledge Agreement, Party B pledges all the equity interests in Party C it holds to Party A respectively, in order to guarantee the performance of the *Exclusive Business Cooperation Agreement* (as amended from time to time, the "**Business Cooperation Agreement**") executed by and between Party A and Party C on the execution date of this Agreement, the **Shareholders' Rights Entrustment Agreement** (as amended from time to time) executed by and among all Parties on the execution date of this Agreement and the **Power of Attorney** (if any, as amended from time to time) issued by Party B pursuant to the Shareholders' Rights Entrustment Agreement, and the obligations hereunder.

2. Undertakings

2.1 Party C's undertakings

Party C hereby undertakes as follows:

2.1.1 without the prior written consent of Party A, Party C shall not supplement, revise or modify Party C's articles of association and bylaws in any manner, increase or decrease its registered capital, or otherwise change the structure of its registered capital; make any division, dissolution or any change in its company form;

2.1.2 Party C shall maintain its existence in accordance with good financial and business standards and practices, and prudently and effectively operate its business and handle its affairs, and perform its obligations under the Business Cooperation Agreement;

2.1.3 without the prior written consent of Party A, Party C shall not change its main business, conduct any business activities that may materially affect its assets, businesses, rights and operations;

2.1.4 without the prior written consent of Party A and at any time following the execution date of this Agreement, Party C shall not sell, transfer, mortgage or otherwise dispose of its legal interest in any assets (tangible or intangible assets), business or revenues of Party C with a value of more than RMB1 million (or any amount otherwise agreed by the Parties), or allow any encumbrance of any security interest set thereon;

2.1.5 without the prior written consent of Party A, Party C shall not dissolve or liquidate, except as required by the PRC laws; after statutory liquidation as described in Article 3.6, Party B shall pay Party A in full any residual value received by it or cause such payment to occur. If such payment is prohibited by the PRC laws, Party B will pay such income to

Party A or the Designee(s) designated by Party A to the extent permitted by the PRC laws;

2.1.6 without the prior written consent of Party A, Party C shall not incur, inherit, guarantee or allow the existence of any debt, except for (i) those incurred in the ordinary course of business other than through loans, and (ii) those that have been disclosed to and approved in writing by Party A;

2.1.7 Party C shall always operate all the businesses in the ordinary course of business to maintain the asset value of Party C and refrain from any action/omission that may adversely affect its operating condition and asset value. Party A's board of directors has the right to supervise the assets of Party C and evaluate whether it has control over the assets of Party C. If Party A's board of directors considers that Party C's business activities affect the value of its assets or affect the board of directors' control over Party C's assets, Party A will engage a legal adviser or other professionals to handle such issues;

2.1.8 without the prior written consent of Party A, Party C shall not execute any Material Contract, except the contracts executed in the ordinary course of business and contracts signed by Party C with the wholly-owned overseas parent company of Party A or subsidiaries directly or indirectly controlled by its wholly-owned overseas parent company (for the purposes of this paragraph, "**Material Contract**" shall refer to any contract with a total price exceeding RMB1 million (or any amount otherwise agreed by the Parties));

2.1.9 without the prior written consent of Party A, Party C shall not provide any person with any security in any form such as loan, financial aid or mortgage or pledge, or allow a third party to mortgage or pledge its assets or equity;

2.1.10 if requested by Party A, Party C shall provide true and accurate materials and documents to Party A;

2.1.11 if requested by Party A, Party C shall provide all information regarding its operations and financial condition on a regular basis to Party A;

2.1.12 without the prior written consent of Party A, Party C shall not revise or alter the accounting policy previously adopted, nor shall it appoint or replace its auditor;

2.1.13 without the prior written consent of Party A, Party C shall not merge into, partner with, consolidate with, acquire or invest in any person;

2.1.14 without the prior written consent of Party A, Party C shall not carry out any enterprise restructuring activities;

2.1.15 Party C shall immediately notify Party A of any litigation, arbitration, or administrative proceedings arising or that are likely to arise with respect to Party C's assets, business, or revenues, and take all necessary measures as reasonably required by Party A;

2.1.16 to maintain Party C's ownership of all its assets, Party C shall execute all necessary or appropriate documents, take all necessary or appropriate actions, and file all necessary or appropriate complaints or raise necessary and appropriate defenses against all claims;

2.1.17 without the prior written consent of Party A, Party C shall not in any manner distribute dividends to its shareholders, provided that upon Party A's request, it shall immediately distribute all distributable profits to its shareholders;

2.1.18 without the prior written consent of Party A, Party C shall not directly or indirectly dispose of or dilute the interests of its subsidiaries and branches;

2.1.19 if requested by Party A, Party C shall appoint a party designated by Party A to act as a director, supervisor and/or senior officer of Party C and/or remove any director, supervisor and/or senior officer of Party C from office and execute all relevant resolutions and filing procedures. Party A has the right to request Party B and Party C to replace the above-mentioned personnel;

2.1.20 subject to other provisions hereof (including but not limited to Articles 5.2 and 12.1), if Party A's exercise of the Option is impeded due to the failure of any shareholder of Party C or Party C to fulfill its tax obligations under applicable laws, Party A has the right to require Party C or its shareholder to perform such tax obligation, or require Party C or its shareholder to pay such tax to Party A, which will pay such tax on its behalf; and

2.1.21 with respect to the undertakings applicable to Party C under this Article 2.1, Party C shall cause its subsidiaries to comply with such undertakings where applicable, as if such subsidiaries were Party C under the relevant terms.

2.2 Party B's undertakings

Each of Party B hereby undertakes, severally and irrevocably but not jointly, as follows:

2.2.1 without the prior written consent of Party A and at any time following the effective date of this Agreement, Party B shall not sell, transfer, mortgage or otherwise dispose of any legal or beneficial interest it holds in the equity interests in Party C, or allow the encumbrance of any security interest to be placed thereon, except for the pledge placed on Party C's equity interests pursuant to the Share Pledge Agreement or other transaction agreements (as defined in the Share Pledge Agreement); and Party B shall cause the shareholders' general meeting and/or the board of directors (or the executive director) of Party C not to approve the sale, transfer, mortgage or otherwise disposal of any legal or beneficial interest in Party C's equity interests held by Party B, nor to allow the encumbrance of any security interest placed thereon, without the prior written consent of Party A, except for the pledge placed on Party C's equity interests pursuant to the Share Pledge Agreement or other transaction agreements (as defined in the Share Pledge Agreement);

2.2.2 Party B shall not engage in business or have any other behavior that adversely affects the reputation of Party C;

2.2.3 Party B shall take reasonable measures to cause Party C to maintain the legality and validity of all business licenses of Party C and renew them on time according to law;

2.2.4 any appointment of directors, supervisors, legal representative and senior management of Party C shall be subject to prior written consent of Party A, and Party B shall execute all necessary or appropriate documents and take all reasonable steps to appoint any such person designated by Party A;

2.2.5 Party B as a shareholder of Party C shall not abuse its shareholder rights to damage the interests of Party C; if Party B abuses its shareholder rights, Party A shall have the right to exercise the Option under the Exclusive Option Agreement;

2.2.6 Party B shall not require Party C to distribute dividends or profit in other forms in respect of the equity interests held by Party B in Party C, and shall not refer to matters decided by the board of directors (or matters decided by the executive director) in connection therewith. in any case, if Party B receives any income, profit distribution or dividends from Party C, it shall, to the extent permitted by the PRC laws, waive the collection of such income, profit distribution or dividends and immediately pay or transfer such income, profit distribution or dividends to Party A or the Designee(s);

2.2.7 Party B shall cause the shareholders' general meeting and/or the board of directors (or the executive director) of Party C not to approve the sale, transfer, mortgage or otherwise disposal of any legal or beneficial interest in the equity interests held by Party B in Party C, nor to allow the encumbrance of any security interest placed thereon, without the prior written consent of Party A, except for the pledge placed on the equity interests in Party C pursuant to the Share Pledge Agreement;

2.2.8 Party B shall cause the shareholders' general meeting and/or the board of directors (or the executive director) of Party C not to approve any merger, partnership, joint venture or union of Party C with any person, or acquisition or investment in any person by Party C, or division or reorganization of Party C, amendment of Party C's articles of association, change of registered capital or change of company form of Party C, without the prior written consent of Party A;

2.2.9 Party B shall immediately notify Party A of any litigation, arbitration, or administrative proceedings arising or that are likely to arise with respect to the equity interests held by Party B in Party C, and take all necessary measures as reasonably required by Party A;

2.2.10 to maintain Party B's equity interests in Party C, Party B shall execute all necessary or appropriate documents, take all necessary or appropriate actions, and file all necessary or appropriate complaints or raise necessary and appropriate defenses against all claims;

2.2.11 Party B will not and will cause its successor not to bring any legal action, arbitration or other legal proceedings against the contractual arrangements, or terminate the contractual arrangements;

2.2.12 Party B shall cause the shareholders' general meeting or board of directors (or executive director) of Party C to vote for the transfer of the Purchased Equity and/or the Purchased Assets specified herein and take any and all other actions that may be required by Party A;

2.2.13 Should Party A request at any time, Party B and/or Party C shall immediately and unconditionally transfer its equity interests and/or assets in Party C to Party A or the Designee(s) according to the Option hereunder, and Party B hereby waives its right of first refusal (if any) in the equity transfer by other shareholders of Party C;

2.2.14 Party B shall strictly comply with this Agreement and other contracts (including but not limited to the Share Pledge Agreement and Business Cooperation Agreement) jointly or separately signed by Party B, Party C and Party A, perform its obligations under this Agreement and such other contracts as described above, and refrain from any act/omission that may affect the validity and enforceability thereof. If Party B has any

residual rights to the equity interests under this Agreement or the Share Pledge Agreement or the Power of Attorney granted in favor of Party A, it shall not exercise such rights unless pursuant to the written instruction from Party A;

2.2.15 If Party A or the Designee(s) has or have paid the Purchase Price of the equity to Party B before Party C's dissolution, but the relevant industrial and commercial registration of changes has not been completed, Party B shall, upon or after Party C's dissolution, promptly pay Party A or the Assignee(s) all the income from distribution of remaining property received for the holding of the equity interests in Party C, in which case Party B shall not claim any rights (except pursuant to the written instruction from Party A) in respect of the income from the distribution of the remaining property;

2.2.16 Party B agrees to return the price charged to Party A for its transfer of the Purchased Equity and/or the Purchased Assets free of charge (provided that taxes (if any) incurred in exercising the Option shall be deducted from such returned price), subject to the provisions and requirements of the PRC laws then applicable;

2.2.17 Party B agrees to execute an irrevocable Power of Attorney satisfactory to Party A, in which it authorizes Party A or the Designee(s) designated by Party A to exercise all of its rights as a shareholder of Party C on its behalf; and

2.2.18 Party B shall ensure Party C's effective existence and shall not take any action which may result in Party C's being terminated, liquidated or dissolved.

3. Representations and Warranties

Party B and Party C hereby represent and warrant to Party A, severally but not jointly, on the execution date of this Agreement and on each date of transfer of the Purchased Equity and the Purchased Assets, as below in Articles 3.1 through 3.3, and Party C hereby represents and warrants to Party A on the date of execution of this Agreement and on each date of transfer of the Purchased Equity and the Purchased Assets as below in Articles 3.4 through 3.9:

3.1 Party B and Party C have the power and ability to authorize the execution and delivery of this Agreement and any Transfer Contract to which Party B or Party C is a party with respect to the Purchased Equity and/or the Purchased Assets to be transferred thereunder (each, a "**Transfer Contract**"), and to perform its obligations under this Agreement and any Transfer Contract. Party B and Party C agree to sign a Transfer Contract on terms consistent with this Agreement when Party A exercises the Option. This Agreement and the Transfer Contract to which Party B or Party C is a party constitute or will constitute a legal, valid

and binding obligation of Party B or Party C and shall be enforceable against Party B or Party C in accordance with its terms;

3.2 Neither the execution and delivery of this Agreement or the Transfer Contract to which Party B or Party C is a party nor the obligations under this Agreement or the Transfer Contract to which Party B or Party C is a party shall or will: (i) cause Party B or Party C to violate any applicable PRC law; (ii) conflict with the articles of association, rules or other organizational documents of Party B or Party C; (iii) result in a breach of any contract or instrument to which Party B or Party C is a party or binding upon the same, or any breach under any contract or instrument to which Party B or Party C is a party or binding upon the same; (iv) cause a breach of any condition for the grant and/or continuation of the effect of any license or permit issued to Party B or Party C; or (v) cause the suspension or revocation of or imposition of additional conditions on any license or permit issued to Party B or Party C;

3.3 Party B has good and marketable ownership of its equity interests in Party C. Party B has not placed any security interest on the said equity interests other than the security interest established in accordance with the Share Pledge Agreement or other transaction agreements (as defined in Share Pledge Agreement);

3.4 Party C has good and marketable ownership of all its assets, and has not placed any security interest on the said assets;

3.5 Except for the (i) debts incurred in the ordinary course of business and (ii) the debts which have been disclosed to and approved by Party A in writing, Party C has no outstanding debts;

3.6 If Party C is dissolved or liquidated as required by the PRC laws, Party C shall sell all of its assets to Party A or other Designee(s) designated by Party A, to the extent permitted by the PRC laws, at the lowest price permitted by the PRC laws. Party C waives any payment obligation arising therefrom of Party A or the Designee(s) it designates to the extent permitted by the applicable PRC laws then in force; any proceeds arising from such transaction shall be paid to Party A or the Designee(s) designated by Party A as part of the service fees under the Business Cooperation Agreement to the extent permitted by the applicable PRC laws then in force;

3.7 Party C complies with all PRC laws and regulations applicable to the acquisition of equity interests or assets;

3.8 There is no litigation, arbitration, or administrative proceeding in connection with the equity interests in Party C, Party C's assets or Party C that is ongoing or pending or may occur; and

3.9 In the event of death, incapacity, marriage, divorce, bankruptcy or other circumstances that may affect Party B's exercise of the equity interests it holds in Party C, Party B's successor (including spouse, child, parent, sibling, paternal grandparent, maternal grandparent) or the then shareholder or the transferee of the equity interests in Party C will be deemed to be a party to this Agreement, shall inherit and undertake all the rights and obligations of Party B hereunder, and transfer the relevant equity interests to Party A or its Designee(s) in accordance with the laws then applicable and this Agreement.

4. Effective Date

This Agreement shall become effective on the date of execution of this Agreement by the Parties and shall remain in force for a renewable period in accordance with the provisions of the PRC laws, unless or until the Purchased Equity and/or Purchased Assets held by Party B are fully transferred to Party A and/or the Designee(s) (subject to the completion of industrial and commercial registration of changes and the filing with the commercial authority (if applicable)) and Party A and its subsidiaries and branches can lawfully engage in the business of Party C. Notwithstanding the foregoing, Party A shall have the right to terminate this Agreement unilaterally and immediately at any time by giving a written notice to Party B and Party C, and shall not be liable for any breach of contract for its unilateral termination of this Agreement. Unless otherwise mandated by the PRC laws, Party B and Party C shall not have the right to unilaterally terminate this Agreement.

5. Liability for Breach of Contract

5.1 Except as otherwise provided herein, if one Party (the "**Defaulting Party**") fails to perform any of its obligations hereunder or otherwise breaches this Agreement, the other Parties (the "**Aggrieved Parties**") may: (a) give a written notice to the Defaulting Party stating the nature and extent of the default and requiring the Defaulting Party to remedy it at its own expense within a reasonable period set forth in the notice (the "**Remedy Period**"); and if the Defaulting Party fails to remedy within the Remedy Period, the Aggrieved Parties shall have the right to require the Defaulting Party to bear all the liabilities arising from its default, and to compensate the Aggrieved Parties for all actual economic losses caused thereby, including, but not limited to, attorney's fees, litigation or arbitration fees incurred due to the litigation or arbitration proceedings relating to such default; in addition, the Aggrieved Parties also have the right to require the Defaulting Party to perform this Agreement compulsorily and the right to request the relevant arbitration organization or court to order the actual performance and/or enforcement of the provisions of this Agreement; (b) terminate this Agreement and require the Defaulting Party to assume all liabilities caused by its default and compensate for all resulting damages; or (c) discount, auction or sell the pledged equity interests in accordance with the Share Pledge Agreement, and have the priority to gain compensation from the price of the discount, auction or sale, and require

the Defaulting Party to bear all the losses caused thereby. The Aggrieved Parties' exercise of the aforementioned remedies shall not affect their exercise of other remedies in accordance with this Agreement and legal provisions.

5.2 The Parties agree and confirm that, unless otherwise mandated by the PRC laws or otherwise provided by other provisions of this Agreement, if Party B or Party C is the Defaulting Party, Party A shall have the right to unilaterally and immediately terminate this Agreement and claim damages from the Defaulting Party. If Party A is the Defaulting Party, Party B and Party C shall release Party A from its liability for damages, and unless otherwise provided by law, Party B and Party C shall in no event have the right to terminate or rescind this Agreement.

6. Governing Law and Dispute Resolution

6.1 Governing Law

The execution, effectiveness, construction, performance, amendment and termination of this Agreement and the resolution of disputes hereunder shall be governed by the laws of the PRC.

6.2 Dispute Resolution

In case of any dispute arising from the construction and performance of this Agreement, the Parties shall first settle such dispute through amicable consultation. If the Parties fail to reach an agreement on the resolution of such dispute within thirty (30) days after any Party requests the other Parties to resolve the dispute through consultation, any Party may submit the dispute to the Beijing Arbitration Commission for arbitration in accordance with its arbitration rules then in effect. The arbitration shall be conducted in Beijing and the arbitration language shall be Chinese. The arbitral award shall be final and binding upon all Parties. The arbitration tribunal may award compensation or indemnity to Party A for the loss caused to Party A by the default of other Parties hereto in respect of Party C's equity interests, assets or property interests, or award compulsory relief or order Party C to go bankrupt in respect of relevant business or compulsory asset transfer. After the arbitral award becomes effective, any Party shall have the right to apply to the court having jurisdiction for enforcement of the arbitral award. Where necessary, before making a final decision on the dispute among the Parties, the arbitration organization shall have the right to rule that the Defaulting Party shall immediately stop the default or rule that the Defaulting Party shall not take any action that may further increase the losses suffered by Party A. Courts in Hong Kong, the Cayman Islands or any other court having jurisdiction (including the court at the location of Party C's domicile, or the court at the location of Party C or Party A's prime assets shall be deemed to have jurisdiction) shall also have the power to grant or enforce the award of the arbitration tribunal and to award or enforce interim relief in respect of Party C's equity interests or property interests, and shall have

the power to rule or deliver a verdict on provision of interim relief to the Party bringing the arbitration while waiting for the formation of the arbitration tribunal or under other appropriate circumstances, such as ruling or deciding that the Defaulting Party shall immediately stop the default or ruling that the Defaulting Party shall not take any action that may further increase the losses suffered by Party A.

6.3 In the event of any dispute arising from the construction and performance of this Agreement or any dispute undergoing arbitration, the Parties hereto shall continue to exercise their respective rights and perform their respective obligations hereunder, except those involved in the dispute.

6.4 At any time following the execution date of this Agreement, in the event of any enactment of or change in the PRC laws, regulations or rules, or any change in the construction or application of such laws, regulations or rules, the following provisions shall apply: to the extent permitted by the PRC laws, (a) if a change in the law or a newly promulgated regulation is more favorable to any Party than the applicable law, regulation, decree or rule in force on the execution date of this Agreement (and the other Party(Parties) is/are not seriously and adversely affected), the Parties shall promptly apply for benefits from such change or new regulation and use their best efforts get the application approved; or (b) if the economic interests of any Party hereunder are seriously and adversely affected directly or indirectly as a result of such change in law or newly promulgated regulation, this Agreement shall continue to be performed in accordance with the original terms. The Parties shall use all legal means to obtain exemption from compliance with such change or regulation. If the adverse impact on the economic interests of any Party cannot be resolved in accordance with this Agreement, after the affected Party notifies the other Parties, the Parties shall promptly negotiate and make all necessary amendments to this Agreement to maintain the economic interests of the affected Party hereunder.

