# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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( <b>M</b> a	rk One) REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 193
	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
	OR
	SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

## **Aurora Mobile Limited**

Commission file number: 001-38587

\_ to \_

Date of event requiring this shell company report \_

For the transition period from \_\_\_\_

(Exact name of Registrant as specified in its charter)

\_\_\_\_

 $\label{eq:N/A} N/A \end{tabular}$  (Translation of Registrant's name into English)

Cayman Islands (Jurisdiction of incorporation or organization)

14/F, China Certification and Inspection Building, No. 8, Keji South 12th Road, Nanshan District Shenzhen, Guangdong 518057 People's Republic of China (Address of principal executive offices)

Shan-Nen Bong, Chief Financial Officer 14/F, China Certification and Inspection Building, No. 8, Keji South 12th Road, Nanshan District

Shenzhen, Guangdong 518057 People's Republic of China

Phone: +86 755-8388-1462 Email: bongsn@jiguang.cn

(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

\* Not for trading, but only in connection with the listing on the Nasdaq Global Market of American depositary shares.

## 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)		
Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of report:	the period covered by the annual	ual
As of December 31, 2021, there were 79,036,462 common shares outstanding, par value of US\$0.0001 per share, bein common shares (excluding treasury shares), par value of US\$0.0001 per share and 17,000,189 Class B common shares share.		
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 pur Securities Exchange Act of 1934. $\square$ Yes $\boxtimes$ No	rsuant to Section 13 or 15(d) of	f the
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of th during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2 requirements for the past 90 days. $\boxtimes$ Yes $\square$ No		
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be Regulation S-T ( $\S232.405$ of this chapter) during the preceding 12 months (or for such shorter period that the registra files). $\boxtimes$ Yes $\square$ No		
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, see the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of		y.
Large accelerated filer □	Accelerated filer	$\boxtimes$
Non-accelerated filer $\Box$	Emerging growth company	$\boxtimes$
If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by che not to use the extended transition period for complying with any new or revised financial accounting standards† prov the Exchange Act. $\Box$		
† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Accounting Standards Codification after April 5, 2012.	ng Standards Board to its	
Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered prepared or issued its audit report. $\Box$ Yes $\boxtimes$ No		
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 □	Othe	er 🗆
If "Other" has been checked in response to the previous question, indicate by check mark which financial statement in follow. $\Box$ Item 17 $\Box$ Item 18	tem the registrant has elected to	)
If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 Act). $\square$ Yes $\boxtimes$ No	of the Exchange	
(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THI	E PAST FIVE YEARS)	
Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.   Yes		

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## INTRODUCTION

Unless otherwise indicated and except where the context otherwise requires, references in this annual report on Form 20-F to:

- "ADSs" are to our American depositary shares, every three of which represent two Class A common shares;
- "Aurora" are to Aurora Mobile Limited;
- "BVI" are to the British Virgin Islands;
- "China" or the "PRC" are to the People's Republic of China, excluding, for the purposes of this annual report only, Hong Kong, Macau and Taiwan:
- "Class A common shares" are to our Class A common shares of par value US\$0.0001 per share;
- "Class B common shares" are to our Class B common shares of par value US\$0.0001 per share;
- "common shares" are to our common shares, par value US\$0.0001 per share;
- "cumulative app installations" as of a certain date are to the cumulative number of apps that have installed one or more of the SDKs offered as part of our developer services as of the same date;
- "customers" in a given period are to those that purchase at least one of our paid-for SAAS Businesses or targeted marketing during the same period. We treat each contracting party as a separate customer although it is possible that a company may have more than one contracting party to enter into contracts with us and multiple entities within one corporate group may use the same contracting party to enter into contracts with us;
- "monthly active SDKs" in a given period are to the number of SDKs offered as part of our developer services and integrated into apps that have been installed on mobile devices, which have established active connection with our servers in the last month of the same period;
- "monthly active unique mobile devices" in a given period are to the number of unique mobile devices that have at least one app establishing active connection with our servers in the last month of the same period;
- "our SAAS Businesses" are to our developer services and vertical applications;
- "our VIE" are to Shenzhen Hexun Huagu Information Technology Co., Ltd., or Hexun Huagu;
- "our WFOE" are to JPush Information Consultation (Shenzhen) Co., Ltd., or Shenzhen JPush;
- "RMB" and "Renminbi" are to the legal currency of China;
- "SAAS" are to Software-as-a-Service;
- "US\$," "U.S. dollars," "\$," and "dollars" are to the legal currency of the United States; and
- "we," "us," "our company" and "our" are to Aurora Mobile Limited, our Cayman Islands holding company, and its subsidiaries, and, when describing our operations and consolidated financial information, also include our VIE in China and its subsidiaries.