7. Taxes and Fees

Any and all transfer and registration taxes, costs and expenses incurred by any Party in connection with the preparation and execution of this Agreement and the Transfer Contract and the completion of the transactions contemplated under this Agreement and the Transfer Contract shall be borne by Party C.

8. Notice

8.1 All notices and other communications required or permitted hereunder shall be delivered by hand or send by postage prepaid registered mail, or commercial courier service to the address of such Party listed in Annex I. The date on which such notice is deemed to have been effectively served shall be determined in the following ways:

8.1.1 If the notice is delivered by hand or by courier service, it shall be deemed to have been effectively served at the designated address on the date of delivery or rejection.

8.1.2 If the notice is sent by postage prepaid registered mail, it shall be deemed to have been effectively served on the fifteenth (15th) day following the date marked on the receipt of the registered mail.

8.2 Any Party may change the address to which notice is to be given at any time by giving a notice to the other Parties under this Article.

9. Confidential Liability

The Parties acknowledge that any oral or written material exchanged for this Agreement shall be confidential information. Each Party shall keep all such information confidential and shall not disclose any such information to any third party without the written consent of the other Parties, except in the following cases: (a) such information is known to the public (but it is not disclosed to the public by the Party receiving the information); (b) such information is required to be disclosed by applicable law or the rules or regulations of any stock exchange; or (c) such information shall be disclosed by any Party to its legal adviser or financial adviser in connection with the transaction contemplated hereunder, provided that such legal or financial advisor shall also be bound by the confidentiality obligations similar to those set out in this Article. Any disclosure of any confidential information by any employee or agency engaged by any Party shall be deemed as a disclosure of such information by such Party, and such Party shall be legally liable for breach of this Agreement. This Article shall survive the invalidity or termination of this Agreement for any reason.

10. Further Warranties

Each Party agrees to execute in a timely manner such documents as may be reasonably required or in its favor and to take such further actions as may be reasonably required or in its favor to implement the provisions and purposes of this Agreement.

11. Force Majeure

11.1 "**Force Majeure**" shall refer to any unforeseeable, unavoidable, and insurmountable event that causes a Party hereto to fail in part or in whole to perform this Agreement. Such events include but are not limited to, earthquakes, typhoons, floods, inundation, wars, strikes, riots, government action, changes in a law or regulation or its application.

11.2 In the event of a Force Majeure event, the obligations of any Party affected by the Force Majeure hereunder shall be automatically suspended during the delay caused by the Force Majeure event, and its performance period shall be automatically extended. The extended period shall be the period of suspension for which the Party shall not be penalized or held liable as a result. Upon the occurrence of a Force Majeure event, all Parties shall consult immediately to

seek a just solution and use all reasonable efforts to minimize the effects of the Force Majeure.

12. **Miscellaneous**

12.1 Non-joint-and-several liability and limitation of liability

Notwithstanding provisions to the contrary under this Agreement or other transaction agreements (as defined in the Share Pledge Agreement) or any other document or law, Party B's obligations and responsibilities hereunder are separate and non-joint.

12.2 Amendment, modification or supplement

Matters not covered herein shall be otherwise determined by the Parties through negotiation. Any amendment, modification or supplement to this Agreement shall be made in the form of a written agreement signed by the Parties. The amendment and supplementary agreements duly signed by the Parties hereto with respect to this Agreement and its annexes shall form an integral part of this Agreement and have the same legal effect as this Agreement.

In the event of any amendments to this Agreement proposed by the Stock Exchange of Hong Kong Limited or other regulatory authorities or any changes to the rules governing the listing of securities on the Stock Exchange of Hong Kong Limited or related requirements in connection with this Agreement, the Parties shall make proper amendments to this Agreement accordingly.

12.3 Entire agreement

This Agreement shall constitute the entire agreement among the Parties with respect to the subject matter hereof, except as amended, supplemented or modified in writing after execution hereof, and shall supersede all prior oral and written negotiations, representations and contracts with respect to the subject matter hereof.

12.4 Heading

The headings in this Agreement are for convenience of reading only and shall not be used to interpret, explain or otherwise affect the meaning of the provisions of this Agreement.

12.5 Text

This Agreement is made in four (4) original copies, with each signatory holding one (1) copy. The four copies shall have the same legal effect.

12.6 Severability

If one or more provisions hereof are held to be invalid, illegal or unenforceable in any respect under any law or regulation, the validity, legality or enforceability of the remaining provisions hereof shall not be affected or impaired in any respect. The Parties shall, through consultations of good faith, seek to replace such invalid, illegal or unenforceable provisions with provisions that are valid to the maximum extent desired by the Parties and are permitted by law. The economic benefits resulting from such valid provisions shall, to the extent possible, be similar to those resulting from such invalid, illegal or unenforceable provisions.

12.7 Successor

This Agreement shall be binding on and in favor of the respective successors of the Parties and the transferees permitted by such Parties.

12.8 Survival

12.8.1 Any obligations arising from or due prior to the expiration or early termination of this Agreement shall survive the expiration or early termination hereof.

12.8.2 The provisions of Articles 6, 7, 8, 9, 12.1 and this Article 12.8 shall survive termination of this Agreement.

12.9 Waiver

Any Party may waive its rights under this Agreement, provided that such waiver must be made in writing and signed by each Party. A waiver made by any Party in respect of a default by other Parties under certain circumstances shall not be deemed to be a waiver by such Party in respect of a similar default under other circumstances.

12.10 Compliance with laws and regulations

Each Party shall comply with and shall ensure that its operations are in full compliance with all laws and regulations officially published and publicly available in the PRC that are binding on it.

12.11 Transfer of rights

Without the prior written consent of Party A, Party C and/or Party B shall not transfer any of their rights and/or obligations hereunder to any third party; Party C and Party B hereby agree that Party A has the right to transfer any of its rights and/or obligations hereunder to other Designees upon written notice to Party C and Party B, and that Party B and Party C shall enter into a supplementary

agreement or an agreement substantially identical to this Agreement with such Designees.

[The remainder of the page is intentionally left blank]

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Option Agreement*)

IN WITNESS WHEREOF, the Parties hereto have caused this Exclusive Option Agreement to be executed as of the date and in the place first above written.

Zhizhe Sihai (Beijing) Technology Co., Ltd.
(Seal)

/s/ Yuan Zhou

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Option Agreement*)

IN WITNESS WHEREOF, the Parties hereto have caused this Exclusive Option Agreement to be executed as of the date and in the place first above written.

Beijing Zhizhe Tianxia Technology Co., Ltd.
(Seal)

/s/ Dahai Li

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Option Agreement*)

IN WITNESS WHEREOF, the Parties hereby have caused this Exclusive Option Agreement to be executed as of the date and in the place first above written.

Yuan Zhou

Signature: /s/ Yuan Zhou

(This page is intentionally left blank, and serves as the Signature Page to the *Exclusive Option Agreement*)

IN WITNESS WHEREOF, the Parties hereby have caused this Exclusive Option Agreement to be executed as of the date and in the place first above written.

Dahai Li

Signature: /s/ Dahai Li

Exhibit 4.7

Annex I

For the purpose of the notice, the contact details of the Parties are as follows:

Party A:

Address: 3-011, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
To: Yuan Zhou

Party B:

Yuan Zhou
Address: **********

Dahai Li
Address: **********

Party C:
Address: 3-010, Workshop 1, 3/F, Building 1, A5 Xueyuan Road, Haidian District, Beijing
To: Yuan Zhou

Exclusive Technology Development, Consultancy and Services Agreement

This Exclusive Technology Development, Consultancy and Services Agreement (hereinafter referred to as this "**Agreement**") is made and entered into by and between the following parties on September 7, 2021:

A. **Shanghai Zhishi Commercial Consulting Co., Ltd.** (hereinafter referred to as "**Party A**"), a limited liability company legally established and existing in accordance with the law of People's Republic of China (the "**PRC**"), with its registered address at F8-11, No. 2777 Zhouhai Road, Pudong New Area, Shanghai.

B. **Shanghai Pinzhi Education Technology Co., Ltd.** (hereinafter referred to as "**Party B**"), a limited liability company legally established and existing in accordance with the law of the PRC, with its registered address at Room 201, F2, Building 11, Lane 1, No. 3805 Songzheng Road, Liantang Town, Qingpu District, Shanghai.

In this Agreement, Party A and Party B shall be herein referred to as the "**Parties**" collectively, and as a "**Party**" respectively.

Whereas:

1. Party A is a wholly foreign-owned enterprise established in PRC, and has the resources and qualifications to provide technology development, consultation and services;

2. Party A agrees to provide Party B with technology development, consultation and related services and Party B agrees to accept technology development, consultation and related services provided by Party A.

The Parties have reached consensus on providing technical consulting and related services through friendly consultation. The Parties hereby agree to enter into this Agreement for mutual compliance so as to clarify the rights and obligations of the Parties.

I. Technology Development, Consultation and Services; Exclusive and Proprietary Rights and Interests

1. Party A agrees to provide Party B with related technology development, consultation and services as the provider of technology development, consultation and services during the term of this Agreement in accordance with the terms and conditions of this Agreement, including but not limited to the following:

   (a) Basic software development and consulting services;
   (b) Development, renewal and updating services of computer system;
   (c) Software development services;
   (d) Product sale services;

(e) Services involving design, manufacturing, agency and publishing of advertisements; and
(f) Demands for other technology development, consultation and services put forward by Party B;

2. Party B agrees to accept technology development, consultation and services provided by Party A. Party B further agrees that unless with Party A's prior written consent, during the term of this Agreement, Party B shall not accept the same or any similar technology development, consultation and services provided by any third party concerning the business mentioned above.

3. Party A shall have exclusive and proprietary rights and interests in any and all rights and interests arising out of the performance of this Agreement, including but not limited to intellectual property concerning ownership, copyrights, patents, etc., technical secrets, trade secrets and others, whether developed by Party A or developed by Party B based on Party A's original intellectual property.

4. In order to guarantee that Party B meets the cash flow requirements in its daily operation and/or offset any losses incurred in the course of its operation, Party A may, at its discretion, decide whether to provide financial support for Party B (only to the extent permitted by Chinese laws), regardless of whether Party B actually incurs any such operating loss. If Party A elects to provide financial support for Party B, Party B must accept such financial support provided by Party A. Party A may provide financial support for Party B in the form of bank entrusted loan or offering a loan, and shall sign such contract on entrusted loan or offering a loan separately.

5. Service-providing Methodology of Party A

(a) Party A and Party B agree that during the term of this Agreement, the Parties may enter into and sign other technical service agreements and consulting service agreements directly or through respective related party, such agreements shall provide the specific contents, methods, personnel and fees for specific technical services and consulting services.

(b) To fulfill this Agreement, Party A and Party B agree that during the term of this Agreement, the Parties may enter into and sign the intellectual property license agreement (including but not limited to software, trademarks, patents and technical secrets) directly or through respective related party, such Agreement shall allow Party B to use Party A's intellectual property rights at any time according to the need of Party B's business.

(c) To fulfill this Agreement, Party A and Party B agree that during the term of this Agreement, the Parties may enter into and sign equipment or workshop lease agreements directly or through respective related party, such Agreement shall allow Party B to use Party A's related equipment or workshop at any time according to the need of Party B's business.

(d) Party A, at its sole discretion, may subcontract part of the services herein to be provided to Party B to a third party.

II. Calculation and Payment of the Service Fees

1. The Parties agree that Party B shall pay the fees of technology development, consultation and services (hereinafter referred to as the "**Consultation and Service Fees**"**)** under this Agreement to Party A on an annual basis or at a time otherwise agreed by the Parties. In principle, Party B shall pay Party A one hundred percent (100%) of the balance (hereinafter referred to as the "**Net Income**") of its total income on the basis of consolidated statements after deducting the business cost agreed by the Parties as Consultation and Service Fees, however, the specific amount of Consultation and Service Fees can be determined by the Parties through separate negotiations. Party A has the rights to adjust the amount of Consultation and Service Fees in written form in advance at its sole discretion in accordance with the current year's service contents of Party A and the business needs of Party B. Party B shall provide Party A with Party B's management statements and operating data for such year within ninety (90) days after the end of each fiscal year, such financial statements shall be audited and certified by an independent certified public accountant approved by Party A. Party B hereby undertakes that the management statements, operating data and financial statements provided by Party B shall be true, valid, accurate and complete. Party B shall bear full liability for losses incurred by Party A due to defects in the aforesaid materials provided by Party B. Party B irrevocably undertakes to indemnify Party A accordingly for the reduced or exempted amount of payment, provided that Party B's obligation to pay the service fees hereunder is reduced or exempted arising out of providing false materials to Party A by Party B.

2. The amount of Consultation and Service Fees shall be determined by the following factors:

   (a) Difficulty of technical development and complexity of consulting and management services;

   (b) Time needed by Party A for providing such technology development, consultation and management services;

   (c) Contents and commercial value of technology development, consultation and management services;

   (d) Party B shall pay the service fees separately according to Party A's quotation for the specific technical services and consulting provided by Party A from time to time at the request of Party B; and

   (e) With respect to the depreciation of equipment actually provided by Party A to Party B, Party A may request Party B to make the compensations according to the actual situation.

3. Party B shall provide Party A with financial statements and all operating records, business contracts and financial data for such year within thirty (30) days prior to the end of each calendar year. Party A may appoint an independent accountant with good reputation to audit relevant information in the event that Party A raises questions about the financial information provided by Party B, and Party B shall provide cooperation.

4. Party B shall bear the burden of tax arising out of the execution of this Agreement by the

Parties.

III. Representations and Warranties

1. Party A hereby represents and warrants as follows:

(a) Party A is a company legally established and validly existing in accordance with the laws of the PRC;
(b) Party A shall enter into and perform this Agreement within its power and business scope of corporation; Party A has taken necessary corporate actions and obtained necessary authorizations as well as all consents and approvals from third parties and government agencies, while not violating the restrictions of binding laws and contracts.
(c) Once this Agreement is signed, it shall constitute Party A's legal, valid and binding obligations, enforceable against it in accordance with terms of this Agreement.

2. Party B hereby represents and warrants as follows:

(a) Party B is a company legally established and validly existing in accordance with the laws of the PRC;
(b) Party B shall enter into and perform this Agreement within its power and business scope of corporation; Party B has taken necessary corporate actions and obtained necessary authorizations as well as all consents and approvals from third parties and government agencies, while not violating the restrictions of binding laws and contracts.
(c) Once this Agreement is signed, it shall constitute Party B's legal, valid and binding obligations, enforceable against it in accordance with terms of this Agreement.

IV. Confidentiality Clauses

1. The Parties acknowledge that any oral or written information exchanged between the Parties on this Agreement is regarded as confidential information (hereinafter referred to as "**Confidential Information**"). Each Party shall maintain confidentiality of all such confidential information, and such Party shall not disclose any relevant Confidential Information to any third party, without obtaining the written consent of the other Party, except for the information that: (a) is or will be in the public domain (other than through the receiving Party's disclosure to public); (b) is under the obligation to be disclosed pursuant to the laws or regulations, rules of any stock exchange; or (c) is required to be disclosed by any Party to its legal counsels or financial advisors regarding the transaction contemplated hereunder, provided that such legal counsels or financial advisors shall be bound by the confidentiality obligations similar to those set forth in this Article. Disclosure of any Confidential Information by employees of or agencies engaged by any Party shall be deemed disclosure of such Confidential Information by such Party, and such Party shall be held liable for breach of this Agreement.

2. The Parties agree that these terms shall remain effective regardless of whether this Agreement

is modified, rescinded or terminated.

V. Indemnification

Party B shall indemnify Party A for any losses, injuries, obligations and /or expenses caused by any lawsuit, claims or other demands against Party A arising from or caused by the technology development, consultation and services at the request of Party B, and shall hold Party A harmless from any damage and loss caused by acts of Party B or requested by any third party as a result of Party B's acts, while the aforesaid lawsuits, claims and other requests arising from the willful misconduct or gross negligence of Party A are excluded.

VI. Effectiveness and Validity

1. This Agreement is signed and shall be effective as of the date indicated on commencement herein. This Agreement shall remain effective for twenty (20) years unless it is early terminated in accordance with this Agreement or other related agreements concluded by the Parties.

2. This Agreement may be extended upon Party A's written confirmation prior to its expiration. The extension of the term shall be determined by Party A and, Party B must agree to it unconditionally. Party A shall have the rights to elect another extension of the validity period.

VII. Termination

1. This Agreement shall terminate on the date of expiration unless it is renewed in accordance with the relevant terms.

2. Party B shall not terminate this Agreement in advance during the term of this Agreement. Notwithstanding, Party A may terminate this Agreement by giving thirty (30) day's prior written notice to Party B at any time.

3. The rights and obligations of the Parties under Articles IV, V and VIII of this Agreement shall remain effective upon the termination of this Agreement.

VIII. Governing laws and Disputes Resolution

1. The conclusion, validity, interpretation, performance, amendment and termination of this Agreement and the dispute resolution shall be governed by the laws of China (excluding Hong Kong, Macau and Taiwan).

2. In the event of any dispute arising out of or in connection with this Agreement, the Parties shall resolve the dispute through negotiation. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either Party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission

for arbitration in Beijing in accordance with its arbitration rules in effect at that time. The arbitral tribunal shall consist of three (3) arbitrators appointed in accordance with the arbitration rules, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission. The arbitration language is Chinese. The arbitration award shall be final and binding on the Parties. During the dispute resolution, each Party shall continue to enjoy its other rights under this Agreement and shall continue to perform its corresponding obligations.

3. The arbitral tribunal may award the indemnity or compensation to the Party A for losses caused to the Party A due to the default by Party B in respect of the equity interests, assets or property interests of the Party B, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order Party B to go bankrupt. After the arbitration award becomes effective, either Party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the Parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Party A. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (including the court where the domicile of Party B is located, and the court where the main assets of the Party B or the Party A are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Party B, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by Party A.

4. Upon the occurrence of any disputes arising from the construction and performance of this Agreement or during the pending arbitration of any dispute, except for the matters under dispute, the Parties shall continue to exercise their respective rights under this Agreement and perform their respective obligations under this Agreement.

IX. Force Majeure

1. “Force majeure event” means any event beyond the reasonable foreseeability and control of a Party, which is inevitable and insurmountable with the reasonable attention of the affected party, including but not limited to government actions, natural forces, infectious diseases, fire disasters, explosions, storms, floods, earthquakes, tides or wars. However, the lack of credit, funds or financing shall not be regarded as a matter beyond the reasonable control of a party. The Party that is affected by force majeure and seeks to be exempted from performance liability shall notify the other party of such exemption from force majeure events as soon as possible, and inform it of the steps to be taken to complete the performance.

2. Where performance of this Agreement is delayed or hindered due to force majeure as defined above, the party affected by force majeure shall not be liable for such delay or obstruction. The Party affected by force majeure shall take appropriate measures to minimize or remove the effect of force majeure and, do its best to resume performance of the obligations delayed or hindered by force majeure. Once the force majeure events are removed, the Parties agree to resume the performance of obligations under this Agreement with their best efforts.

X. Notices

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Party A: Shanghai Zhishi Commercial Consulting Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong District, Shanghai
Tel: **********
Addressee: Sike Li

Party B: Shanghai Pinzhi Education Technology Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong District, Shanghai
Tel: **********
Addressee: Sike Li

XI. Assignment

Without Party A's prior written consent, Party B shall not assign its rights and/or obligations under this Agreement to any third party.

XII. Severability

If any clause hereunder is invalid or unenforceable due to inconsistency with relevant laws, such clause shall only be invalid or unenforceable within the jurisdiction of such law, and shall not affect the legal effect of other clauses hereunder.

XIII. Modifications and Supplements

The Parties agree that any modifications and supplements to this Agreement shall be in writing. The modified agreements and supplementary agreements that have been signed by the Parties shall be an integral part of this Agreement and shall have the same legal validity as this Agreement.

XIV. XIV. Miscellaneous

This Agreement shall take effect after it is signed and sealed by authorized representatives of the Parties. This Agreement is made in duplicate, each of which shall be held by Party A and Party B respectively, and shall have the same legal validity.

[The remainder of this page is intentionally left blank]

There is no text in this page. It is a signature page for the *Exclusive Technology Development, Consultancy and Services Agreement*.

Shanghai Zhishi Commercial Consulting Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Position: Legal Representative

There is no text in this page. It is a signature page for Exclusive Technology Development, Consultancy and Services Agreement.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Position: Legal Representative

Exhibit 4.9

Power of Attorney

Date: September 7, 2021

I, Sike Li (nationality: People's Republic of China, ID No.: **********), the shareholder holding 35% of equity ("**My Equity**") of Shanghai Pinzhi Education Technology Co., Ltd. (the "**Target Company**"), do hereby irrevocably authorize Shanghai Zhishi Commercial Consulting Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on my behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be myself or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

(1) To participate in the shareholders' meeting of the Target Company, and to execute on my behalf any resolutions passed by any shareholders' meeting; (2) To exercise any and all right as a shareholder entitled by me as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of My Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as my authorized representative; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to execute and sign on my behalf the Transfer Agreement as specified in the Exclusive Option Agreement (to which I am a party upon request), and to duly perform the Share Pledge Agreement and Exclusive Option Agreement to which I'm a party and which is executed on the same day as this Power of Attorney. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to My Equity shall be deemed as the act of my own, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by myself. The Trustee may act at his own will or intention upon doing the said act without the need to obtain my prior consent. I do hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with my prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of My Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that I am a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of execution hereof unless instructed in writing by the Trustee to the contrary. Once the Trustee notifies me in writing to

terminate this Power of Attorney in whole or in part, I will immediately revoke the authorization and delegation made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation to other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains incurred by My Equity as directed by me in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day I'm no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, I hereby waive all rights related to My Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by myself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

Exhibit 4.9

There is no text in this page. It is the signature page for the *Power of Attorney*.

Authorized by:
Sike Li

Signature: /s/ Sike Li

Signature Page for the Power of Attorney

Power of Attorney

Date: September 7, 2021

I, Lingtao Zhang (nationality: People's Republic of China, ID No.: **********), the shareholder holding 10% of equity ("**My Equity**") of Shanghai Pinzhi Education Technology Co., Ltd. (the "**Target Company**"), do hereby irrevocably authorize Shanghai Zhishi Commercial Consulting Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on my behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be myself or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

(1) To participate in the shareholders' meeting of the Target Company, and to execute on my behalf any resolutions passed by any shareholders' meeting; (2) To exercise any and all right as a shareholder entitled by me as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of My Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as my authorized representative; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to execute and sign on my behalf the Transfer Agreement as specified in the Exclusive Option Agreement (to which I am a party upon request), and to duly perform the Share Pledge Agreement and Exclusive Option Agreement to which I'm a party and which is executed on the same day as this Power of Attorney. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to My Equity shall be deemed as the act of my own, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by myself. The Trustee may act at his own will or intention upon doing the said act without the need to obtain my prior consent. I do hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with my prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of My Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that I am a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of execution hereof unless instructed in writing by the Trustee to the contrary. Once the Trustee notifies me in writing to

terminate this Power of Attorney in whole or in part, I will immediately revoke the authorization and delegation made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation to other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains incurred by My Equity as directed by me in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day I'm no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, I hereby waive all rights related to My Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by myself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

There is no text in this page. It is the signature page for the *Power of Attorney.*

Authorized by:
Lingtao Zhang

Signature: /s/ Lingtao Zhang

Power of Attorney

Date: September 7, 2021

The Company, Nanjing Zhizhe Tianxia Information Technology Co., Ltd., a limited liability company legally established and existing according to the laws of China, with the Unified Social Credit Code of 91320117MA264KUW5N, the shareholder holding 55% of equity ("**the Company's Equity**") of Shanghai Pinzhi Education Technology Co., Ltd. (the "**Target Company**"), does hereby irrevocably authorize Shanghai Zhishi Commercial Consulting Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on the Company's behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be the Company itself or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

(1) To participate in the shareholders' meeting of the Target Company, and to execute on the Company's behalf any resolutions passed by any shareholders' meeting; (2) To exercise any and all right as a shareholder entitled by the Company as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of the Company's Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as the Company's authorized representative; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to execute and sign on behalf of the Company the Transfer Agreement as specified in the Exclusive Option Agreement (to which Company is a party upon request), and to duly perform the Share Pledge Agreement and Exclusive Option Agreement to which the Company is a party and which is executed on the same day as this Power of Attorney. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to the Company's Equity shall be deemed as the Company's own act, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by the Company. The Trustee may act at his own will or intention upon doing the said act without the need to obtain the Company's prior consent. The Company does hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with the Company's prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of the Company's Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that the Company is a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of execution hereof unless instructed in writing by the Trustee to the contrary. Once the Trustee notifies the Company in writing to terminate this Power of Attorney in whole or in part, the Company will immediately revoke the authorization and delegation made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation to other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains incurred by the Company's Equity as directed by the Company in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day the Company is no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, the Company hereby waives all rights related to the Company's Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by itself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the

breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

Power of Attorney

There is no text in this page. It is the signature page for the *Power of Attorney*.

Authorized by:
Nanjing Zhizhe Tianxia Information Technology Co., Ltd. (Seal)

Signature of Authorized
Representative: /s/ Ning Zhang

Share Pledge Agreement

This Share Pledge Agreement (this "**Agreement**") is entered into by and between the following parties on September 7, 2021:

1. **Shanghai Zhishi Commercial Consulting Co., Ltd.** (the "**Pledgee**"), a limited liability company legally established and validly existing according to the laws of the People's Republic of China (hereinafter referred to as "**China**"), has its registered address at F8-11, No. 2777 Zhouhai Road, Pudong New Area, Shanghai;

2. **Sike Li**, a Chinese citizen, resident ID No. **********, whose residence is **********;

3. **Lingtao Zhang**, a Chinese citizen, resident ID No. **********, whose residence is **********;

4. **Nanjing Zhizhe Tianxia Information Technology Co., Ltd.**, a limited liability company legally established and validly existing according to the laws of China, has its registered address at Shiqiu Film and Television City, Shiqiu Street, Lishui District, Nanjing; (collectively referred to as the "**Pledgor**" with Sike Li and Lingtao Zhang).

5. **Shanghai Pinzhi Education Technology Co., Ltd.** (the "**Target Company**"), a limited liability company legally established and validly existing according to Chinese laws, has its registered address at Room 201, F2, Building 11, Lane 1, No. 3805 Songzheng Road, Liantang Town, Qingpu District, Shanghai.

In this Agreement, the Pledgee, the Pledgor and the Target Company shall be collectively referred to as the "**parties**", each of which is referred to as a "**party**".

Whereas:

1 The Target Company is a company incorporated in China. The Pledgor collectively holds 100% of equity of the Target Company, of which Sike Li holds 35% of equity of the Target Company, Lingtao Zhang holds 10% of equity of the Target Company, and Nanjing Zhizhe Tianxia Information Technology Co., Ltd. holds 55% of equity of the Target Company (as shown in Annex I).

2 On September 7, 2021, the Pledgee and the Target Company signed the Exclusive Technology Development, Consultancy and Services Agreement (the "**Service Agreement**").

3 On September 7, 2021, the parties signed the Exclusive Option Agreement (hereinafter referred to as the "**Exclusive Option Agreement**").

4 On September 7, 2021, the Pledgor issued a Power of Attorney to the Pledgee (hereinafter referred to as the "**Power of Attorney**").

5 In order to ensure that the Pledgor and the Target Company can fulfill their obligations under the Service Agreement, the Exclusive Option Agreement and the Power of Attorney, the Pledgor provides pledge guarantee with all of its equity of the Target Company.

Through friendly negotiation, the parties reached a consensus on equity pledge. In order to clarify the rights and obligations of the parties, this Agreement is concluded for mutual compliance.

I. Definition and Interpretation

Unless otherwise specified in this Agreement, the following terms shall have the meanings set forth below:

1. Pledge right: Refers to all the contents listed in Article II of this Agreement.

2. Pledged equity: Refers to all of the equity legally held by the Pledgor in the Target Company, accounting for 100% of equity of the Target Company in total.

3. Pledge period: Refers to the period stipulated in Article III of this Agreement.

4. Event of default: Refers to any situation listed in Article VII of this Agreement.

5. Notice of default: Refers to the notice issued by the Pledgee announcing the event of default according to this Agreement.
6. Transaction documents: Service Agreement, Exclusive Option Agreement and Power of Attorney and any modifications, amendments and/or restatements to the aforesaid documents.

7. Secured obligations: Refers to the direct, indirect and derivative losses and the loss of predictable benefits suffered by the Pledgee due to any event of default by the Pledgor and/or the Target Company. The basis for the amount of such losses includes but is not limited to: the Pledgee's reasonable business plan and profit forecast, the service fees payable by the Target Company under the Service Agreement, and all expenses incurred by the Pledgee to force the Pledgor and/or the Target Company to fulfill their contractual obligations.

II. Pledge Right

1. The Pledgor pledges all the equity owned by the Pledgor in the Target Company to the Pledgee as a guarantee for the Pledgor and the Target Company to perform the transaction documents and repay the secured obligations.

2. Pledge right refers to the right enjoyed by the Pledgee to be compensated firstly with the price of discount, auction or sale of the equity pledged by the Pledgor to the Pledgee.

III. Pledge Period

1. This Agreement shall take effect from the date of signing, and the pledge right under this Agreement shall be recorded in the register of shareholders of the Target Company (Annex II) and take effect from the date when Shanghai Qingpu District Administration for Market Regulation completes the registration of equity pledge, and the validity period of pledge right is the same as that of the Service Agreement.

2. In the process of pledge, if the Target Company fails to pay the fees for technology development and consultation services as stipulated in the Service Agreement, the Pledgee has the right to dispose of the pledge right according to the provisions of this Agreement and relevant laws and regulations.

IV. Custody of Pledge Certificate

1. Within the pledge period stipulated in this Agreement, the Pledgor shall sign or cause the Target Company to sign the capital contribution certificate and register of shareholders attached to this Agreement, and deliver the above formally signed documents to the Pledgee, who shall keep the above documents within the pledge period stipulated in this Agreement.

2. The Pledgee is entitled to receive all dividends, bonuses and other cash earnings and non-cash earnings generated from the pledged equity from the date of signing this Agreement.

V. Representations and Warranties of the Pledgor and the Target Company

The Pledgor and the Target Company hereby separately warrant to the Pledgee:

1. The Pledgor has the full power and authority to sign this Agreement and perform its obligations hereunder, and the terms of this Agreement constitute legal, valid and binding obligations for it;

2. The Target Company has full corporate power and authority to sign this Agreement and perform its obligations hereunder, and the terms of this Agreement constitute legal, valid and binding obligations for it;

3. The signing, delivery and performance of this Agreement and any related agreements by the Pledgor and the Target Company shall not violate due to time limit and/or any act or event or any other reason:

   (a) Any establishment documents of the Target Company;

   (b) Any law that the Pledgor and the Target Company shall abide by; or

   (c) Any agreement and any obligation in any written documents such as contracts, agreements and memorandums signed and effective by the Pledgor and the Target Company;

4. The Pledgor is the legal owner of the pledged equity;

5. At any time, once the Pledgee exercises the Pledgee's rights under this Agreement, there shall be no interference from any other party.

6. Except for the Pledgee, the Pledgor has not set any other pledge rights or third-party rights on its equity.

VI. Undertakings Made by the Pledgor

1. Within the term of this Agreement, the Pledgor undertakes to the Pledgee that the Pledgor shall:

   (a) Not transfer the equity directly or indirectly in any way without the prior written consent of the Pledgee except for equity transfer to the Pledgee or the person designated by the Pledgee according to the Exclusive Option Agreement, or shall provide no pledge or other form of guarantee that may compromise the rights and interests of the Pledgee;

(b) Abide by and implement all laws and regulations on pledge of rights, and notify the Pledgee within five (5) days upon receipt of any notice, instruction or suggestion in respect of the Pledgee from the competent authority, and comply with such notice, instruction or suggestion, or make objections and statements in respect of such matters upon the Pledgee's reasonable request or with the Pledgee's consent;

(c) Notify the Pledgee promptly of any event or notice received that may affect the Pledgor's equity or any other rights, and any event or notice received that may change any warranty or obligation of the Pledgor under this Agreement or compromise the Pledgor's performance of its obligations hereunder.

2. The Pledgor agrees that the Pledgee acquires the pledge right in accordance with the terms of this Agreement and that the pledge right shall not be interrupted or impaired by any legal proceedings taken by the Pledgor, the Pledgor's heirs, spouses (where applicable), the Pledgor's principal or any other person.

3. The Pledgor warrants to the Pledgee that, in order to protect or improve the guarantee of this Agreement for the Pledgor and the Target Company to fulfill the obligations of transaction documents and repay the secured obligations, the Pledgor shall sign in good faith, and cause other interested parties to sign all certificates of rights and contracts required by the Pledgee, and/or perform and cause other interested parties to perform obligations required by the Pledgee, and facilitate the exercise of the rights and authority granted to the Pledgee under this Agreement, sign all the change documents related to the equity certificate with the Pledgee or its designated person (natural person/legal person), and provide the Pledgee with all the notices, orders and decisions related to the pledge right as it deems necessary within a reasonable period of time.

4. The Pledgor warrants to the Pledgee that, for the benefit of the Pledgee, the Pledgor shall abide by and perform all warranties, promises, agreements, representations and conditions. If the Pledgor fails to perform or fails to fully perform its warranties, promises, agreements, representations and conditions, the Pledgor shall indemnify the Pledgee for all losses suffered therefrom.

5. The Pledgor warrants to the Pledgee that the Pledgor and the Target Company shall register the pledge right of the Agreement in the register of shareholders of the Target Company on the date of signing this Agreement; within two (2) months from the date of signing this Agreement, the Pledgor shall urge the Target Company to handle the equity pledge registration with the Shanghai Qingpu District Administration for Market Regulation.

VII. Events of Default

1. The following events shall be deemed as events of default:

(a) Violation of the obligations under the transaction documents by the Pledgor or the Target Company, including but not limited to the failure of the Target Company to pay the fees for technology development and consultation service payable under the Service Agreement in full and on time;

(b) Any representations or warranties made by the Pledgor and the Target Company in

Article V of this Agreement are materially misleading or wrong, and/or the Pledgor and the Target Company violate the representations and warranties made in Article V of this Agreement;

(c) The Pledgor violates the undertaking in Article VI of this Agreement;

(d) The Pledgor violates any provision of this Agreement;

(e) Except as stipulated in clause 1(a) of Article VI of this Agreement, the Pledgor loses the pledged equity for any reason, or transfers the pledged equity without the written consent of the Pledgee;

(f) Any external loans, guarantees, indemnities, promises or other liabilities of the Pledgor (1) are required to be repaid or performed in advance due to default; or (2) are due but cannot be repaid or performed as scheduled, which causes the Pledgee to believe that the Pledgor's ability to perform its obligations under this Agreement has been affected;

(g) The Pledgor is unable to repay general debts or other debts, which causes the Pledgee to believe that the Pledgor or the Target Company's ability to perform the obligations under transaction documents or this Contract has been affected;

(h) In the event of withdrawal, suspension, invalidation or material modification of any governmental consent, permission, approval or authorization required for the transaction document or this Agreement to be executed or to make it legal or effective;

(i) The Pledgee believes that the Pledgor or the Target Company's ability to perform the obligations under transaction documents or this Agreement has been affected due to significant adverse changes in the property owned by the Pledgor;

(j) The successor or custodian of the Target Company can only partially perform or refuse to perform the obligations under the transaction documents or pay the secured obligations; and

(k) Other circumstances under which the Pledgee cannot exercise the right to dispose of the pledge right according to relevant laws.

2. The Pledgor shall immediately notify the Pledgee in writing of any of the matters referred to in clause 1 of this Article or of the occurrence of an event which may lead to such matters. The Pledgee has the right to require the Pledgor to correct the event of default within a time limit.

3. Unless the events of default listed in clause 1 of this Article has been resolved with the approval of the Pledgee, otherwise, the Pledgee may send a notice of default to the Pledgor in writing when or at any time after the Pledgor's default occurs, requiring the Pledgor to immediately pay all the arrears and other payables under the Service Agreement or dispose of pledge right according to Article VIII of this Agreement. If the transaction documents or this Agreement are illegal or the Pledgor or the Target Company cannot continue to perform the obligations under transaction documents or this Agreement due to the promulgation of relevant laws, the Pledgor and the Pledgee shall reach a solution satisfactory to the Pledgee within thirty (30) days, otherwise the Pledgee may require the Pledgor to immediately pay all

the arrears under the Service Agreement, dispose of pledge right according to Article VIII of this Agreement or require the Pledgor to perform the rights under the Exclusive Option Agreement.

VIII. Exercise of Pledge Right

1. Before the fees for technology development and consultation services mentioned in the Service Agreement are fully repaid, without the written consent of the Pledgee,

   (a) The Pledgor shall not transfer the equity held by it by any means for any reason;

   (b) The pledgor shall not transfer the pledge right.

2. When exercising the pledge right, the Pledgee shall issue a notice of default to the Pledgor.

3. The Pledgee may exercise the right to dispose of pledge right at the same time as or at any time after the notice of default is given in accordance with clause 3 of Article VII.

4. The Pledgee has the right to discount all or part of the equity under this Agreement according to legal procedures, or to be compensated first with the price of auction or sale of the equity, until the unpaid fees for technology development and consulting service and all other payables under the Service Agreement are compensated.

5. When the Pledgee disposes of pledge right in accordance with this Agreement, the Pledgor shall not set up obstacles and shall provide necessary assistance to enable the Pledgee to realize its pledge right.

IX. Transfer

1. The Pledgor shall not be entitled to grant or transfer its rights and obligations under this Agreement except with the prior consent of the Pledgee.

2. This Agreement is binding on the Pledgor or its successors, and valid for the Pledgee and each of its successors.

X. Termination

This Agreement is terminated after the Pledgor and the Target Company have fully and completely fulfilled all obligations under transaction document and paid off all secured obligations. The Pledgee shall terminate this Agreement and assist the Pledgor in canceling the registration of the pledged equity within a reasonably feasible time.

XI. Handling Fees and Other Expenses

1. All expenses and actual expenditures related to this Agreement, including but not limited to legal fees, production costs, stamp duty and any other taxes and expenses, shall be borne by the Target Company. If the law requires the Pledgee to pay the relevant taxes and fees, the Pledgor shall compensate the Pledgee in full for the taxes and fees paid by the Pledgee.

2. If the Pledgor fails to pay any taxes and fees payable by it in accordance with the provisions of this Agreement, or causes the Pledgee to take any recourse by any ways or means due to other reasons, the Pledgor shall bear all expenses arising therefrom (including but not limited

to various taxes and fees, handling fees, management fees, legal fees, attorney fees and various insurance premiums).