Unless otherwise noted, all translations from Renminbi to U.S. dollars and from U.S. dollars to Renminbi in this annual report are made at a rate of RMB6.3726 to US\$1.00, 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 or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, or at all.

## FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F contains forward-looking statements that relate to our current expectations and views of future events. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigations Reform Act of 1995.

You can identify some of these forward-looking statements by words or phrases such as "may," "will," "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 conditions and results of operations;
- the expected growth of the mobile internet industry and the mobile app developer services market in China;
- the expected growing application of big data technology in China, including in areas such as mobile online marketing, financial risk management, market intelligence and location-based intelligence services;
- our expectations regarding demand for and market acceptance of our SAAS Businesses and targeted marketing;
- our expectations regarding our relationships with app developers, customers, strategic partners and other stakeholders;
- competition in our industry; and
- relevant government policies and regulations relating to our industry.

You should read this annual report and the documents that we refer to in this annual report and have filed as exhibits to this annual report completely and with the understanding that our actual future results may be materially different from what we expect. Other sections of this annual report discuss factors which could adversely impact our business and financial performance. Moreover, we operate in an evolving environment. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, 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. We qualify all of our forward-looking statements by these cautionary 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. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events.

#### 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 VIE

Aurora Mobile Limited is not an operating company in China but a Cayman Islands holding company with no equity ownership in its variable interest entity, or VIE. We conduct our operations in China primarily through our PRC subsidiary and our VIE. PRC laws and regulations restrict and impose conditions on foreign investment in businesses providing certain value-added telecommunications services in China. Accordingly, we operate these businesses in China through our VIE. Investors in our ADSs are not purchasing equity interest in our operating entities in China but instead are purchasing equity interest in a holding company incorporated in the Cayman Islands. As used in this annual report, "Aurora" refers to Aurora Mobile Limited, and "we," "us," "our company," or "our" refers to Aurora Mobile Limited and its subsidiaries, and, when describing our operations and consolidated financial information, also includes our VIE and its subsidiaries in China. We refer to Shenzhen Hexun Huagu Information Technology Co., Ltd., or Hexun Huagu, as "our VIE", and to JPush Information Consultation (Shenzhen) Co., Ltd., or Shenzhen JPush, as "our WFOE" in this annual report. Investors in our ADSs are not purchasing equity interest in our operating entities in China but instead are purchasing equity interest in a holding company incorporated in the Cayman Islands.

We, through our WFOE, have entered into a series of contractual arrangements with our VIE and the nominee shareholders of our VIE. These contractual arrangements enable us to: (i) exercise effective control over our VIE; (ii) receive the economic benefits that could potentially be significant to our VIE in consideration for the services provided by our WFOE; and (iii) hold an exclusive option to purchase all or part of the equity interests in and assets of our VIE when and to the extent permitted by PRC law. Because of these contractual arrangements, we are the primary beneficiary of our VIE and hence consolidate its financial results with ours under U.S. GAAP. In 2019, 2020 and 2021, we derived 98.6%, 97.7% and 95.0% of our external revenues from our VIE, respectively.