XII. Force Majeure

1. If the performance of this Agreement is delayed or hindered by any force majeure event, the party affected by the force majeure shall not bear any responsibility under this Agreement only for this part of the delayed or hindered performance.

2. "Force majeure event" means any event beyond the reasonable foreseeability and control of a party, which is inevitable and insurmountable with the reasonable attention of the affected party, including but not limited to government actions, natural forces, infectious diseases, fire disasters, explosions, storms, floods, earthquakes, tides or wars. However, the lack of credit, funds or financing shall not be regarded as a matter beyond the reasonable control of a party.

3. The party seeking exemption from performance under this Agreement or any provision hereof affected by force majeure shall notify the other party of such exemption and inform it of the steps to be taken to complete performance as soon as possible.

4. The party affected by force majeure shall not be liable for failure to perform its obligations under this Agreement, but the affected party shall try its best to reduce the losses caused to the other party, and the obligations not performed shall be limited to those not performed due to force majeure. After the event of force majeure ends, the parties agree to resume the performance of obligations under this Agreement with their best efforts.

XIII. Governing Laws and Dispute Resolution

1. The execution, validity, interpretation, performance, amendment and termination of this Agreement and the dispute resolution shall be governed by the laws of China (excluding Hong Kong, Macau and Taiwan).

2. In the event of any dispute between the parties concerning the interpretation and performance of the terms of this Agreement, the parties shall resolve the dispute through negotiation. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission for arbitration in Beijing in accordance with its arbitration rules in effect at that time. The arbitral tribunal shall consist of three (3) arbitrators appointed in accordance with the arbitration rules, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission. The arbitration language is Chinese. The arbitration award shall be final and binding on the parties. During the dispute resolution, the party shall continue to enjoy its other rights under this Agreement and shall continue to perform its corresponding obligations.

3. The arbitral tribunal may award the indemnity or compensation to the Pledgee for losses caused to the Pledgee due to the default by other parties hereto in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go

bankrupt. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Pledgee. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the Pledgee are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Pledgee.

XIV. Notice

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Pledgee: Shanghai Zhishi Commercial Consulting Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong District, Shanghai
Tel: **********
Recipient: Sike Li

Pledgor: Sike Li
Address: **********
Tel: **********
Recipient: Sike Li

Pledgor: Lingtao Zhang
Address: **********
Tel: **********
Recipient: Lingtao Zhang

Pledgor: Nanjing Zhizhe Tianxia Information Technology Co., Ltd.
Address: Gate 11, Block A, 768 Creative Industry Park, Haidian District, Beijing
Tel: **********
Recipients: Ning Zhang/Zhiwei Cai/Zhongyu Fan

Target Company: Shanghai Pinzhi Education Technology Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong District, Shanghai
Tel: **********
Recipient: Sike Li

XV. Annexes

The annexes listed in this Agreement are an integral part of this Agreement.

XVI. Severability

If any clause hereunder is invalid or unenforceable due to inconsistency with relevant laws, such clause shall only be invalid or unenforceable within the jurisdiction of such law, and shall not affect the legal effect of other clauses hereunder.

XVII. Effective

1. This Agreement and any modification, supplement or alteration shall be in written form and shall come into effect after being signed and sealed by the parties.

2. This Agreement is made in quintuplicate, with two natural persons and one legal person as the Pledgor holding one copy, and the Pledgee and the Target Company holding one copy respectively, which have the same legal effect.

[The remainder of this page is intentionally left blank]

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Shanghai Zhishi Commercial Consulting Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Position: Legal representative

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Sike Li

Signature: /s/ Sike Li

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Lingtao Zhang

Signature: /s/ Lingtao Zhang

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Nanjing Zhizhe Tianxia Information Technology Co., Ltd. (Seal)

Signature: /s/ (Seal)

There is no text in this page. It is the signature page for the Share Pledge Agreement.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Position: Legal representative

Annex I

Certificate of Shanghai Pinzhi Education Technology Co., Ltd.

(No. 001)

Shanghai Pinzhi Education Technology Co., Ltd. was founded on November 17, 2017, registered with the Shanghai Pudong New Area Administration for Market Regulation and changed its registration with the Shanghai Qingpu District Administration for Market Regulation. Unified social credit code: **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 10,000,000.

Sike Li (ID No.: **********), the Company's shareholder, has subscribed RMB 3,500,000 in the registered capital and holds 35% of the equity, all of which has been pledged to **Shanghai Zhishi Commercial Consulting Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: _____
Name: Sike Li
Position: Legal representative

Date: _____

Annex I

Certificate of Shanghai Pinzhi Education Technology Co., Ltd.

(No. 002)

Shanghai Pinzhi Education Technology Co., Ltd. was founded on November 17, 2017, registered with the Shanghai Pudong New Area Administration for Market Regulation and changed its registration with the Shanghai Qingpu District Administration for Market Regulation. Unified social credit code: **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 10,000,000.

Lingtao Zhang (ID No.: **********), the Company's shareholder, has subscribed RMB 1,000,000 in the registered capital and holds 10% of the equity, all of which has been pledged to **Shanghai Zhishi Commercial Consulting Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: _____
Name: Sike Li
Position: Legal representative

Date: _____

Annex I

Certificate of Shanghai Pinzhi Education Technology Co., Ltd.

(No. 003)

Shanghai Pinzhi Education Technology Co., Ltd. was founded on November 17, 2017, registered with the Shanghai Pudong New Area Administration for Market Regulation and changed its registration with the Shanghai Qingpu District Administration for Market Regulation. Unified social credit code: **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 10,000,000.

Nanjing Zhizhe Tianxia Information Technology Co., Ltd. (unified social credit code: **********), the Company's shareholder, has subscribed RMB 5,500,000 in registered capital and holds 55% of the equity, all of which has been pledged to **Shanghai Zhishi Commercial Consulting Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: _____
Name: Sike Li
Position: Legal representative

Date: _____

Annex II

Register of Shareholders of Shanghai Pinzhi Education Technology Co., Ltd.

Name or designation shareholder	Address	Capital contribution certificate No.	Equity ratio	Subscribed capital contribution (RMB)	Registration of pledge
Sike Li	**********	001	35%	3,500,000	It has been pledged to Shanghai Zhishi Commercial Consulting Co., Ltd.
Lingtao Zhang	**********	002	10%	1,500,000	It has been pledged to Shanghai Zhishi Commercial Consulting Co., Ltd.
Nanjing Zhizhe Tianxia Information Technology Co., Ltd.	Shiqiu Film and Television City, Shiqiu Street, Lishui District, Nanjing	003	55%	5,500,000	It has been pledged to Shanghai Zhishi Commercial Consulting Co., Ltd.

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: _____
Name: Sike Li
Position: Legal representative

Date: _____

Exclusive Option Agreement

This Exclusive Option Agreement (this "**Agreement**") is executed by and among the following parties on September 7, 2021:

1. **Shanghai Zhishi Commercial Consulting Co., Ltd.** (the "**Party A**"), a limited liability company legally established and validly existing in accordance with the law of the People's Republic of China, with its registered address at F8-11, No. 2777 Zhouhai Road, Pudong New Area, Shanghai;

2. **Sike Li**, whose nationality is Chinese, ID No. **********, with his residence at **********;

3. **Lingtao Zhang**, whose nationality is Chinese, ID No. **********, with his residence at **********;

4. **Nanjing Zhizhe Tianxia Information Technology Co., Ltd.**, a limited liability company legally established and validly existing in accordance with the law of the People's Republic of China, with its registered address at Shiqiu Film and Television City, Shiqiu Street, Lishui District, Nanjing; (collectively referred to as the "**Party B**" together with Sike Li and Lingtao Zhang)

5. **Shanghai Pinzhi Education Technology Co., Ltd.** (the "**Party C**"), a limited liability company legally established and validly existing in accordance with the law of the People's Republic of China, with its registered address at Room 201, F2, Building 11, Lane 1, No. 3805 Songzheng Road, Liantang Town, Qingpu District, Shanghai;

Party A, Party B and Party C shall be collectively referred to as the "**Parties**", and individually referred to as a "**Party**" herein.

Whereas:

1. Party B collectively hold 100% of equity of Party C, of which Sike Li holds 35%, Lingtao Zhang holds 10%, Nanjing Zhizhe Tianxia Information Technology Co., Ltd. holds 55%.

2. Party A and Party C have entered into the "Exclusive Technology Development, Consultancy and Services Agreement" (the "**Service Agreement**") on September 7, 2021.

3. Party A, Party B and Party C entered into the "Share Pledge Agreement" (the "**Share Pledge Agreement**") on September 7, 2021.

Upon amicable consultation, the Parties have reached consensus with respect to matters concerning exclusive option. In order to clarify the rights and obligations of each Party, this Agreement is made hereby for mutual abidance.

I. Purchase & Sales of Equity

1. Grant of Option

   (a) Party B hereby irrevocably grants Party A, to the extent permitted by PRC laws, the exclusive right to purchase directly from Party B or designate one or more persons

(the "**Designee**") to purchase the equity (the "**Purchase Option of Equity**") of Party C wholly or partially held by Party B at any time, in accordance with the exercise steps determined by Party A at its own discretion and in accordance with the price stated in clause 3 of Article I of this Agreement. No third party shall have such Purchase Option of Equity except for Party A or its Designee.

(b) "Person" as used in this Article and herein refers to any individual, firm, joint venture, partnership, enterprise, trust or non-corporation organization.

2. Steps for Exercise of the Option

Party A may only exercise the Purchase Option of Equity subject to compliance with provisions of the laws and regulations of the PRC. Upon exercise of the Purchase Option of Equity, Party A shall give a notice in writing to Party B for the purchase of the equity (the "**Exercise Notice**"), in which the following matters shall be specified:

(a) Party A's decision to exercise the Option;

(b) The portion of equity contemplated to be purchased by Party A from Party B (the "**Purchased Equity**"); and

(c) The date of purchase/the date of transfer for the Purchased Equity.

3. Purchase Price of the Equity

Unless the equity is required to be evaluated by any laws, the total consideration (the "**Purchase Price of the Equity**") of the Purchased Equity shall be RMB 10 or the minimum price as permitted by the Chinese laws. Where Party A and Party B otherwise agree on a price, such price agreed shall prevail.

Notwithstanding the forgoing, subject to compliance with any provisions and requirements of then-effective Chinese laws, any consideration paid by Party A and/or its Designee at any price to Party B and/or Party C shall be severally but not jointly returned by Party B and/or Party C to Party A and/or its Designee (provided that any tax and duties (if any) incurred by exercise of the Purchase Option of Equity shall be deducted from such consideration so returned). After making necessary tax withholdings to the purchase price in accordance with Chinese laws, the purchase price shall be paid by Party A and/or its Designee to the account designated by Party B and/or Party C within seven (7) days from the day on which the Purchased Equity are duly transferred to Party A and/or its Designee.

4. Transfer of Purchased Equity

At each time Party A exercises its option,

(a) Party B shall cause Party C to convene shareholders' meeting in a timely manner, and shall in such meeting pass resolution approving transfer of the Purchased Equity by Party B to Party A and/or its Designee;

(b) An equity transfer agreement shall be executed by and between Party B and Party A and/or its Designee in accordance with this Agreement and Exercise Notice;

(c) Party B shall execute any other necessary contract, agreement or instruments with Party A and/or its Designee, obtain any and all of the necessary government approval and consents, and take any necessary actions, and shall transfer the ownership of the Purchased Equity without attaching any security interests with respect thereto to Party A and/or its Designee and cause Party A and/or its Designee to become the registered owner of the Purchased Equity.

(d) For the purpose of this Article and this Agreement, "security interests" shall include security, charge, rights and interests of third party, any right to purchase shares, right to acquire, right of first refusal, right to setoff, retention of title or any other security arrangement, etc., however, for clarity, security interests shall not include any security interests incurred under this Agreement, Share Pledge Agreement, i.e., Party B's pledge of all of its equity in Party C to Party A in order to secure that Party C is able to perform its obligation under the Service Agreement.

II. Undertakings Concerning Equity

1. Party C hereby undertakes that:

(a) Without prior written consent of Party A or the parent company of Party A, it shall neither make any supplements, alteration or amendments to the articles of association of Party C, nor increase or decrease its registered capital, nor change the structure of its registered capital in any other form;

(b) It shall, in accordance with good financial and business standard and practices, keep and maintain its existence and operate its business and deal with affairs in a prudent and effective manner;

(c) Without prior written consent of Party A or the parent company of Party A, it shall neither sell, transfer, charge or otherwise dispose of any assets, business, income or other legitimate interests, nor allow placement of any other security interests thereon at any time after the date of execution hereof;

(d) Without prior written consent of Party A or the parent company of Party A, it shall not incur, succeed, secure or permit existence of any debt, unless:

(i) Such debt is incurred in the normal and daily business rather than by way of borrowing; and

(ii) Such debt has been disclosed to Party A and has obtained written consent of Party A.

(e) It keeps conducting any and all business during normal course of business, keeps the value of Party C's assets, doesn't conduct any act or omission which is sufficient to affect its operation condition and value of assets;

(f) Without prior written consent of Party A or the parent company of Party A, it shall not execute or terminate any material contract beyond normal business operation, "material contract" as used herein shall refer to any contract whose value exceeds five hundred thousand yuan (RMB500,000);

(g) Without prior written consent of Party A or the parent company of Party A, it shall not offer loan or credit to anyone;

(h) Upon request of Party A, it shall provide any and all material relating to operation and financial condition of Party C;

(i) Without prior written consent of Party A or the parent company of Party A, it shall not merger or amalgamate with any person, or acquire any person or make investment to any person;

(j) It shall notify Party A in case of any legal proceedings, arbitration or administrative procedures pending or threatened relating to any assets, business or income of Party C;

(k) To protect the ownership of Party C to all of its assets, it shall sign any and all necessary and proper documents, take any and all necessary and proper actions, file any and all necessary or proper complaints, or make any necessary and proper defenses against any and all claims;

(l) Without prior written consent of Party A or the parent company of Party A, it shall not distribute any dividends to its shareholders in whatever form, however, upon request of Party A, it shall immediately distribute and allocate all of its distributable profits to their shareholders;

(m) Upon request of Party A, it shall appoint any person designated by Party A as director of Party C.

2. Party B undertakes that:

(a) Without prior written consent of Party A or the parent company of Party A, it shall neither sell, transfer, charge or otherwise dispose of any interests relating to any equity, nor allow placement of any other security interests thereon at any time after the date of execution hereof, unless such pledge is placed over any equity of Party B under Share Pledge Agreement;

(b) It shall neither require Party C to distribute any dividends or make profit distribution in any other form as to any shares in Party C owned by Party B, nor propose any matters with respect thereto for resolution by shareholders' meeting, nor vote for any matters decided by such meeting of shareholders. Notwithstanding the foregoing, if Party B receives any earnings, profit distribution, dividends of Party C, Party B shall pay or transfer such profit, profit distribution or dividends to Party A or any party designated by Party A for the benefit of Party C as a portion of service fee payable to Party A by Party C under the Service Agreement;

(c) Without prior written consent of Party A or the parent company of Party A, it shall neither cause the shareholders of Party C to approve any equity interests of shares to be sold, transferred, charged or otherwise disposed, nor allow others to place any other security interests over such shares, except for any approval of any

pledge placed over equity of Party B under Share Pledge Agreement;

(d) Without prior written consent of Party A or the parent company of Party A, it shall neither cause the shareholders of Party C to approve Party C's any merger or amalgamation with any person, nor make acquisition of any person or make any investment to any person;

(e) It shall give timely notice to Party A with respect to any actions, arbitration or administrative procedures pending or threatened relating to any equity owned by Party B;

(f) It shall cause shareholders of Party C to vote for transfer of the Purchased Equity specified herein;

(g) To protect the ownership of Party B to its equity, it shall sign any and all necessary and proper documents, actively take any and all necessary and proper actions and/or file any and all necessary or proper charges, or make any necessary and proper defenses against any and all claims;

(h) Upon request of Party A, it shall appoint any person designated by Party A as director of Party C;

(i) Upon request of Party A, it shall immediately and unconditionally transfer its equity to Party A or any representative designated by Party A at any time, and waive any right of first refusal enjoyed by it with respect to transfer of the said equity by other shareholders; and

(j) It shall strictly abide by any provisions of this Agreement and any other agreements jointly or severally entered into by and among Party A, the parent company of Party A, Party B and Party C, fulfill effectively any and all obligations under such agreement, and shall not conduct any act and/or omission which may affect the effectiveness and enforceability of such agreement.

3. Party B and Party C shall not withdraw the undertaking as aforesaid, and shall be jointly and severally liable for any obligations hereunder.

III. Purchase Option of Assets

1. Definition

"Asset" refers to any and all assets of Party C, including but not limited to fixed assets, current assets, intellectual property and any interests under any and all contracts executed by Party C. The aforesaid intellectual property shall include any patent right, right of patent application, trademark right, right of trademark application, trade name, copyright, business secrets, inventions, technical secrets, industrial design, logo, sign, web design, layout design, domain name, etc. created, owned or had any right thereto by Party C at present or in the future.

2. Grant of Option

To the extent permitted by Chinese laws, Party B and Party C hereby irrevocably grant

to Party A an exclusive right, i.e., Party A is entitled to purchase at any time or cause any of its Designee to purchase any and all assets held by Party C (the "**Purchase Option of Assets**") by the step of exercise decided at its sole discretion and at the price specified in clause 4 of Article III hereof. Party B unanimously agrees Party C to grant the Purchase Option of Assets to Party A.

3. Steps of Exercise

(a) Party A's exercise of its Purchase Option of Assets is subject to compliance with provisions of Chinese laws and regulations. Upon exercise the Purchase Option of Assets, Party A shall give written notice to Party B (the "**Purchase Notice of Assets**"), specifying:

(i) The decision of Party A with respect to exercise of its Purchase Option of Assets;

(ii) The assets to be purchased by Party A from Party B (the "**Purchased Assets**");

(iii) The date of purchase.

(b) After giving the Purchase Notice of Assets, upon exercise of the Purchase Option of Assets by Party A at each time, Party C shall undertake to perform the following obligations, and Party B undertakes to supervise and urge Party C to perform the following obligations:

(i) Party C executes assets transfer agreement with respect to the Purchased Assets in accordance with this Agreement and the specific requirements of each Purchase Notice of Assets; and

(ii) Party C shall execute any and all necessary contracts, agreements or documents, obtain any and all necessary government approval and consents, and take any and all necessary actions to transfer the ownership of Purchased Assets to Party A and/or its designee without attaching any security interests, and complete registration and filing procedures with respect to transfer of intellectual property in accordance with provisions of pertinent Chinese laws and regulations in order to make Party A and/or its Designee become the registered owner of the Purchased Assets.

4. Purchase Price of Assets

Unless otherwise provided by any law, total consideration of the Purchased Assets (the "**Purchase Price of Assets**") shall be RMB10 or the minimum price permitted by Chinese laws and regulations. Where Party A and Party C otherwise agree on a price, their agreed price shall prevail. Party C shall bear any and all taxes and duties incurred by such assets transfer.

Notwithstanding the foregoing, subject to compliance with provisions and requirements of then-effective Chinese laws, any consideration paid by Party A and/or its Designee to Party B and/or Party C at any such price shall be returned by Party B and/or Party C

severally but not jointly to Party A and/or its designee (provided that any taxes and duties (if any) incurred by exercise of Purchase Option of Assets shall be deducted from any sums returned). The purchase price, after making necessary tax withholdings in accordance with Chinese laws, shall be paid to the account designated by Party B and/or Party C by Party A and/or its Designee within seven (7) days after the day on which the Purchased Assets is duly transferred to the name of Party A and/or its Designee.

IV. Representation and Warranties of Party B and Party C

Party B and Party C hereby respectively represents and undertakes to Party A on the date of execution hereof and each day of transfer that:

1. It has the power and right to sign and deliver this Agreement, any equity transfer agreement executed for each transfer of the Purchased Equity hereunder, or any assets transfer agreement executed for the Purchased Assets (respectively referred to as "**Transfer Agreement**"), and to perform obligations under this Agreement and any Transfer Agreement. This Agreement and each Transfer Agreement shall constitute legal, valid and binding obligations to parties hereto and thereto from the date of execution, and is enforceable against parties hereto and thereto in accordance with their terms;

2. Any execution and delivery of this Agreement or any Transfer Agreement or performance of any obligations under this Agreement or any Transfer Agreement shall not:

   (a) Violate any pertinent Chinese laws;

   (b) Conflict with articles of association or other constitutional document of Party C;

   (c) Breach any agreement or document to which it is a party or by which it is bound, nor constitute breach under any agreement or document by which it is bound;

   (d) Breach any conditions under which any permit is issued to it or any approval is granted and/or any permit or approval continue to be effective; or

   (e) Result in suspension, withdrawal of any permit or approval issued to it or attachment of any further conditions.

3. Party B legally has ownership to the equity it owns. Party B does not place any security interest over the said equity, except for the share pledge over shares of Party B under Share Pledge Agreement;

4. Party C has no outstanding debts, with the following exceptions:

   (a) Such debts are incurred during ordinary course of business, and

   (b) Such debts have been disclosed to Party A and agreed in writing by Party A.

5. Party C complies with any and all applicable laws and regulations;

6. There is no ongoing, pending or threatened litigation, arbitration or administrative proceedings relating to equity or assets of Party C or otherwise related to Party C.

V. Effective Date and Term

This Agreement shall become effective from the date of execution hereof. This Agreement shall terminate upon the time when all the equity of Party C held by Party B is duly transferred to Party A or any other person designated by Party A as agreed herein.

VI. Governing Laws and Dispute Resolution

1. Governing Laws

The execution, validity, interpretation and performance hereof and dispute resolution hereunder shall be governed by the laws of People's Republic of China (excluding Hong Kong, Macau and Taiwan).

2. Dispute Resolution

Any dispute arising out of or in connection with interpretation or performance hereof shall first be settled through amicable consultation and negotiation among the Parties. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either Party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission for arbitration in Beijing in accordance with its arbitration rules in effect at that time. The arbitral tribunal shall consist of three (3) arbitrators appointed in accordance with the arbitration rules, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission. The arbitration language is Chinese. The arbitration award shall be final and binding on the Parties. During the dispute resolution, the Party shall continue to enjoy its other rights under this Agreement and shall continue to perform its corresponding obligations.

The arbitral tribunal may award the indemnity or compensation to the Party A for losses caused to the Party A due to the default by other Parties hereto in respect of the equity interests, assets or property interests of Party C, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order Party C to go bankrupt. After the arbitration award becomes effective, either Party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the Parties, the arbitration institution shall be entitled to rule that the breaching Party should immediately stop the breach of agreement or that the breaching Party should not engage in any act that may further expand the losses suffered by the Party A. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of Party C is located, and the court where the main assets of Party C or the Party A are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of Party C, and to make an award or judgment to give provisional relief to the Party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching Party should immediately stop the breach of agreement or that the breaching Party should not

engage in any act that may further expand the losses suffered by the Party A.

VII. Tax and Charges

Each Party shall bear any taxes and charges incurred by it hereunder in accordance with Chinese law.

VIII. Notice

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Party A: Shanghai Zhishi Commercial Consulting Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong New Area, Shanghai City, PRC
Tel: **********
Recipient: Sike Li

Party B: Sike Li
Address: **********
Tel: **********
Recipient: Sike Li

Party B: Lingtao Zhang
Address: **********
Tel: **********
Recipient: Lingtao Zhang

Party B: Nanjing Zhizhe Tianxia Information Technology Co., Ltd.
Address: Gate 11, Tower A, 768 Creative Industrial Park, Haidian District, Beijing, PRC
Tel: **********
Recipient: Ning Zhang/Zhiwei Cai/Zhongyu Fan

Party C: Shanghai Pinzhi Education Technology Co., Ltd.
Address: No. 9, Lane 2211, Longdong Avenue, Pudong New Area, Shanghai City, PRC
Tel: **********
Recipient: Sike Li

IX. Confidential Obligation

1. Each Party acknowledges that any oral or written information exchanged among them with respect hereto shall be deemed as confidential information. Each Party shall keep

all such information in confidence. Without prior written consent of the other Party, it shall not disclose any related information to any third party unless:

(a) Such information is known or to be known by public (rather than by disclosure to the public by recipient of such information);

(b) Such information is disclosed in accordance with any provisions of laws and regulations; or

(c) Such information is disclosed by either party to its legal or financial advisor with respect to the transaction contemplated hereunder, provided that such legal or financial advisor shall comply with the confidential obligation similar to those described in this Article.

2. Any disclosure by any employee of or organization engaged by either Party shall be deemed as disclosure of such Party who shall be duly liable for breach hereunder. Regardless this Agreement is terminated for whatever causes, this clause shall remain in effect.

X. Further Assurance

Each Party agrees to execute any document as soon as possible as reasonably necessary or favorable to it for enforcement of various provisions and purpose hereof, and to take any further actions reasonably necessary or favorable to it for enforcement of various provisions and purpose hereof.

XI. Termination, Breach Liability and Indemnification

1. If either Party hereof breaches any obligation specified herein (the "**Breaching Party**"), the other Parties (the "**Non-breaching Party**") may give notice in writing to the Breaching Party requesting the Breaching Party to correct any of its act of breach. The Breaching Party shall cease its act of breach within thirty (30) days from receipt of the notice, and indemnify any and all losses suffered thereby by the Non-breaching Party; if the Breaching Party continue its act of breach after the thirty (30) day-period from receipt of the notice elapses, either Non-breaching Party may unilaterally terminate this Agreement, and is entitled to request the Breaching Party to indemnify any and all losses suffered thereby by the Non-breaching Party.

2. Any grace, forbearance or delay in exercise of its right under any laws or hereunder given by the Non-breaching Party with respect to any act of breach of the Breaching Party, shall not be deemed as waiver of the Non-breaching Party to its right.

3. In the event that Party A, Party A's senior officers, managers, directors, shareholders, members, representatives, agents or employees (the "**Indemnified Persons**") bear any claims, indemnities, debts, costs and expenses (including but not limited to reasonable attorney fees) in relevant lawsuits or legal proceedings, which are caused by any breach of statutory or agreed warranties, representations or other agreements by Party B or Party C or caused by any dispute or any lawsuit brought by a third party over the Purchased Equity prior to the transfer of Purchased Equity, both Party B and Party C shall

compensate, defend and hold Party A harmless, unless such liabilities arise from the intentional or gross negligence of the indemnified persons.

XII. Miscellaneous

1. Any amendments, alteration and supplements made hereto shall be made in writing and become effective only after signature and seal by the Parties.

2. Each Party shall abide by and ensure its business operation fully comply with any and all existing Chinese laws and regulations.

3. Except for any amendments, supplements or alteration made after execution hereof, this Agreement shall constitute entire agreement reached by Parties hereto with respect to matters specified herein, and supersede any and all oral and/or written consultation, representation and agreements reached hereinbefore.

4. The headings and titles hereof are inserted for reference only, shall not be used to interpret, explain or otherwise affect meaning of each clause hereunder.

5. This Agreement shall become effective upon signature and seal by the Parties hereto. This Agreement is made in quintuplicates, two natural persons of Party B, one legal person of Party B, and Party A and Party C shall each hold one (1) copy respectively, each of which shall be of the same legal force and effect.

6. In case any one or more clause is judged as invalid, illegal or unenforceable in any respect under any laws and regulations, the validity, legality or enforceability of the remaining clauses shall not be affected or damaged thereby to any extent. Each Party shall negotiate in good faith to replace those invalid, illegal or unenforceable provisions with valid and effective provisions, in order to achieve the economic effect of such valid and effective provisions similar to the greatest extent to those invalid, illegal or unenforceable provisions.

7. This Agreement shall be binding upon each successor and assignee of each party.

8. Survival

   Article VI, Article IX, Article XI and clause 8 of Article XII hereof shall survive after termination hereof.

9. Either Party may waive any terms and conditions hereof only in writing form, and such waiver may only take effect upon the Parties' signature hereof. The waiver by one Party in the circumstances with respect to any breach of the other Parties shall not be deemed as waiver by such Party under other circumstances and with respect to breach of similar nature.

[The remainder of this page is intentionally left blank]

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Shanghai Zhishi Commercial Consulting Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Title: Legal Representative

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Sike Li

Signature: /s/ Sike Li

There is no text in this page. It is the signature page for the *Exclusive Option Agreement*.

Lingtao Zhang

Signature: /s/ Lingtao Zhang

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Nanjing Zhizhe Tianxia Information Technology Co., Ltd. (Seal)

Signature: /s/ (Seal)

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Shanghai Pinzhi Education Technology Co., Ltd. (Seal)

Signature: /s/ Sike Li
Name: Sike Li
Title: Legal Representative

Exclusive Technology Development, Consultancy and Services Agreement

This Exclusive Technology Development, Consultancy and Services Agreement (hereinafter referred to as this "**Agreement**") is made and entered into by and between the following parties in Beijing City of China on November 9, 2021:

A. **Shanghai Paya Information Technology Co., Ltd.** (hereinafter referred to as "**Party A**"), a limited liability company legally established and validly existing according to the laws of the People's Republic of China, has its registered address at Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai;

B. **Shanghai Biban Network Technology Co., Ltd.** (hereinafter referred to as "**Party B**"), a limited liability company legally established and validly existing according to Chinese laws, has its registered address at Room 101-J, Building 6, No. 2222 Huancheng Road, Juyuan New Park, Jiading District, Shanghai

In this Agreement, Party A and Party B shall be herein referred to as the "**Parties**" collectively, and as a "**Party**" respectively.

Whereas:

1. Party A is a wholly foreign-owned enterprise established in PRC, and has the resources and qualifications to provide technology development, consultation and services for Party B;

2. Party A agrees to provide Party B with technology development, consultation and related services and Party B agrees to accept the above-mentioned technology development, consultation and related services provided by Party A.

The Parties have reached consensus on providing technology development, consultation and related services through friendly consultation. The Parties hereby agree to enter into this Agreement for mutual compliance so as to clarify the rights and obligations of the Parties.

I. Technology Development, Consultation and Services; Exclusive and Proprietary Rights and Interests

1. Party A agrees to provide Party B with related technology development, consultation and services as the provider of technology development, consultation and services during the term of this Agreement in accordance with the terms and conditions of this Agreement, including but not limited to the following:

   (a) Basic software development and consulting services;
   (b) Development, renewal and updating services of computer system;
   (c) Product sale services;
   (d) Services involving design, manufacturing, agency and publishing of advertisements;

(e) Providing technical support and professional training for relevant personnel according to Party B's needs;

(f) Conducting market information consultation, collection and research in relevant industries (except for market researches prohibited by Chinese laws for wholly foreign-owned enterprises) according to Party B's needs;

(g) Providing enterprise management consulting according to Party B's needs; and

(h) Demands for other technology development, consultation and services put forward by Party B;

2. Party B agrees to accept technology development, consultation and services provided by Party A. Party B further agrees that unless with Party A's prior written consent, during the term of this Agreement, Party B shall not accept the same or any similar technology development, consultation and services provided by any third party concerning the business mentioned above.

3. Party A shall have exclusive and proprietary rights and interests in any and all rights and interests related to intellectual property arising from the performance of this agreement, including but not limited to the ownership and other interests of intellectual property involving trademark rights, copyrights, patent rights, etc., technical secrets, and trade secrets, whether developed by Party A or developed by Party B based on Party A’s original intellectual property.

4. In order to guarantee that Party B meets the cash flow requirements in its daily operation and/or offset any losses incurred in the course of its operation, Party A may, at its discretion, decide whether to provide financial support for Party B (only to the extent permitted by Chinese laws), regardless of whether Party B actually incurs any such operating loss. If Party A elects to provide financial support for Party B, Party B must accept such financial support provided by Party A. Party A may provide financial support for Party B in the form of bank entrusted loan or offering a loan, and shall sign such contract on entrusted loan or offering a loan separately.

5. Service-providing Methodology of Party A

(a) Party A and Party B agree that during the term of this Agreement, the Parties may enter into and sign other technical service agreements and consulting service agreements directly or through respective related party, such agreements shall provide the specific contents, methods, personnel and fees for specific technical services and consulting services.
(b) To fulfill this Agreement, Party A and Party B agree that during the term of this Agreement, the Parties may enter into and sign the intellectual property license agreement (including but not limited to software, trademarks, patents and technical secrets) directly or through respective related party, such Agreement shall allow Party B to use Party A’s intellectual property rights at any time according to the need of Party B’s business.
(c) To fulfill this Agreement, Party A and Party B agree that during the term of this

Agreement, the Parties may enter into and sign the equipment or workplace lease agreements directly or through respective related party, such Agreement shall allow Party B to use Party A's related equipment or workplace at any time according to the need of Party B's business.

II. Calculation and Payment of the Service Fees

1. The Parties agree that Party B shall pay the fees of technology development, consultation and services (hereinafter referred to as the "**Consultation and Service Fees**"**)** under this Agreement to Party A on an annual basis or at a time otherwise agreed by the Parties. In principle, Party B shall pay Party A one hundred percent (100%) of the balance (hereinafter referred to as the "**Net Income**") of its total income on the basis of consolidated statements after deducting the business cost agreed by the Parties as Consultation and Service Fees, however, the specific amount of Consultation and Service Fees can be determined by the Parties through separate negotiations. Party A has the rights to adjust the amount of Consultation and Service Fees in written form in advance at its sole discretion in accordance with the current year's service contents of Party A and the business needs of Party B. Party B shall provide Party A with the financial statements and all operating data, business contracts and financial information of Party B for such year within ninety (90) days after the end of each fiscal year, such financial statements shall be audited and certified by an independent certified public accountant approved by Party A. In the event that Party A have doubts on the financial information provided by Party B, Party A may appoint a reputable independent accountant to audit the relevant information, and Party B shall be cooperative for that. Party B hereby undertakes that the aforementioned materials provided by Party B shall be true, valid, accurate and complete. Party B shall bear full liability for losses incurred by Party A due to defects in the aforesaid materials provided by Party B. Party B irrevocably undertakes to indemnify Party A accordingly for the reduced or exempted amount of payment, provided that Party B's obligation to pay the service fees hereunder is reduced or exempted arising out of providing false materials to Party A by Party B.

2. The amount of Consultation and Service Fees shall be determined by the following factors:

   (a) Difficulty of technical development and complexity of consulting and management services;

   (b) Time needed by Party A for providing such technology development, consultation and management services;

   (c) Contents and commercial value of technology development, consultation and management services;

   (d) Party B shall pay the service fees separately according to Party A's quotation for other technical consulting and management services provided by Party A from time to time at the request of Party B; and

   (e) For the depreciation incurred by Party B's use of Party A's equipment, Party A may request Party B to make the compensations according to the actual situation.

3. The taxes and fees arising from the implementation of this Agreement shall be borne by the Parties according to the laws of China.

III. Representations and Warranties

1. Party A hereby represents and warrants as follows:

   (a) Party A is a company legally established and validly existing in accordance with the laws of China;

   (b) Party A shall enter into and perform this Agreement within its power and business scope of corporation; Party A has taken necessary corporate actions and obtained necessary authorizations as well as all consents and approvals (if necessary) from third parties and government agencies, while not violating the restrictions of binding laws and contracts.

   (c) Once this Agreement is signed, it shall constitute Party A's legal, valid and binding obligations, enforceable against it in accordance with terms of this Agreement.

2. Party B hereby represents and warrants as follows:

   (a) Party B is a company legally established and validly existing in accordance with the laws of China;

   (b) Party B shall enter into and perform this Agreement within its power and business scope of corporation; Party B has taken necessary corporate actions and obtained necessary authorizations as well as all consents and approvals (if necessary) from third parties and government agencies, while not violating the restrictions of binding laws and contracts.

   (c) Once this Agreement is signed, it shall constitute Party B's legal, valid and binding obligations, enforceable against it in accordance with terms of this Agreement.

IV. Confidentiality Clauses

1. The Parties acknowledge that any oral or written information exchanged between them on this Agreement is regarded as confidential information (hereinafter referred to as "**Confidential Information**"). Each Party shall maintain confidentiality of all such Confidential Information, and such Party shall not disclose any relevant Confidential Information to any third party, without obtaining the written consent of the other Party except for the information that: (a) is or will be in the public domain (other than through the receiving Party's disclosure to public); (b) is required to be disclosed pursuant to the applicable laws or the regulations or rules of any stock exchange; or (c) is disclosed by either Party to its shareholders, directors, employees, legal advisors or financial advisors etc. in connection with the transactions under this Agreement, and such persons are also bound by confidentiality obligations similar to those provided in this Article. Disclosure of any Confidential Information by shareholders, directors, employees, legal advisers or financial advisers of any Party shall be deemed disclosure of such confidential information by such Party, and such Party shall be held liable for this.

2. The Parties agree that these terms shall remain effective regardless of whether this Agreement

is modified, rescinded or terminated.

V. Indemnification

Party B shall indemnify Party A from any losses, injuries, obligations and /or expenses caused by any lawsuit, claims or other demands against Party A arising from or caused by the technology development, consultation and services at the request of Party B, and shall hold Party A harmless from any damage and loss caused by acts of Party B or requested by any third party as a result of Party B's acts, while the aforesaid lawsuits, claims and other requests arising from the willful misconduct or gross negligence of Party A are excluded.

VI. Effectiveness and Validity

1. This Agreement is signed and shall be effective as of the date indicated on commencement herein. This Agreement shall remain effective for twenty (20) years unless it is early terminated in accordance with this Agreement or other related agreements concluded by the Parties.

2. This Agreement may be extended upon Party A's written confirmation prior to its expiration. The extension of the term shall be determined by Party A and, Party B must agree to it unconditionally. Party A shall have the rights to elect another extension of the validity period.

VII. Termination

1. This Agreement shall terminate on the date of expiration unless it is renewed in accordance with the relevant terms.

2. Party B shall not terminate this Agreement in advance during the term of this Agreement. Notwithstanding, Party A may terminate this Agreement by giving thirty (30) day's prior written notice to Party B at any time.

3. The rights and obligations of the Parties under Articles IV, V, and VIII of this Agreement shall remain effective upon the termination of this Agreement.

VIII. Governing Laws and Disputes Resolution

1. The execution, validity, interpretation, performance, amendment and termination of this Agreement and the dispute resolution shall be governed by the laws of China (for the purpose of this Agreement, the laws of Hong Kong, Macau and Taiwan regions are not included).

2. In the event of any dispute arising out of or in connection with this Agreement, the Parties shall resolve the dispute through negotiation. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either Party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission

for arbitration in Beijing in accordance with its arbitration rules in effect at that time. According to the arbitration rules, the arbitral tribunal shall consist of three (3) designated arbitrators, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission according to the arbitration rules. The arbitration language is Chinese. The arbitration award shall be final and binding on the Parties.

3. The arbitral tribunal may award the indemnity or compensation to the Party A for losses caused to the Party A due to the default by Party B in respect of the equity interests, assets or property interests of the Party B, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order Party B to go bankrupt. After the arbitration award becomes effective, either Party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the Parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Party A. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (including the court where the domicile of Party B is located, and the court where the main assets of the Party B or the Party A are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Party B, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of Agreement or that the breaching party should not engage in any act that may further expand the losses suffered by Party A.