These contractual agreements include exclusive option agreements, exclusive business cooperation agreement, financial support agreement, shareholder voting proxy agreement and equity interest pledge agreements. Pursuant to the exclusive option agreements, each shareholder of our VIE has irrevocably granted our WFOE an exclusive option to purchase all or part of his equity interests in our VIE, and our VIE has irrevocably granted our WFOE an exclusive option to purchase all or part of its assets. Pursuant to the exclusive business cooperation agreement, our WFOE has the exclusive right to provide our VIE comprehensive business support, technical services, consulting services and other services. Pursuant to the financial support agreement, we undertake to provide unlimited financial support to our VIE to the extent permissible under the applicable PRC laws and regulations, whether or not any operational loss is actually incurred by our VIE. Each of the shareholders of our VIE has also executed a shareholder voting proxy agreement to irrevocably authorize our company to act as his attorney-in-fact to exercise all of his rights as a shareholder of our VIE. Pursuant to the equity interest pledge agreements, the shareholders of our VIE have pledged 100% equity interests in our VIE to our WFOE to guarantee performance by the shareholders of their obligations under the exclusive option agreements, the shareholder voting proxy agreement and the financial support agreement, as well as the performance by our VIE of its obligations under the exclusive business cooperation agreement and the exclusive option agreements. For a summary of the material provisions of the contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure."

However, the contractual arrangements may not be as effective as direct ownership in providing us with control over our VIE, and we may incur substantial costs to enforce the terms of the arrangements. In addition, these agreements have not been tested in China courts. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure—We rely on contractual arrangements with our VIE and its shareholders for substantially all of our business operation, which may not be as effective as direct ownership" and "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure—The shareholders of our VIE may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition."

The legal environment in the PRC is not as developed as in other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability, as a Cayman holding company, to enforce these contractual arrangements and doing so may be quite costly. 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 VIE and its 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 our VIE are found to be in violation of any existing or future PRC laws or regulations, or fail to obtain or maintain any of the required permits or approvals, the relevant PRC regulatory authorities would have broad discretion to take action in dealing with such violations or failures. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect us," "—Risks Related to Our Corporate Structure—If the PRC government finds that the agreements that establish the structure for operating some of our business operations in China do not comply with PRC regulations relating to 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 interest in those operations," and "—Our business may be significantly affected by the newly enacted PRC Foreign Investment Law."

Our corporate structure is subject to risks associated with our contractual arrangements with our VIE. If the PRC government deems that our contractual arrangements with our VIE 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 holding company, our PRC subsidiaries and VIE, 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 VIE and, consequently, significantly affect the financial performance of our VIE and our company as a whole. For a detailed description of the risks associated with our corporate structure, please refer to risks disclosed under "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure."

In addition, our VIE is owned principally by Mr. Weidong Luo, who hold 80% of our VIE. Mr. Luo also has 76. 4% of the total voting power of Aurora. Accordingly, the enforceability of the various contracts described above by our company against our VIE is dependent upon Mr. Luo. If he fails to perform his obligations under the contractual arrangements, we could be unable to enforce the contractual arrangements that give us effective control over our VIE. If this happens, we would need to deconsolidate our VIE. The majority of our assets, including the necessary licenses to conduct business in China are held by our VIE. A significant part of our revenues is generated by our VIE. An event that results in the deconsolidation of our VIE would have a material effect on our operations and result in the value of the securities diminish substantially or even become worthless. For a detailed description of the risks associated with our corporate structure, see "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure."

We face various risks and uncertainties related 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 offshore offerings, antimonopoly regulatory actions, and oversight on cybersecurity and data privacy, as well as the lack of inspection by the Public Company Accounting Oversight Board, or the PCAOB, on our auditors as determined by the announcement of the PCAOB issued on December 16, 2021. This may impact our ability to conduct certain businesses, accept foreign investments, or list on a United States or other foreign exchange. 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 related to doing business in China, please refer to risks disclosed under "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China."

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, including data security or anti-monopoly related regulations, in this nature may cause the value of such securities to significantly decline. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—The PRC government's significant oversight and discretion over our business operation could result in a material adverse change in our operations and the value of our ADSs."