4. Upon the occurrence of any disputes arising from the construction and performance of this Agreement or during the pending arbitration of any dispute, except for the matters under dispute, the Parties shall continue to exercise their respective rights under this Agreement and perform their respective obligations under this Agreement.

IX. Force Majeure

1. "**Force majeure**" means any event beyond the reasonable foreseeability and control of a party, which is inevitable and insurmountable with the reasonable attention of the affected party, including but not limited to government actions, natural forces, infectious diseases, fire disasters, explosions, storms, floods, earthquakes, tides or wars. However, the lack of credit, funds or financing shall not be regarded as a matter beyond the reasonable control of a party. The party that is affected by force majeure and seeks to be exempted from performance liability shall notify the other party of such force majeure as soon as possible, and inform the other party of the details of the force majeure events, explaining the reasons for its failure to perform, partially perform or request for delay of performance.

2. Where performance of this Agreement is delayed or hindered due to force majeure as defined above, the party affected by force majeure shall not be liable for such delay or obstruction. The party affected by force majeure shall take appropriate measures to minimize or remove the effect of force majeure and, do its best to resume performance of the obligations delayed or hindered by force majeure. Once the force majeure events are removed, the Parties agree to resume the performance of obligations under this Contract with their best efforts.

X. Notices

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Party A: Shanghai Paya Information Technology Co., Ltd.
Address: Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai
Tel: **********
Recipient: Changjian Ma

Party B: Shanghai Biban Network Technology Co., Ltd.
Address: Room 1904, Hopson International Plaza, No. 2218 Huangxing Road, Yangpu District, Shanghai
Tel: **********
Recipient: Changjian Ma

XI. Assignment

Without Party A's prior written consent, Party B shall not assign its rights and/or obligations under this Agreement to any third party.

XII. Severability

If any clause hereunder is invalid or unenforceable due to inconsistency with relevant laws, such clause shall only be invalid or unenforceable within the jurisdiction of such law, and shall not affect the legal effect of other clauses hereunder.

XIII. Modifications and Supplements

The Parties agree that any modifications and supplements to this Agreement shall be in writing. The modified agreements and supplementary agreements that have been signed by the Parties shall be an integral part of this Agreement and shall have the same legal validity as this Agreement.

XIV. XIV. Miscellaneous

This Agreement shall take effect after it is signed and sealed by authorized representatives of the Parties. This Agreement is made in duplicate, each of which shall be held by Party A and Party B respectively, and shall have the same legal validity.

[The remainder of this page is intentionally left blank]

There is no text in this page. It is a signature page for the *Exclusive Technology Development, Consultancy and Services Agreement*.

Shanghai Paya Information Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

There is no text in this page. It is a signature page for *Exclusive Technology Development, Consultancy and Services Agreement*.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

Exhibit 4.13

Power of Attorney

I, Changjian Ma (nationality: People's Republic of China, ID No.: **********), the shareholder holding 27% of equity ("**My Equity**") of Shanghai Biban Network Technology Co., Ltd. (the "**Target Company**"), do hereby irrevocably authorize Shanghai Paya Information Technology Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on my behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be myself or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

(1) To participate in the shareholders' meeting of the Target Company, and to execute on my behalf any resolutions passed by any shareholders' meeting; (2) To exercise all right as a shareholder entitled by me as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of My Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as my authorized representative; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to sign all documents which are required to be signed by me as specified in the *Exclusive Option Agreement* and the *Share Pledge Agreement* signed on November 9, 2021 (including the amendments, revisions or restatements of the above documents, collectively referred to as the "**Transaction Agreements**") with the Target Company, the WFOE and other parties on my behalf, and perform the Transaction Agreements as scheduled. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to My Equity shall be deemed as the act of my own, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by myself. The Trustee may act at his own will or intention upon doing the said act without the need to obtain my prior consent. I do hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with my prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of My Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that I am a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of signing hereof unless otherwise instructed in writing by the Trustee. Once the Trustee notifies me in writing to terminate this Power of Attorney in whole or in part, I will immediately revoke the authorization and delegation

made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation to other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains (if any) incurred by My Equity as directed by me in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day I'm no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, I hereby waive all rights related to My Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by myself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

There is no text in this page. It is the signature page for the *Power of Attorney*.

Authorized by: Changjian Ma

Signature: /s/ Changjian Ma
Date: November 9, 2021

Power of Attorney

Power of Attorney

I, Wenjing Zhao (nationality: People's Republic of China, ID No.: **********), the shareholder holding 18% of equity ("**My Equity**") of Shanghai Biban Network Technology Co., Ltd. (the "**Target Company"**), do hereby irrevocably authorize Shanghai Paya Information Technology Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on my behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be myself or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

(1) To participate in the shareholders' meeting of the Target Company, and to execute on my behalf any resolutions passed by any shareholders' meeting; (2) To exercise all right as a shareholder entitled by me as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of My Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as my authorized representative; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to sign all documents which are required to be signed by me as specified in the *Exclusive Option Agreement* and the *Share Pledge Agreement* signed on November 9, 2021 (including the amendments, revisions or restatements of the above documents, collectively referred to as the "**Transaction Agreements**") with the Target Company, the WFOE and other parties on my behalf, and perform the Transaction Agreements as scheduled. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to My Equity shall be deemed as the act of my own, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by myself. The Trustee may act at his own will or intention upon doing the said act without the need to obtain my prior consent. I do hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with my prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of My Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that I am a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of signing hereof unless otherwise instructed in writing by the Trustee. Once the Trustee notifies me in writing to terminate this Power of Attorney in whole or in part, I will immediately revoke the authorization and delegation

made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation to other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains (if any) incurred by My Equity as directed by me in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day I'm no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, I hereby waive all rights related to My Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by myself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

There is no text in this page. It is the signature page for the *Power of Attorney*.

Authorized by: Wenjing Zhao

Signature: /s/ Wenjing Zhao
Date: November 9, 2021

Power of Attorney

Power of Attorney

The Company, Nanjing Zhixin Technology Co., Ltd., a limited liability company legally established and validly existing according to the laws of China, with the Unified Social Credit Code of **********, the shareholder holding 55% of equity (the "**Company's Equity**") of Shanghai Biban Network Technology Co., Ltd. (the "**Target Company**"), does hereby irrevocably authorize Shanghai Paya Information Technology Co., Ltd. (the "**WFOE**") or, as instructed by such WFOE, authorize the director elected by the board of directors of the overseas parent company designated by the WFOE or liquidator or other successor acting on behalf of the director (hereinafter referred to as the "**Trustee**") to exercise any and all rights of shareholder of the Target Company entitled in accordance with the then existing and valid articles of association and transaction documents (as defined in the Share Pledge Agreement) of the Target Company and any applicable laws and regulations, and to exercise any right as a shareholder on the Company's behalf in any and all matters of the Target Company, however, provided that the Trustee shall not be the Company or any other shareholder of the Target Company. Such rights of shareholder shall include but is not limited to:

The WFOE is authorized to act as the sole and exclusive agent and authorizer of the Company and have the full authority to exercise the rights in the name of the Company regarding the matters of the Company's Equity, including but not limited to the following: (1) To participate in the shareholders' meeting of the Target Company, and to execute on the behalf of the Company any resolutions passed by any shareholders' meeting; (2) To exercise any and all right as a shareholder entitled by the Company as prescribed by pertinent laws and the articles of association of the Target Company, including but not limited to voting rights, the right to sell, transfer, pledge or dispose whole or part of the Company's Equity; (3) To elect, designate or appoint the legal representative, chairman of the board, directors, supervisors, general manager or other officers etc. of the Target Company as the authorized representative of the Company; and (4) To decide on the matters regarding the submission and registration of documents related to the Target Company to government authorities.

The Trustee is entitled to sign all documents which are required to be signed by the Company as specified in the *Exclusive Option Agreement* and the *Share Pledge Agreement* signed on November 9, 2021 (including the amendments, revisions or restatements of the above documents, collectively referred to as the "**Transaction Agreements**") with the Target Company, the WFOE and other parties on the behalf of the Company, and perform the Transaction Agreements as scheduled. The exercise of such right will not impose any restrictions on this Power of Attorney.

Any act of the Trustee relating to the Company's Equity shall be deemed as the Company's own act, and any document executed and signed by such Trustee shall be deemed as if duly executed and signed by the Company. The Trustee may act at his own will or intention upon doing the said act without the need to obtain the Company's prior consent. The Company does hereby acknowledge and ratify any such acts and/or documents done or executed by the Trustee.

Unless with the Company's prior written consent, the Trustee has no power of delegation, it shall not delegate dealing of the aforesaid matters and exercise of the Company's Equity to any other individual or entity, or transfer any right with respect to the said matters.

Provided that the Company is a shareholder of the Target Company, this Power of Attorney shall irrevocably become effective and remain valid as from the date of signing hereof unless otherwise instructed in writing by the Trustee. Once the Trustee notifies the Company in writing to terminate this Power of Attorney in whole or in part, the Company will immediately revoke the authorization and delegation made to the Trustee hereby, and will immediately sign the power of attorney in the same format as this Power of Attorney, to make the authorization and delegation in writing to the Trustee or other persons nominated by the Trustee with the same contents as this Power of Attorney.

Unless otherwise specified herein, the Trustee is entitled to allocate, employ or otherwise dispose any cash earnings/dividends or other non-cash gains (if any) incurred by the Company's Equity as directed by the Company in writing.

This Power of Attorney shall take effect from the date of execution hereof and shall be valid until the earlier of: (a) the day the Company is no longer the nominal or actual shareholder of the Target Company; (b) the day on which the Trustee requests in writing to terminate the entrustment hereof.

During the validity period of this Power of Attorney, the Company hereby waives all rights related to the Company's Equity that have been authorized to the Trustee through this Power of Attorney, and will no longer exercise such rights by itself.

Any dispute arising out of or in connection with this Power of Attorney shall be solved and governed by the laws of People's Republic of China. Any dispute arising out of interpretation or performance hereof shall first be settled by the parties upon amicable consultation. In case no agreement can be reached by the parties within thirty (30) days from the day requested by either party to solve the dispute by mutual consultation, such dispute may be submitted by either party to the China International Economic and Trade Arbitration Commission for arbitration in accordance with the then effective rules of arbitration. The place of arbitration shall be Beijing, and the language of arbitration shall be Chinese. The arbitration award shall be final and binding upon the parties. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. The arbitral tribunal may award the indemnity in respect of the equity interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the WFOE are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the

Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of contract or that the breaching party should not engage in any act that may further expand the losses suffered by the WFOE.

[The remainder of the page is intentionally left blank]

Power of Attorney

There is no text in this page. It is the signature page for the *Power of Attorney*.

Authorized by: Nanjing Zhixin Technology Co., Ltd. (Seal)

Signature of Authorized Representative:	/s/ Ning Zhang
Position:	Legal Representative
Date:	November 9, 2021

Share Pledge Agreement

This Share Pledge Agreement (this "**Agreement**") is entered into by and between the following parties in Beijing city of China on November 9, 2021:

1. **Shanghai Paya Information Technology Co., Ltd.** (hereinafter referred to as the "**Pledgee**"), a limited liability company legally established and validly existing according to the laws of the People's Republic of China (hereinafter referred to as "**China**"), has its registered address at Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai;

2. **Changjian Ma**, a Chinese citizen, resident ID No. **********, whose residence is **********;

3. **Wenjing Zhao**, a Chinese citizen, resident ID No. **********, whose residence is **********;

4. **Nanjing Zhixin Technology Co., Ltd.**, a limited liability company legally established and validly existing according to the laws of China, has its registered address at Science and Technology Innovation Center, Shiqiu Street, Lishui District, Nanjing; (Nanjing Zhixin Technology Co., Ltd., Changjian Ma and Wenjing Zhao are collectively referred to as the "**Pledgor**").

5. **Shanghai Biban Network Technology Co., Ltd. (**hereinafter referred to as the "**Target Company**"), a limited liability company legally established and validly existing according to Chinese laws, has its registered address at Room 101-J, Building 6, No. 2222 Huancheng Road, Juyuan New Park, Jiading District, Shanghai

In this Agreement, the Pledgee, the Pledgor and the Target Company shall be collectively referred to as the "**parties**", each of which is referred to as a "**party**".

Whereas:

1 The Pledgor collectively holds 100% of equity of the Target Company, of which Changjian Ma holds 27% of equity of the Target Company, Wenjing Zhao holds 18% of equity of the Target Company, and Nanjing Zhixin Technology Co., Ltd. holds 55% of equity of the Target Company (as shown in Annex I: Capital Contribution Certificate of Shanghai Biban Network Technology Co., Ltd.).

2 On November 9, 2021, the Pledgee and the Target Company signed the Exclusive Technology Development, Consultancy and Services Agreement (hereinafter referred to as the "**Exclusive Service Agreement**").

3 On November 9, 2021, the parties signed the Exclusive Option Agreement (hereinafter referred to as the "**Exclusive Option Agreement**").

4 On November 9, 2021, the Pledgor issued a Power of Attorney to the Pledgee (hereinafter referred to as the "**Power of Attorney**").

5 In order to ensure that each Pledgor and the Target Company can fulfill their obligations

under the Exclusive Service Agreement, the Exclusive Option Agreement and the Power of Attorney, each Pledgor provides pledge guarantee with all of its equity of the Target Company respectively.

Through friendly negotiation, the parties reached a consensus on equity pledge. In order to clarify the rights and obligations of the parties, this Agreement is concluded for mutual compliance.

I. Definition and Interpretation

Unless otherwise specified in this Agreement, the following terms shall have the meanings set forth below:

1. Pledge right: Refers to all the contents listed in Article II of this Agreement.

2. Pledged equity: Refers to all of the equity legally held by each Pledgor in the Target Company, accounting for 100% of equity of the Target Company in total.

3. Pledge period: Refers to the period stipulated in Article III of this Agreement.

4. Event of default: Refers to any situation listed in Article VII of this Agreement.

5. Notice of default: Refers to the notice issued by the Pledgee announcing the event of default according to this Agreement.

6. Transaction documents: Exclusive Service Agreement, Exclusive Option Agreement and Power of Attorney and any modifications, amendments and/or restatements to the aforesaid documents.

7. Secured obligations: Refers to the direct, indirect and derivative losses and the loss of predictable benefits at the time of entering into this Agreement suffered by the Pledgee due to any event of default by the Pledgor and/or the Target Company. The calculation basis for the amount of such losses includes but is not limited to: the Pledgee's reasonable business plan and profit forecast, the service fees payable by the Target Company under the Exclusive Service Agreement, and all expenses incurred by the Pledgee to force the Pledgor and/or the Target Company to fulfill their contractual obligations.

II. Pledge Right

1. Each Pledgor pledges all the equity owned by each Pledgor in the Target Company to the Pledgee as a guarantee for each Pledgor and the Target Company to perform the transaction documents and repay the secured obligations.

2. Pledge right refers to the right enjoyed by the Pledgee to be compensated firstly with the price of discount, auction or sale of the equity pledged by each Pledgor to the Pledgee.

III. Pledge Period

1. This Agreement shall take effect from the date of signing as listed at the beginning of the text, and the pledge right under this Agreement shall be recorded in the register of shareholders of the Target Company (see Annex II: Register of Shareholders of Shanghai Biban Network Technology Co., Ltd.) and shall take effect from the date when Shanghai Jiading District Administration for Market Regulation completes the registration of equity pledge, and shall

become invalid since the date when the pledge registration of pledged equity is released in accordance with this Agreement.

2. From the date of signing this Agreement to the validity period of the pledge, if the Target Company fails to pay the consulting service fees as stipulated in the Exclusive Service Agreement, the Pledgee has the right to dispose of the pledge right according to the provisions of this Agreement and relevant laws and regulations.

IV. Custody of Pledge Certificate

1. After this Agreement takes effect, each Pledgor shall urge the Target Company to sign the capital contribution certificate and register of shareholders attached to this Agreement, and deliver the above formally signed documents to the Pledgee, who shall keep the above documents within the pledge period stipulated in this Agreement.

2. The Pledgee is entitled to receive all dividends, bonuses and other cash earnings and non-cash earnings generated from the pledged equity from the date of signing this Agreement to the date of terminating this Agreement.

V. Representations and Warranties of the Pledgor and the Target Company

Each Pledgor and the Target Company hereby severally but not jointly warrant to the Pledgee:

1. Each Pledgor has the full power and authority to sign this Agreement and perform its obligations hereunder, and the terms of this Agreement constitute legal, valid and binding obligations for it;

2. The Target Company has full corporate power and authority to sign this Agreement and perform its obligations hereunder, and the terms of this Agreement constitute legal, valid and binding obligations for it;

3. The signing, delivery and performance of this Agreement and other transaction documents by each Pledgor / the Target Company shall not violate:

   (a) Any establishment documents of the Target Company;

   (b) Any law that each Pledgor and the Target Company shall abide by; or

   (c) Any agreement and any obligation in any written documents such as contracts, agreements and memorandums signed and effective by each Pledgor and the Target Company;

4. During the period of this Agreement, each Pledgor is the legal owner of the pledged equity; except for the Pledgee, each Pledgor has not set any other pledge rights or third-party rights on the pledged equity;

5. During the period of this Agreement, once the Pledgee exercises the rights of the pledgee in accordance with this Agreement, each Pledgor and the Target Company shall actively cooperate with it.

VI. Undertakings Made by the Pledgor

1. Within the term of this Agreement, each Pledgor severally but not jointly undertakes to the Pledgee that each Pledgor shall:

   (a) Not transfer the equity directly or indirectly in any way without the prior written consent of the Pledgee except for equity transfer to the Pledgee or the person designated by the Pledgee according to the Exclusive Option Agreement, or shall provide no pledge or other form of guarantee that may compromise the rights and interests of the Pledgee;

   (b) Abide by and implement all laws and regulations on pledge of rights, and notify the Pledgee within five (5) days upon receipt of any notice, instruction or suggestion in respect of the Pledgee from the competent authority, and comply with such notice, instruction or suggestion, or make objections and statements in respect of such matters upon the Pledgee's reasonable request or with the Pledgee's consent;

   (c) Notify the Pledgee promptly of any event or notice received that may affect the pledged equity, and any event or notice received that may change any warranty or obligation of the Pledgor under this Agreement or compromise the Pledgor's performance of its obligations hereunder.

2. Each Pledgor agrees that the Pledgee acquires the pledge right in accordance with the terms of this Agreement and that the pledge right shall not be interrupted or impaired by any legal proceedings taken by each Pledgor, each Pledgor's heirs, spouse (where applicable), each Pledgor's principal or any other person.

3. Each Pledgor warrants to the Pledgee that, in order to protect or improve the guarantee of this Agreement for the Pledgor and the Target Company to fulfill the obligations of transaction documents and repay the secured obligations, the Pledgor shall sign in good faith, and cause other interested parties to sign all certificates of rights and agreements required by the Pledgee, and/or perform and cause other interested parties to perform obligations required by the Pledgee, and facilitate the exercise of the rights and authority granted to the Pledgee under this Agreement, sign all the change documents related to the equity certificate with the Pledgee or its designated person (natural person/legal person), and provide the Pledgee with all the notices, orders and decisions related to the pledge right as it deems necessary within a reasonable period of time.

4. Each Pledgor warrants to the Pledgee that, for the benefit of the Pledgee, each Pledgor shall abide by and perform all warranties, promises, agreements, representations and conditions of the transaction documents. If each Pledgor fails to perform or fails to fully perform its warranties, promises, agreements, representations and conditions, each Pledgor shall indemnify the Pledgee for all actual losses suffered therefrom.