## Permissions Required from the PRC Authorities for Our Operations

We conduct our business in China through our subsidiaries and our VIE in China. Our operations in China are governed by PRC laws and regulations. As of the date of this annual report, and except otherwise disclosed in this annual report, our PRC subsidiaries and VIE have obtained the requisite licenses and permits from the PRC government authorities that are material for the business operations of our holding company and our VIE in China, including, among others, two value-added telecommunication business licenses covering different scope of operations and a foreign-related investigation license. Our VIE may also be required to obtain the personal credit reporting business license. The PRC government has adopted several regulations governing personal credit reporting businesses. According to the Administrative Regulations on the Credit Reporting Industry, which was promulgated by the State Council and became effective in 2013, "personal credit reporting business" means the activities of collecting, organizing, storing and processing "information related to the credit standing" of individuals as well as providing the information to others, and a "credit reporting agency" refers to a duly established agency whose primary business is credit reporting. Under the Administrative Regulations on the Credit Reporting Industry and the Administrative Measures for Credit Reporting Agencies, the latter of which was promulgated by the People's Bank of China and became effective in 2013, no entity may engage in personal credit reporting business without approval by the credit reporting industry regulatory department under the State Council. On September 27, 2021, the PBOC promulgated the Administrative Measures for Credit Information Services, or the Credit Information Services Measures, which took effect on January 1, 2022. Pursuant to the Credit Information Services Measures, Credit Information Services, shall mean the collection, sorting, retention, and processing of credit information of enterprises and individuals, and the provision of the foregoing information to information users. Credit information, shall mean the basic individual information, lending information and other relevant information used for identification and determination of creditworthiness status of enterprises and individuals, and collected pursuant to the law for the purpose of providing services for financial activities, as well as the analyzed and evaluated information formed based on the foregoing information. Persons engaging in personal credit information services shall obtain the personal credit information organization license issued by the PBOC pursuant to the Credit Information Services Measures. Our VIE provides financial risk management solutions to financial institutions as well as emerging technology companies based on device-level mobile behavior data. Due to the lack of further interpretations of the current regulations governing personal credit reporting businesses, the exact definition and scope of "information related to credit standing" and "personal credit reporting business" under the current regulations are unclear. It is therefore uncertain whether our VIE would be deemed to engage in personal credit reporting business because of our financial risk management solutions. As of the date of this annual report, we have not been subject to any fines or other penalties under any PRC laws or regulations related to personal credit reporting business. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Credit Reporting." 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, filings or approvals for the functions and services of our platform in the future. For more detailed information, see "Item 3. Key Information—D. Risk Factors— Risks Related to Doing Business in China—We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internetrelated businesses and companies, and any lack of requisite approvals, licenses or permits applicable to our business may have a material adverse effect on our business and results of operations."

Furthermore, except as disclosed in this annual report, in connection with our issuance of securities to foreign investors, under current PRC laws, regulations and regulatory rules, as of the date of this annual report, we, our PRC subsidiaries and our VIE, (i) are not required to obtain permissions from the China Securities Regulatory Commission, or the CSRC, and (ii) have not received or were denied such requisite permissions by any PRC authority. We are subject to the risks of uncertainty of any future actions of the PRC government in this regard including the risk that we inadvertently conclude that the permission or approvals discussed here are not required, that applicable laws, regulations or interpretations change such that we are required to obtain approvals in the future.

However, the PRC government has recently indicated an intent to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers. On December 28, 2021, the Cyberspace Administration of China published the Measures for Cybersecurity Review, or Cybersecurity Review Measures, which replaced the current Measures for Cybersecurity Review after it was adopted and became effective on February 15, 2022. The Cybersecurity Review Measures, among others, stipulate that if an operator has personal information of over one million users and intends to be listed in a foreign country, it must be subject to the cybersecurity review. The Cybersecurity Review Measures remain unclear on whether the relevant requirements will be applicable to further equity or debt offerings by companies that have completed the initial public offering in the United States. We cannot assure you the clear impact of the Cybersecurity Review Measures, or the authorities would hold the same opinions with us regarding the newly-effective laws, and we will closely monitor and assess the statutory developments in this regard. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicable laws relating to privacy and cybersecurity. The improper use or disclosure of data could have a material and adverse effect on our business and prospects."

Under Cybersecurity Review Measures and other PRC cybersecurity laws and regulations, critical information infrastructure operators that intend to purchase internet products and services that affect or may affect national security must be subject to the cybersecurity review. As advised by our PRC legal counsel, the PRC governmental authorities may have wide discretion in the interpretation and enforcement of these laws, including the interpretation of the scope of "critical information infrastructure operators." See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Personal Information Protection." In addition, the Cybersecurity Review Measures also stipulate that any data processor carrying out data processing activities that affect or may affect national security should also be subject to the cybersecurity review. In anticipation of the strengthened implementation of cybersecurity laws and regulations and the continued expansion of our business, we face potential risks if we are deemed as a critical information infrastructure operator under the PRC cybersecurity laws and regulations. In such case, we must fulfill certain obligations as required under the PRC cybersecurity laws and regulations, including, among others, storing personal information and important data collected and produced within the PRC territory during our operations in China, which we have fulfilled in our business, and we may be subject to review when purchasing internet products and services. Furthermore, we may be subject to review when conducting data processing activities, and may face challenges in addressing its requirements and make necessary changes to our internal policies and practices in data processing. As of the date of this annual report, we have not been involved in any investigations on cybersecurity review made by the Cyberspace Administration of China on such basis, and we have not received any inquiry, notice, warning, or sanctions in such respect.

On July 6, 2021, the relevant PRC governmental authorities made public the Opinions on Strictly Cracking Down Illegal Securities Activities in Accordance with the Law. These opinions emphasized the need to strengthen the administration over illegal securities activities and the supervision on overseas listings by China-based companies and proposed to take effective measures, such as promoting the construction of relevant regulatory systems to deal with the risks and incidents faced by China-based overseas-listed companies. As these opinions are recently issued, official guidance and related implementation rules have not been issued yet and the interpretation of these opinions remains unclear at this stage. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—The approval and/or other requirements of the CSRC or other PRC governmental authorities may be required in connection with an offering under PRC rules, regulations or policies, and, if required, we cannot predict whether or how soon we will be able to obtain such approval." As of the date of this annual report, we have not received any inquiry, notice, warning, or sanctions regarding offshore offering from the CSRC or any other PRC governmental authorities.

In addition to the approval of the CSRC or other PRC government authorities that may be required in connection with our offshore offerings, our VIE is required to obtain and maintain applicable licenses and approvals from different regulatory authorities to provide their current services. Under the current PRC regulatory scheme, a number of regulatory agencies, including but not limited to the Ministry of Industry and Information Technology, or MIIT, and Cyberspace Administration of China, jointly regulate all major aspects of the internet industry, including the mobile internet business. Operators must obtain government approvals and licenses for relevant telecommunications business. Our VIE also provides mobile app data analysis product to both domestic and foreign financial industry clients, and may be considered as engaging in foreign-related investigation business. As such, under the current PRC regulatory scheme, our VIE may be required to obtain a foreign-related investigation license. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations—Regulations on Foreign-related Investigation."

## **Cash Flows through Our Organization**

Aurora is a holding company with no material operations of its own. We conduct our operations primarily through our WFOE and our VIE. As a result, Aurora's ability to pay dividends depends upon dividends paid by our WFOE. If our WFOE or any newly formed PRC subsidiaries 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 WFOE is permitted to pay dividends to us only out of its retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Under PRC law, each of our WFOE and our VIE is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of its registered capital. In addition, our WFOE 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. For more details, see "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Holding Company Structure."

Under PRC laws and regulations, our PRC subsidiaries and VIE are subject to certain restrictions with respect to paying dividends or otherwise transferring any of their net assets to us. Remittance of dividends by a wholly foreign-owned company out of China is subject to examination by the banks designated by SAFE. Our WFOE has not paid dividends and will not be able to pay dividends until it generates accumulated profits and meets the requirements for statutory reserve funds. The net liabilities of our VIE, in which we have no legal ownership, amounted to RMB81 million, RMB240 million and RMB326 million (US\$51 million) as of December 31, 2019, 2020 and 2021, respectively. For restrictions and limitations on our ability to distribute earnings from our businesses, including subsidiaries and VIE, to Aurora and investors as well as the ability to settle amounts owed under the VIE agreements, see "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our initial public offering to make loans or additional capital contributions to our PRC subsidiary, which could materially and adversely affect our liquidity and our ability to fund and expand our business," "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We may rely on dividends and other distributions on equity paid by our PRC subsidiary to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC subsidiary to make payments to us could have a material and adverse effect on our ability to conduct our business" and "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Governmental control of currency conversion may limit our ability to utilize our cash balance effectively and affect the value of your investment."