5. Each Pledgor warrants to the Pledgee that each Pledgor and the Target Company shall register the pledge right of the Agreement in the register of shareholders of the Target Company on the date of signing this Agreement; within two (2) months from the date of signing this Agreement, each Pledgor shall urge the Target Company to handle the equity pledge registration with the Shanghai Jiading District Administration for Market Regulation.

VII. Events of Default

1. The following events shall be deemed as events of default:

   (a) Violation of the obligations under the transaction documents by each Pledgor or the Target Company, including but not limited to the failure of the Target Company to pay the consulting service fees payable under the Exclusive Service Agreement in full and on time, or the partial performance or refusal of performance of the Target Company on the obligations under the transaction documents or on the repayment of secured obligations;

   (b) Any representations or warranties made by each Pledgor or the Target Company in Article V of this Agreement and each pledgor's undertakings in Article VI of this Agreement are materially misleading or wrong, and/or the Pledgor and the Target Company violate the representations and warranties made in Article V of this Agreement and/or the undertakings in Article VI of this Agreement;

   (c) Any external loans, guarantees, indemnities, promises or other liabilities of each Pledgor (1) are required to be repaid or performed in advance due to default; or (2) are due but cannot be repaid or performed as scheduled, which causes the Pledgee to believe that the Pledgor's ability to perform its obligations under this Agreement has been affected;

   (d) Each Pledgor is unable to repay due debts or other debts, or there are material adverse changes in the property owned by the pledger, which causes the Pledgee to have reasonable grounds to believe that any Pledgor or the Target Company's ability to perform the obligations under transaction documents or this Agreement has been seriously affected;

   (e) In the event of withdrawal, suspension, invalidation or material modification of any governmental consent, permission, approval or authorization required for the transaction document or this Agreement to be executed or to make it legal or effective (except as a result of the Pledgee's reasons);

   (f) The successor or custodian of the Target Company can only partially perform or refuse to perform the obligations under the transaction documents or pay the secured obligations; and

   (g) Other circumstances under which the Pledgee cannot exercise the right to dispose of the pledge right according to relevant laws.

2. The Pledgor shall immediately notify the Pledgee in writing of any of the matters referred to in clause 1 of this Article which may, will and has occurred. The Pledgee has the right to require the Pledgor to correct the event of default within a time limit.

3. Unless the events of default listed in clause 1 of this Article has been resolved with the approval of the Pledgee, otherwise, the Pledgee may send a notice of default to the Pledgor in writing when or at any time after the Pledgor's default occurs, requiring the Target Company to immediately pay all the arrears and other payables under the Exclusive Service Agreement or dispose of pledge right according to Article VIII of this Agreement. If the transaction documents or this Agreement are illegal or the Pledgor or the Target Company cannot continue to perform the obligations under transaction documents or this Agreement due to the

promulgation of relevant laws, the Pledgor and the Pledgee shall reach a solution satisfactory to the Pledgee within thirty (30) days, otherwise the Pledgee may require the Pledgor to immediately pay all the arrears under the Exclusive Service Agreement, dispose of pledge right according to Article VIII of this Agreement or require the Pledgor to perform the rights under the Exclusive Option Agreement.

VIII. Exercise of Pledge Right

1. Before the technology development and consultation service fees mentioned in the Exclusive Service Agreement are fully repaid, without the written consent of the Pledgee,

   (a) The Pledgor shall not transfer the pledged equity held by it by any means for any reason;

   (b) The pledgor shall not transfer the pledge right.

2. When exercising the pledge right, the Pledgee shall issue a notice of default to the Pledgor.

3. The Pledgee may exercise the right to dispose of pledge right at the same time as or at any time after the notice of default is given in accordance with clause 3 of Article VII.

4. The Pledgee has the right to discount all or part of the equity under this Agreement according to legal procedures, or to be compensated first with the price of auction or sale of the equity, until the unpaid technical development, consulting service fees and all other payables under the Exclusive Service Agreement are compensated.

5. When the Pledgee disposes of pledge right in accordance with this Agreement, the Pledgor shall not set up obstacles and shall provide necessary assistance to enable the Pledgee to realize its pledge right.

IX. Transfer

1. The Pledgor shall not be entitled to grant or transfer its rights and obligations under this Agreement except with the prior consent of the Pledgee.

2. This Agreement is binding on the Pledgor or its successors, and valid for the Pledgee and each of its successors.

X. Termination

This Agreement is terminated after the Pledgor and the Target Company have fully and completely fulfilled all obligations under transaction document and paid off all secured obligations. The Pledgee shall terminate this Agreement and assist the Pledgor in canceling the registration of the pledged equity within a reasonably feasible time.

XI. Handling Fees and Other Expenses

1. All expenses and actual expenditures related to this Agreement, including but not limited to legal fees, production costs, stamp duty and any other taxes and expenses, shall be borne by the Target Company. If the law requires the Pledgee to pay the relevant taxes and fees, the Pledgor shall compensate the Pledgee in full for the taxes and fees paid by the Pledgee.

2. If the Pledgor fails to pay any taxes and fees payable by it in accordance with the provisions

of this Agreement, or causes the Pledgee to take any recourse by any ways or means due to other reasons, the Pledgor shall bear all expenses arising therefrom (including but not limited to various taxes and fees, handling fees, management fees, legal fees, attorney fees and various insurance premiums).

XII. Force Majeure

1. If the performance of this Agreement is delayed or hindered by any force majeure event, the party affected by the force majeure shall not bear any responsibility under this Agreement only for this part of the delayed or hindered performance.

2. "Force majeure event" means any event beyond the reasonable foreseeability and control of a party, which is inevitable and insurmountable with the reasonable attention of the affected party, including but not limited to government actions, natural forces, infectious diseases, fire disasters, explosions, storms, floods, earthquakes, tides or wars. However, the lack of credit, funds or financing shall not be regarded as a matter beyond the reasonable control of a party.

3. The party seeking exemption from performance under this Agreement or any provision hereof affected by force majeure shall notify the other party of such exemption and inform it of the steps to be taken to complete performance as soon as possible.

4. The party affected by force majeure shall not be liable for failure to perform its obligations under this Agreement, but the affected party shall try its best to reduce the losses caused to the other party, and the obligations not performed shall be limited to those not performed due to force majeure. After the event of force majeure ends, the parties agree to resume the performance of obligations under this Agreement with their best efforts.

XIII. Governing Laws and Dispute Resolution

1. The execution, validity, interpretation, performance, amendment and termination of this Agreement and the dispute resolution shall be governed by the laws of China (excluding Hong Kong, Macau and Taiwan).

2. In the event of any dispute between the parties concerning the interpretation and performance of the terms of this Agreement, the parties shall resolve the dispute through negotiation. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission for arbitration in Beijing in accordance with its arbitration rules in effect at that time. The arbitral tribunal shall consist of three (3) arbitrators appointed in accordance with the arbitration rules, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission. The arbitration language is Chinese. The arbitration award shall be final and binding on the parties. During the dispute resolution, the party shall continue to enjoy its other rights under this Agreement and shall continue to perform its corresponding obligations.

3. The arbitral tribunal may award the indemnity or compensation to the Pledgee for losses caused to the Pledgee due to the default by other parties hereto in respect of the equity

interests, assets or property interests of the Target Company, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order the Target Company to go bankrupt. After the arbitration award becomes effective, either party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the parties, the arbitration institution shall be entitled to rule that the breaching party should immediately stop the breach of agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Pledgee. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of the Target Company is located, and the court where the main assets of the Target Company or the Pledgee are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of the Target Company, and to make an award or judgment to give provisional relief to the party initiating arbitration while awaiting the formation of arbitral tribunal or in other appropriate circumstances, such as an award or judgment that the breaching party should immediately stop the breach of agreement or that the breaching party should not engage in any act that may further expand the losses suffered by the Pledgee.

XIV. Notice

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Pledgee: Shanghai Paya Information Technology Co., Ltd.

Address: Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai
Tel: **********
Recipient: Changjian Ma

Pledgor: Changjian Ma

Address: **********
Tel: **********
Recipient: Changjian Ma

Pledgor: Wenjing Zhao

Address: **********
Tel: **********
Recipient: Wenjing Zhao

Pledgor: Nanjing Zhixin Technology Co., Ltd.

Address: Science and Technology Innovation Center, Shiqiu Street, Lishui District, Nanjing
Tel: **********
Recipient: Ning Zhang

Target Company: Shanghai Biban Network Technology Co., Ltd.

Address: Room 1904, Hopson International Plaza, No. 2218 Huangxing Road, Yangpu

District, Shanghai
Tel: **********
Recipient: Changjian Ma

XV. Annexes

The annexes listed in this Agreement are an integral part of this Agreement.

XVI. Severability

If any clause hereunder is invalid or unenforceable due to inconsistency with relevant laws, such clause shall only be invalid or unenforceable within the jurisdiction of such law, and shall not affect the legal effect of other clauses hereunder.

XVII. Effective

1. This Agreement and any modification, supplement or alteration shall be in written form and shall come into effect after being signed and sealed by the parties.

2. This Agreement is made in quintuplicate, with two natural persons and one legal person as the Pledgor holding one copy, and the Pledgee and the Target Company holding one copy respectively, which have the same legal effect.

[The remainder of this page is intentionally left blank]

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Shanghai Paya Information Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

There is no text in this page. It is the signature page for the *Share Pledge Agreement.*

Changjian Ma

Signature: /s/ Changjian Ma

There is no text in this page. It is the signature page for the *Share Pledge Agreement.*

Wenjing Zhao

Signature: /s/ Wenjing Zhao

There is no text in this page. It is the signature page for the *Share Pledge Agreement*.

Nanjing Zhixin Technology Co., Ltd. (Seal)

Signature: /s/ Ning Zhang
Name: Ning Zhang
Position: Legal representative

There is no text in this page. It is the signature page for the Share Pledge Agreement.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

Annex I

Capital Contribution Certificate of Shanghai Biban Network Technology Co., Ltd.

(No. 001)

Shanghai Biban Network Technology Co., Ltd. was founded on November 20, 2020, registered with the Shanghai Jiading District Administration for Market Regulation, with the Unified Social Credit Code of **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 1,000,000.

Changjian Ma (ID No.: **********), the Company's shareholder, has subscribed RMB 288,300 in the registered capital and holds 27% of the equity, all of which has been pledged to **Shanghai Paya Information Technology Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: _____

Name: Changjian Ma

Position: Legal representative

Date: _____

Annex I

Capital Contribution Certificate of Shanghai Biban Network Technology Co., Ltd.

(No. 002)

Shanghai Biban Network Technology Co., Ltd. was founded on November 20, 2020, registered with the Shanghai Jiading District Administration for Market Regulation, with the Unified Social Credit Code of **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 1,000,000.

Wenjing Zhao (ID No.: **********), the Company's shareholder, has subscribed RMB 192,100 in the registered capital and holds 18% of the equity, all of which has been pledged to **Shanghai Paya Information Technology Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: _____
Name: Changjian Ma
Position: Legal representative

Date: _____

Annex I

Capital Contribution Certificate of Shanghai Biban Network Technology Co., Ltd.

(No. 003)

Shanghai Biban Network Technology Co., Ltd. was founded on November 20, 2020, registered with the Shanghai Jiading District Administration for Market Regulation, with the Unified Social Credit Code of **********. As of the date of this capital contribution certificate, the registered capital of the Company is RMB 1,000,000.

Nanjing Zhixin Technology Co., Ltd. (Unified Social Credit Code: **********), the Company's shareholder, has subscribed RMB 587,000 in the registered capital and holds 55% of the equity, all of which has been pledged to **Shanghai Paya Information Technology Co., Ltd.** In witness whereof, the Company hereby issue this certificate.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: _____

Name: Changjian Ma

Position: Legal representative

Date: _____

Annex II

Register of Shareholders of Shanghai Biban Network Technology Co., Ltd.

Name or designation shareholder	Address	Capital contribution certificate No.	Equity ratio	Subscribed register capital (RMB)	Registration of pledge
Changjian Ma	**********	001	27%	288,300	It has been pledged to Shanghai Paya Information Technology Co., Ltd.
Wenjing Zhao	**********	002	18%	192,100	It has been pledged to Shanghai Paya Information Technology Co., Ltd.
Nanjing Zhixin Technology Co., Ltd.	Science and Technology Innovation Center, Shiqiu Street, Lishui District, Nanjing	003	55%	587,000	It has been pledged to Shanghai Paya Information Technology Co., Ltd.

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: _____
Name: Changjian Ma
Position: Legal representative

Date: _____

Exclusive Option Agreement

This Exclusive Option Agreement (this "**Agreement**") is executed by and among the following parties on November 9, 2021:

1. **Shanghai Paya Information Technology Co., Ltd.** (hereinafter referred to as "**Party A**"), a limited liability company legally established and validly existing according to the laws of the People's Republic of China, has its registered address at Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai;

2. **Changjian Ma**, a Chinese citizen, resident ID No. **********, whose residence is **********;

3. **Wenjing Zhao**, a Chinese citizen, resident ID No. **********, whose residence is **********;

4. **Nanjing Zhixin Technology Co., Ltd.**, a limited liability company legally established and validly existing according to the laws of China, has its registered address at Science and Technology Innovation Center, Shiqiu Street, Lishui District, Nanjing; (Nanjing Zhixin Technology Co., Ltd., Changjian Ma and Wenjing Zhao are collectively referred to as "**Party B**")

5. **Shanghai Biban Network Technology Co., Ltd.** (hereinafter referred to as the "**Party C**"), a limited liability company legally established and validly existing according to Chinese laws, has its registered address at Room 101-J, Building 6, No. 2222 Huancheng Road, Juyuan New Park, Jiading District, Shanghai.

   Party A, Party B and Party C shall be collectively referred to as the "**Parties**", and individually referred to as a "**Party**" herein.

Whereas:

1. Party B collectively hold 100% of equity of Party C, of which Changjian Ma holds 27%, Wenjing Zhao holds 18%, Nanjing Zhixin Technology Co., Ltd. holds 55%.

2. Party A and Party C have entered into the "Exclusive Technology Development, Consultancy and Services Agreement" (the "**Service Agreement**") on November 9, 2021.

3. Party A, Party B and Party C entered into the "Share Pledge Agreement" (the "**Share Pledge Agreement**") on November 9, 2021.

   Upon amicable consultation, the Parties have reached consensus with respect to matters concerning exclusive option. In order to clarify the rights and obligations of each Party, this Agreement is made hereby for mutual abidance.

I. Purchase & Sales of Equity

1. Grant of Option

   (a) Party B hereby irrevocably grants Party A, to the extent allowed under Chinese laws, the exclusive right to purchase for the equity (the "**Purchase Option of Equity**") of

Party C wholly or partially held by Party B in the name of Party A itself or by designating one or more persons (the "**Designee**") at any time, in accordance with the exercise steps determined by Party A at its own discretion and in accordance with the price stated in clause 3 of Article I of this Agreement. No third party shall have such Purchase Option of Equity except for Party A or its Designee.

(b) "Person" as used in this Article and herein refers to any individual, firm, joint venture, partnership, enterprise, trust or non-corporation organization.

2. Steps for Exercise of the Option

Party A may only exercise the Purchase Option of Equity subject to compliance with provisions of the laws and regulations of the PRC. Upon exercise of the Purchase Option of Equity, Party A shall give a notice in writing to Party B for the purchase of the equity (the "**Exercise Notice**"), in which the following matters shall be specified:

(a) Party A's decision to exercise the Option;

(b) The portion of equity contemplated to be purchased by Party A from Party B (the "**Purchased Equity**"); and

(c) The date of purchase/the date of transfer for the Purchased Equity.

3. Purchase Price of the Equity

Unless the equity is required to be evaluated by any laws, the total consideration (the "**Purchase Price of the Equity**") of the Purchased Equity shall be RMB 10 or the minimum price as permitted by the Chinese laws. Where Party A and Party B otherwise agree on a price, such price agreed shall prevail.

Notwithstanding the forgoing, subject to compliance with any provisions and requirements of then-effective Chinese laws, any consideration paid by Party A and/or its Designee at any price to Party B and/or Party C shall be severally but not jointly returned by Party B and/or Party C to Party A and/or its Designee (provided that any tax and duties (if any) incurred by exercise of the Purchase Option of Equity shall be deducted from such consideration so returned). After making necessary tax withholdings to the purchase price in accordance with Chinese laws, the purchase price shall be paid by Party A and/or its Designee to the account designated by Party B and/or Party C within seven (7) days from the day on which the Purchased Equity are duly transferred to Party A and/or its Designee.

4. Transfer of Purchased Equity

At each time Party A exercise its option,

(a) Party B shall cause Party C to convene shareholders' meeting in a timely manner, and shall in such meeting pass resolution approving transfer of the Purchased Equity by Party B to Party A and/or its Designee;

(b) An equity transfer agreement shall be executed by and between Party B and Party A and/or its Designee in accordance with this Agreement and Exercise Notice;

(c) Party B shall execute any other necessary contract, agreement or instruments with Party A and/or its Designee, obtain any and all of the necessary government approval and consents, and take any necessary actions, and shall transfer the ownership of the Purchased Equity without attaching any security interests with respect thereto to Party A and/or its Designee and cause Party A and/or its Designee to become the registered owner of the Purchased Equity.

(d) For the purpose of this Article and this Agreement, "security interests" shall include security, charge, rights and interests of third party, any right to purchase share, acquire equity, preemptive right of purchase, right to setoff, retention of title or any other security arrangement, etc., however, for clarity, security interests shall not include any security interests incurred under this Agreement, Share Pledge Agreement, i.e. Party B's pledge of all of its equity in Party C to Party A in order to secure that Party C is able to perform its obligation under the Service Agreement.

II. Undertakings Concerning Equity

1. Party C hereby undertakes that:

(a) Without prior written consent of Party A or the parent company of Party A, it shall neither make any supplements, alteration or amendments to the articles of association of Party C, nor increase or decrease its registered capital, nor change the structure of its registered capital in any other form;

(b) It shall, in accordance with good financial and business standard and practices, keep and maintain its existence and operate its business and deal with affairs in a prudent and effective manner;

(c) Without prior written consent of Party A or the parent company of Party A, it shall neither sell, transfer, charge or otherwise dispose of any assets, business, income or other legitimate interests, nor allow placement of any other security interests thereon at any time after the date of execution hereof;

(d) Without prior written consent of Party A or the parent company of Party A, it shall not incur, succeed, secure or permit existence of any debt, unless:

(i) Such debt is incurred in the normal and daily business rather than by way of borrowing; and

(ii) Such debt has been disclosed to Party A and has obtained written consent of Party A.

(e) It keeps conducting any and all business during normal course of business, keeps the value of Party C's assets, doesn't do any act or omission which is sufficient to affect its operation condition and value of assets;

(f) Without prior written consent of Party A or the parent company of Party A, it shall not execute or terminate any material agreement beyond normal business operation, "material agreement" as used herein shall refer to any agreement whose value exceeds five hundred thousand yuan (RMB500,000);

(g) Without prior written consent of Party A or the parent company of Party A, it shall not offer loan or credit to anyone;

(h) Upon request of Party A, it shall provide any and all material relating to operation and financial condition of Party C;

(i) Without prior written consent of Party A or the parent company of Party A, it shall not merge or amalgamate with any person, or acquire any person or make investment to any person;

(j) It shall notify Party A in case of any legal proceedings, arbitration or administrative procedures pending or threatened relating to any assets, business or income of Party C;

(k) To protect the ownership of Party C to all of its assets, it shall sign any and all necessary and proper documents, take any and all necessary and proper actions, file any and all necessary or proper complaints, or make any necessary and proper defenses against any and all claims;

(l) Without prior written consent of Party A or the parent company of Party A, it shall not distribute any dividends to its shareholders in whatever form, however, upon request of Party A, it shall immediately distribute and allocate all of its distributable profits to their shareholders;

(m) Upon request of Party A, it shall appoint any person designated by Party A as director of Party C.