Our subsidiaries and our VIE conduct business transactions that include provision of services and intercompany loans, and collection of employee's individual income tax from the exercise of share options, subject to satisfaction of applicable government registration and approval requirements. The cash flows occurred between our subsidiaries and our VIE are summarized below:

	For the yea	nber 31,	
	2019	2020	2021
	(RM	B in thousand	s)
Loans from a subsidiary, JPush Information Consulting (Shenzhen) Co., Ltd. to the VIE	197,943		80,000
Repayment of loans and interests by the VIE to a subsidiary, JPush Information Consulting			
(Shenzhen) Co., Ltd.	_	156,124	56,341
Employee's individual income tax from the exercise of share options from a subsidiary,			
JPush Information Consulting (Shenzhen) Co., Ltd. to the VIE	5,133	878	2,630

With respect to intercompany loans, our VIE received cash from our subsidiary amounted to RMB197.9 million, nil and RMB80.0 million (US\$12.6 million) for the year ended December 31, 2019, 2020 and 2021, respectively, and repaid cash to our subsidiary amounted to nil, RMB156.1 million and RMB56.3 million (US\$8.8 million) for the year ended December 31, 2019, 2020 and 2021, respectively. With respect to the collection of employee's individual income tax from the exercise of share options, our VIE received cash from our subsidiary amounted to RMB5.1 million, RMB0.9 million and RMB2.6 million (US\$0.4 million) for the year ended December 31, 2019, 2020 and 2021, respectively, which were then remitted to local tax authorities on behalf of our employees.

Aurora has not declared or paid any cash dividends, nor does it has 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."

## Financial Information Related to Our VIE, Parent and Its Subsidiaries

The following tables provide condensed consolidating schedules depicting the financial position, cash flows, and results of operations for the parent, subsidiaries, the consolidated VIE, and any eliminating adjustments and consolidated totals (in thousands of RMB) as of and for the years ended December 31, 2019, 2020 and 2021.

For the year ended December 31 2021

## Selected Condensed Consolidating Schedule of Results of Operations

	For the year ended December 31, 2021				
Parent	VIE	Subsidiaries	Eliminating adjustments	Consolidated total	
		RMB in thousan			
_	351,243	116,306	(110,227)	357,322	
(117,029)		<u> </u>	117,029		
(140,584)	(100,782)	(16,247)	117,029	(140,584)	
		, , ,			
	For the year ended December 31, 2020				
Parent	VIE	Subsidiaries	Eliminating adjustments	Consolidated total	
- arent		RMB in thousan		- Cottai	
_	465,066	103,435	(96,887)	471,614	
(193,109)		<u> </u>	193,109	_	
(225,075)	(173,865)	(19,244)	193,109	(225,075)	
	For the y	ear ended Decer	nber 31, 2019		
D 4	VIII	6.1.11	Eliminating	Consolidated	
<u>Parent</u>	VIE	Subsidiaries (RMB in thousa	adjustments	total	
<u></u>	900,454	100,484	(94,480)	906,458	
(93,328)	,		93,328	, 150, 150 —	
(109,841)		2,501	93,328	(109,841)	
(109,041)	(33,043)	2,301	93,320	(109,041)	

## Selected Condensed Consolidating Schedule of Financial Position

		As of December 31, 2021				
	Parent	VIE	Subsidiaries	Eliminating adjustments	Consolidated total	
			(RMB in thousa	inds)		
Cash and cash equivalents	6,724	55,946	27,882	_	90,552	
Restricted cash	5,998	158,032	_	_	164,030	
Total current assets	32,896	394,640	446,052	(492,452)	381,136	
Investments in subsidiaries	349,501	_	1,622,191	(1,971,692)	_	
Total non-current assets	401,447	144,382	1,917,264	(2,248,692)	214,401	
Total assets	434,343	539,022	2,363,316	(2,741,144)	595,537	
Total liabilities	218,900	865,202	60,174	(764,182)	380,094	
Total equity	215,443	(326,180)	2,303,142	(1,976,962)	215,443	
Total liabilities and equity	434,343	539,022	2,363,316	(2,741,144)	595,537	

		As of December 31, 2020				
	Parent	VIE	Subsidiaries (RMB in thousa	Eliminating adjustments	Consolidated total	
Cash and cash equivalents	92,123	115,713	148,279	_	356,115	
Restricted cash	_	115	_	_	115	
Total current assets	101,564	296,573	425,555	(293,463)	530,229	
Investments in subsidiaries	439,276		1,660,152	(2,099,428)		
Total non-current assets	494,422	173,546	1,985,658	(2,396,428)	257,198	
Total assets	595,986	470,119	2,411,213	(2,689,891)	787,427	
Total liabilities	274,747	709,702	68,218	(586,479)	466,188	
Total equity	321,239	(239,583)	2,342,995	(2,103,412)	321,239	
Total liabilities and equity	595,986	470,119	2,411,213	(2,689,891)	787,427	

## Selected Condensed Consolidating Schedules of Cash Flows

	For the year ended December 31, 2021					
	Parent	VIE	Subsidiaries (RMB in thousa	Eliminating adjustments nds)	Consolidated total	
Net cash (used in)/ provided by operating activities	(24,383)	68,336	(120,603)	· —	(76,650)	
Net cash (used in)/ provided by investing activities	(4,859)	(186)	1,487	30,000	26,442	
Net cash provided by / (used in) financing activities	(54,520)	30,000	_	(30,000)	(54,520)	
Effect of exchange rate fluctuation on cash and cash equivalents	4,361	_	(1,281)	_	3,080	
Net change in cash	(79,401)	98,150	(120,397)	_	(101,648)	
Opening cash balance	92,123	115,828	148,279	_	356,230	
Ending cash balance	12,722	213,978	27,882	_	254,582	

	For the year ended December 31, 2020					
	Parent	VIE	Subsidiaries (RMB in thousa	Eliminating adjustments ids)	Consolidated total	
Net cash (used in)/ provided by operating activities	(17,412)	168,971	(75,749)	_	75,810	
Net cash (used in)/ provided by investing activities	(6,525)	(108,450)	121,742	(151,182)	(144,415)	
Net cash provided by / (used in) financing activities	5,257	(156,124)	_	151,182	315	
Effect of exchange rate fluctuation on cash and cash equivalents	(3,686)	_	(3,368)	_	(7,054)	
Net change in cash	(22,366)	(95,603)	42,625	_	(75,344)	
Opening cash balance	114,489	211,429	105,656	_	431,574	
Ending cash balance	92,123	115,828	148,279	_	356,230	

	For the year ended December 31, 2019					
				Eliminating	Consolidated	
	Parent	VIE	Subsidiaries	adjustments	total	
		(	RMB in thousar	ıds)		
Net cash provided by/(used in) operating activities	15,273	16,059	(57,090)	—	(25,758)	
Net cash used in investing activities	(95,412)	(34,451)	(294,921)	335,818	(88,966)	
Net cash (used in)/provided by financing activities	(33,845)	197,943	137,837	(335,818)	(33,883)	
Effect of exchange rate fluctuation on cash and cash equivalents	(9,763)	_	13,267	_	3,504	
Net change in cash	(123,747)	179,551	(200,907)	_	(145,103)	
Opening cash balance	238,236	31,878	306,563	_	576,677	
Ending cash balance	114,489	211,429	105,656	_	431,574	