2. Party B undertakes that:

(a) Without prior written consent of Party A or the parent company of Party A, it shall neither sell, transfer, charge or otherwise dispose of any interests relating to any equity, nor allow placement of any other security interests thereon at any time after the date of execution hereof, unless such pledge is placed over any equity of Party B under Share Pledge Agreement;

(b) It shall neither require Party C to distribute any dividends or make profit distribution in any other form as to any shares in Party C owned by Party B, nor propose any matters with respect thereto for resolution by meeting of shareholders, nor vote for any matters decided by such meeting of shareholders. Notwithstanding the foregoing, if Party B receives any earnings, profit distribution, dividends of Party C, Party B shall pay or transfer such profit, profit distribution or dividends to Party A or any party designated by Party A for the benefit of Party C as a portion of service fee payable to Party A by Party C under the Service Agreement;

(c) Without prior written consent of Party A or the parent company of Party A, it shall neither cause the shareholders of Party C to approve any equity interests of shares to be sold, transferred, charged or otherwise disposed, nor allow others to place any other security interests over such shares, except for any approval of any

pledge placed over equity of Party B under Share Pledge Agreement;

(d) Without prior written consent of Party A or the parent company of Party A, it shall neither cause the shareholders of Party C to approve Party C's any merger or amalgamation with any person, nor make acquisition of any person or make any investment to any person;

(e) It shall give timely notice to Party A with respect to any actions, arbitration or administrative procedures pending or threatened relating to any equity owned by Party B;

(f) It shall cause shareholders of Party C to vote for transfer of the Purchased Equity specified herein;

(g) To protect the ownership of Party B to its equity, it shall sign any and all necessary and proper documents, actively take any and all necessary and proper actions and/or file any and all necessary or proper charges, or make any necessary and proper defenses against any and all claims;

(h) Upon request of Party A, it shall appoint any person designated by Party A as director of Party C;

(i) Upon request of Party A, it shall immediately and unconditionally transfer its equity to Party A or any Designee at any time, and waive any right of first refusal enjoyed by it with respect to transfer of the said equity by other shareholders; and

(j) It shall strictly abide by any provisions of this Agreement and any other agreement jointly or severally entered into by and among Party A, the parent company of Party A, Party B and Party C, fulfill effectively any and all obligations under such agreement, and shall not do any act and/or omission which may affect the effectiveness and enforceability of such agreement.

3. Party B and Party C shall not withdraw the undertaking as aforesaid, and shall be jointly and severally liable for any obligations hereunder.

III. Purchase Option of Assets

1. Definition

"Asset" refers to any and all assets of Party C, including but not limited to fixed assets, current assets, intellectual property and any interests under any and all agreements executed by Party C. The aforesaid intellectual property shall include any patent right, right of patent application, trademark right, right of trademark application, trade name, copyright, business secrets, inventions, technical secrets, industrial design, logo, sign, web design, layout design, domain name, etc. created, owned or had any right thereto by Party C at present or in the future.

2. Grant of Option

To the extent permitted by Chinese laws, Party B and Party C hereby irrevocably grant to Party A an exclusive right, i.e., Party A is entitled to purchase at any time or cause

any of its Designee to purchase any and all assets held by Party C (the "**Purchase Option of Assets**") by the step of exercise decided at its sole discretion and at the price specified in clause 4 of Article III hereof. Party B unanimously agrees Party C to grant the Purchase Option of Assets to Party A. Except for Party A and the Designee, no other third party shall be entitled to the Purchase Option of Assets.

3. Steps of Exercise

(a) Party A's exercise of its Purchase Option of Assets is subject to compliance with provisions of Chinese laws and regulations. Upon exercise the Purchase Option of Assets, Party A shall give written notice to Party B (the "**Purchase Notice of Assets**"), specifying:

(i) The decision of Party A with respect to exercise of its Purchase Option of Assets;

(ii) The assets to be purchased by Party A from Party B (the "**Purchased Assets**");

(iii) The date of purchase.

(b) After giving the Purchase Notice of Assets, upon exercise of the Purchase Option of Assets by Party A at each time, Party C shall undertake to perform the following obligations, and Party B undertakes to supervise and urge Party C to perform the following obligations:

(i) Party C executes assets transfer agreement with respect to the Purchased Assets in accordance with this Agreement and the specific requirements of each Purchase Notice of Assets; and

(ii) Party C shall execute any and all necessary agreements, contracts or documents, obtain any and all necessary government approval and consents, and take any and all necessary actions to transfer the ownership of Purchased Assets to Party A and/or its Designee without attaching any security interests, and complete registration and filing procedures (if necessary) with respect to transfer of intellectual property in accordance with provisions of pertinent Chinese laws and regulations in order to make Party A and/or its Designee become the registered owner of the Purchased Assets.

4. Purchase Price of Assets

Unless otherwise provided by any law, full consideration of the Purchased Assets (the "**Purchase Price of Assets**") shall be RMB10 or the minimum price permitted by Chinese laws and regulations. Where Party A and Party C otherwise agree on a price, their agreed price shall prevail. Party C shall bear any and all taxes and duties incurred by such assets transfer.

Notwithstanding the foregoing, subject to compliance with provisions and requirements of then-effective Chinese laws, any consideration paid by Party A and/or its Designee to Party B and/or Party C at any such price shall be returned by Party B and/or Party C

severally but not jointly to Party A and/or its Designee (provided that any taxes and duties (if any) incurred by exercise of Purchase Option of Assets shall be deducted from any sums returned). The purchase price, after making necessary tax withholdings in accordance with Chinese laws, shall be paid to the account designated by Party B and/or Party C by Party A and/or its Designee within seven (7) days after the day on which the Purchased Assets is duly transferred to the name of Party A and/or its Designee.

IV. Representation and Warranties of Party B and Party C

Party B and Party C hereby respectively represents and undertakes to Party A on the date of execution hereof and each day of transfer that:

1. It has the power and right to sign and deliver this Agreement, any equity transfer agreement executed for each transfer of the Purchased Equity hereunder, or any assets transfer agreement executed for the Purchased Assets (respectively referred to as "**Transfer Agreement**"), and to perform obligations under this Agreement and any Transfer Agreement. This Agreement and each Transfer Agreement shall constitute legal, valid and binding obligations to parties hereto and thereto from the date of execution, and is enforceable against parties hereto and thereto in accordance with their terms;

2. Any execution and delivery of this Agreement or any Transfer Agreement or performance of any obligations under this Agreement or any Transfer Agreement shall not:

   (a) Violate any pertinent Chinese laws;

   (b) Conflict with articles of association or other constitutional document of Party C;

   (c) Breach any agreement or document to which it is a party or by which it is bound, nor constitute breach under any agreement or document by which it is bound;

   (d) Breach any conditions under which any permit is issued to it or any approval is granted and/or any permit or approval continue to be effective; or

   (e) Result in suspension, withdrawal of any permit or approval issued to it or attachment of any further conditions.

3. Party B legally has ownership to the equity it owns. Party B does not place any security interest over the said equity, except for the share pledge over shares of Party B under Share Pledge Agreement;

4. Party C has no outstanding debts and complies with all applicable laws and regulations, with the following exceptions:

   (a) Such debts are incurred during ordinary course of business, and

   (b) Such debts and business conditions have been disclosed to Party A and agreed in writing by Party A.

5. There is no ongoing, pending or threatened litigation, arbitration or administrative

proceedings relating to equity or assets of Party C or otherwise related to Party C.

V. Effective Date and Term

This Agreement shall become effective from the date of execution hereof. This Agreement shall terminate upon the time when all the assets of Party C or all the equity of Party C held by Party B are duly transferred to Party A or its Designees as agreed herein.

VI. Governing Laws and Dispute Resolution

1. Governing Laws

The execution, validity, interpretation and performance hereof and dispute resolution hereunder shall be governed by the laws of People's Republic of China (excluding Hong Kong, Macau and Taiwan).

2. Dispute Resolution

Any dispute arising out of or in connection with interpretation or performance hereof shall first be settled through amicable consultation and negotiation among the Parties. If the dispute cannot be resolved through negotiation within fifteen (15) working days after its occurrence, either Party shall be entitled to submit the dispute to the China International Economic and Trade Arbitration Commission for arbitration in Beijing in accordance with its arbitration rules in effect at that time. The arbitral tribunal shall consist of three (3) arbitrators appointed in accordance with the arbitration rules, one (1) arbitrator appointed by the claimant and one (1) arbitrator appointed by the respondent, and the third arbitrator shall be appointed by the first two arbitrators through consultation or by the China International Economic and Trade Arbitration Commission. The arbitration language is Chinese. The arbitration award shall be final and binding on the Parties. During the dispute resolution, the Party shall continue to enjoy its other rights under this Agreement and shall continue to perform its corresponding obligations.

The arbitral tribunal may award the indemnity or compensation to the Party A for losses caused to the Party A due to the default by other Parties hereto in respect of the equity interests, assets or property interests of Party C, award injunctive relief in respect of the relevant business or compulsory asset transfer, or order Party C to go bankrupt. After the arbitration award becomes effective, either Party shall be entitled to apply to the court with jurisdiction for enforcement of arbitration award. If necessary, before making a final ruling on the disputes between the Parties, the arbitration institution shall be entitled to rule that the breaching Party should immediately stop the breach of agreement or that the breaching Party should not engage in any act that may further expand the losses suffered by the Party A. The courts of Hong Kong, the Cayman Islands or other courts with jurisdiction (the court where the domicile of Party C is located, and the court where the main assets of Party C or the Party A are located shall be deemed to have jurisdiction) shall also be entitled to grant or enforce the award of arbitral tribunal, to award or enforce provisional relief for the equity interest or property interest of Party C, and to make an award or judgment to give provisional relief to the Party initiating arbitration while awaiting the formation of arbitral tribunal or in other

appropriate circumstances, such as an award or judgment that the breaching Party should immediately stop the breach of agreement or that the breaching Party should not engage in any act that may further expand the losses suffered by the Party A.

VII. Tax and Charges

Each Party shall bear any taxes and charges incurred by itself hereunder in accordance with Chinese law.

VIII. Notice

Unless there is a written notice to change the address below, the notice under this Agreement shall be sent by personal delivery or registered mail to the address below. If the notice is sent by registered mail, the date of receipt recorded on the receipt of registered mail shall be the date of service; if it is sent by personal delivery, the date of service shall be the date of delivery:

Party A: Shanghai Paya Information Technology Co., Ltd.

Address: Building 1, No. 1036 Xizha Road, Fengxian District, Shanghai
Tel: **********
Recipient: Changjian Ma

Party B: Changjian Ma

Address: **********
Tel: **********
Recipient: Changjian Ma

Party B: Wenjing Zhao

Address: **********
Tel: **********
Recipient: Wenjing Zhao

Party B: Nanjing Zhixin Technology Co., Ltd.

Address: Science and Technology Innovation Center, Shiqiu Street, Lishui District, Nanjing
Tel: **********
Recipients: Ning Zhang

Party C: Shanghai Biban Network Technology Co., Ltd.

Address: Room 1904, Hopson International Plaza, No. 2218 Huangxing Road, Yangpu District, Shanghai
Tel: **********
Recipient: Changjian Ma

IX. Confidential Obligation

1. Each Party acknowledges that any oral or written information exchanged among them with respect hereto shall be deemed as confidential information. Each party shall keep

all such information in confidence. Without prior written consent of the other party, it shall not disclose any related information to any third party unless:

(a) Such information is known or to be known by public (rather than by disclosure to the public by recipient of such information);

(b) Such information is disclosed in accordance with any provisions of laws and regulations; or

(c) Such information is disclosed by either Party to its legal or financial advisor with respect to the transaction contemplated hereunder, provided that such legal or financial advisor shall comply with the confidential obligation similar to those described in this Article.

2. Any disclosure by any employee of or organization engaged by either Party shall be deemed as disclosure of such Party who shall be duly liable for breach hereunder. Regardless this Agreement is terminated for whatever causes, this clause shall remain in effect.

X. Further Assurance

Each Party agrees to execute any document as soon as possible as reasonably necessary or favorable to it for enforcement of various provisions and purpose hereof, and to take any further actions reasonably necessary or favorable to it for enforcement of various provisions and purpose hereof.

XI. Termination, Breach Liability and Indemnification

1. If either Party hereof breaches any obligation specified herein (the "**Breaching Party**"), the other Parties (the "**Non-breaching Party**") may give notice in writing to the Breaching Party requesting the Breaching Party to correct any of its act of breach. The Breaching Party shall cease its act of breach within thirty (30) days from receipt of the notice, and indemnify any and all losses suffered thereby by the Non-breaching Party; if the Breaching Party continues its act of breach after the thirty (30) day-period from receipt of the notice elapses, either Non-breaching Party may unilaterally terminate this Agreement, and is entitled to request the Breaching Party to indemnify any and all losses suffered thereby by the Non-breaching Party.

2. Any grace, forbearance or delay in exercise of its right under any laws or hereunder given by the Non-breaching Party with respect to any act of breach of the Breaching Party, shall not be deemed as waiver of the Non-breaching Party to its right.

3. In the event that Party A, Party A's senior officers, managers, directors, shareholders, members, representatives, agents or employees (the "**Indemnified Persons**") bear any claims, indemnities, debts, costs and expenses (including but not limited to reasonable attorney fees) in relevant lawsuits or legal proceedings, which are caused by any breach of statutory or agreed warranties, representations or other agreements by Party B or Party C or caused by any dispute or any lawsuit brought by a third party over the equity or assets prior to the transfer of equity or assets, both Party B and Party C shall

compensate, defend and hold Party A harmless, unless such liabilities arise from the intentional or gross negligence of the indemnified persons.

XII. Miscellaneous

1. Any amendments, alteration and supplements made hereto shall be made in writing and become effective only after signature and seal by the Parties.

2. Each Party shall abide by and ensure its business operation fully comply with any and all existing Chinese laws and regulations.

3. Except for any amendments, supplements or alteration made after execution hereof, this Agreement shall constitute entire agreement reached by Parties hereto with respect to matters specified herein, and supersede any and all oral and/or written consultation, representation and agreements reached hereinbefore.

4. The headings and titles hereof are inserted for reference only, shall not be used to interpret, explain or otherwise affect meaning of each clause hereunder.

5. This Agreement shall become effective upon signature and seal by the Parties hereto. This Agreement is made in quintuplicates, two natural persons of Party B, one legal person of Party B, and Party A and Party C shall each hold one (1) copy respectively, each of which shall be of the same legal force and effect.

6. In case any one or more clause is judged as invalid, illegal or unenforceable in any respect under any laws and regulations, the validity, legality or enforceability of the remaining clauses shall not be affected or damaged thereby to any extent. Each Party shall negotiate in good faith to replace those invalid, illegal or unenforceable provisions with valid and effective provisions, in order to achieve the economic effect of such valid and effective provisions similar to the greatest extent to those invalid, illegal or unenforceable provisions.

7. This Agreement shall be binding upon each successor and assignee of each Party.

8. Survival. Article VI, Article IX, Article XI and clause 8 of Article XII hereof shall survive after termination hereof.

9. Either Party may waive any terms and conditions hereof only in writing form, and such waiver may only take effect upon the Parties' signature hereof. Waiver by one Party in one circumstances with respect to any breach of the other Parties shall not be deemed as waiver by such Party under other circumstances and with respect to breach of similar nature.

[The remainder of this page is intentionally left blank]

Exhibit 4.15

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Shanghai Paya Information Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

Exhibit 4.15

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Changjian Ma

Signature: /s/ Changjian Ma

Signature Page for the Exclusive Option Agreement

Exhibit 4.15

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Wenjing Zhao

Signature: /s/ Wenjing Zhao

Exhibit 4.15

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Nanjing Zhixin Technology Co., Ltd. (Seal)

Signature: /s/ Ning Zhang
Name: Ning Zhang
Position: Legal representative

Exhibit 4.15

There is no text in this page. It is the signature page for the *Exclusive Option Agreement.*

Shanghai Biban Network Technology Co., Ltd. (Seal)

Signature: /s/ Changjian Ma
Name: Changjian Ma
Position: Legal representative

Signature Page for the Exclusive Option Agreement

Exhibit 8.1

List of Principal Subsidiaries and Consolidated Variable Interest Entities

Subsidiary	Place of Incorporation
Zhihu Technology (HK) Limited	Hong Kong
Zhizhe Sihai (Beijing) Technology Co., Ltd.	PRC
Beijing Zhihu Network Technology Co., Ltd.	PRC

Consolidated Variable Interest Entity	Place of Incorporation
Beijing Zhizhe Tianxia Technology Co., Ltd.	PRC
Shanghai Pinzhi Education Technology Co., Ltd.	PRC
Shanghai Biban Network Technology Co., Ltd.	PRC

Exhibit 12.1

Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Yuan Zhou, certify that:

1. I have reviewed this annual report on Form 20-F of Zhihu Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) [reserved];

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 8, 2022

By: /s/ Yuan Zhou
Name: Yuan Zhou
Title: Chief Executive Officer

Exhibit 12.2

Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Wei Sun, certify that:

1. I have reviewed this annual report on Form 20-F of Zhihu Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) [reserved];

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 8, 2022

By: /s/ Wei Sun
Name: Wei Sun
Title: Chief Financial Officer

Exhibit 13.1

Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Zhihu Inc. (the "Company") on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Yuan Zhou, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 8, 2022

By: /s/ Yuan Zhou
Name: Yuan Zhou
Title: Chief Executive Officer

Exhibit 13.2

Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Zhihu Inc. (the "Company") on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Wei Sun, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 8, 2022

By: /s/ Wei Sun
Name: Wei Sun
Title: Chief Financial Officer

Exhibit 15.1

Our ref KKZ/742046-000004/21751406v1

Zhihu Inc.
A5 Xueyuan Road
Haidian District, Beijing 100083
People's Republic of China

8 April 2022

Dear Sir or Madam

Zhihu Inc.

We have acted as legal advisers as to the laws of the Cayman Islands to Zhihu Inc., an exempted limited liability company incorporated in the Cayman Islands (the "**Company**"), in connection with the filing by the Company with the United States Securities and Exchange Commission (the "**SEC**") of an annual report on Form 20-F for the year ended 31 December 2021 (the "**Annual Report**").

We hereby consent to the reference to our firm under the heading "Item 10. Additional Information—E. Taxation" in the Annual Report, and we further consent to the incorporation by reference of the summary of our opinions under this heading into the Company's registration statement on Form S-8 (File No. 333-256178) that was filed on 17 May 2021, pertaining to the Company's 2012 Incentive Compensation Plan.

We consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully

/s/ Maples and Calder (Hong Kong) LLP
Maples and Calder (Hong Kong) LLP

Exhibit 15.2

Consent of Han Kun Law Offices

To: Zhihu Inc.

Date: April 8, 2022

Dear Sirs,

We consent to the reference to our firm under the headings "Item 3.D—Risk Factors," "Item 4.B—Business Overview—Regulation," and "Item 4.C— Organizational Structure—Contractual Arrangements with Our VIEs and Their Shareholders" in Zhihu Inc.'s Annual Report on Form 20-F for the year ended December 31, 2021, which will be filed with the Securities and Exchange Commission (the "SEC"). We also consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report on Form 20-F for the year ended December 31, 2021.

Yours faithfully,

/s/ HAN KUN LAW OFFICES
HAN KUN LAW OFFICES

Exhibit 15.3

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (File No. 333-256178) of Zhihu Inc. of our report dated April 8, 2022 relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers Zhong Tian LLP

Beijing, the People's Republic of China

April 8, 2022