## A. Selected Financial Data

The following tables present the selected consolidated financial information for our company. The selected consolidated statements of operations data for the years ended December 31, 2019, 2020 and 2021, selected consolidated balance sheets data as of December 31, 2020 and 2021 and selected consolidated cash flows data for the years ended December 31, 2019, 2020 and 2021 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. The selected consolidated statements of operations data for the year ended December 31, 2017 and 2018, the selected consolidated balance sheets data as of December 31, 2017 and 2018 and selected consolidated cash flows data for the year ended December 31, 2017 and 2018 have been derived from our audited consolidated financial statements not included in this annual report. Our historical results do not necessarily indicate results expected for any future periods. The selected consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, our audited consolidated financial statements and related notes and "Item 5. Operating and Financial Review and Prospects". Our consolidated financial statements are prepared and presented in accordance with U.S. GAAP.

			For the Year End	ed December 31,		
	2017	2018	2019	2020	202	
	RMB	RMB	RMB	RMB t for per share dat	RMB	US\$
Consolidated Statements of Operations Data:		(III)	thousanus, excep	t for per share dat	a)	
Revenues	284,709	714,141	906,458	471,614	357,322	56,072
Cost of revenues <sup>(1)</sup>	(213,370)	(517,074)	(649,596)	(265,436)	(92,393)	(14,498)
Gross profit	71,339	197,067	256,862	206,178	264,929	41,574
Operating expenses:(1)						
Research and development expenses	(71,651)	(134,358)	(176,248)	(174,597)	(206,722)	(32,439)
Sales and marketing expenses	(59,673)	(83,853)	(118,548)	(102,319)	(116,415)	(18,268)
General and administrative expenses	(32,431)	(71,641)	(109,291)	(119,087)	(79,922)	(12,542)
Total operating expenses	(163,755)	(289,852)	(404,087)	(396,003)	(403,059)	(63,249)
Loss from operations	(92,416)	(92,785)	(147,225)	(189,825)	(138,130)	(21,675)
Loss before income taxes	(94,271)	(66,167)	(109,679)	(224,989)	(140,552)	(22,055)
Net loss	(90,291)	(66,197)	(109,841)	(225,075)	(140,584)	(22,060)
Net loss attributable to Aurora Mobile Limited's						
shareholders	(90,291)	(66,197)	(109,841)	(225,075)	(140,584)	(22,060)
Accretion of contingently redeemable convertible preferred		<del></del>			<del></del>	
shares	(26,391)	(24,094)	_	_	_	_
Net loss attributable to common shareholders	(116,682)	(90,291)	(109,841)	(225,075)	(140,584)	(22,060)
Net loss per common share:						
Basic and diluted	(2.73)	(1.57)	(1.43)	(2.91)	(1.78)	(0.28)
Weighted average number of shares used in calculating						
basic and diluted loss per common share:						
Common shares — Basic and diluted	42,666,670	_	_	_	_	_
Class A common share — Basic and diluted	_	40,441,999	59,721,341	60,415,978	61,809,501	61,809,501
Class B common share — Basic and diluted	_	17,000,189	17,000,189	17,000,189	17,000,189	17,000,189

## Notes:

(1) Share-based compensation expenses are allocated in cost of revenues and operating expenses as follows:

	For the Year Ended December 31,								
	2017	2018	2019	2020	202	1			
	RMB	RMB	RMB	RMB	RMB	US\$			
Cost of revenue	_		73	4	41	6			
Research and development expenses	1,408	9,448	12,819	7,176	13,801	2,166			
Sales and marketing expenses	944	3,347	6,040	3,965	2,609	409			
General and administrative expenses	5,923	11,766	28,352	17,713	13,761	2,160			
Total	8,275	24,561	47,284	28,858	30,212	4,741			

	As of December 31,									
	2017	2018	2019	2020	2021					
	RMB	RMB	RMB	RMB	RMB	US\$				
		(in thousands)								
Consolidated Balance Sheet Data:										
Cash and cash equivalents	208,161	576,562	431,459	356,115	90,552	14,210				
Accounts receivable, net	49,594	141,911	135,417	44,886	43,860	6,883				
Prepayments and other current assets	34,228	80,578	86,087	49,013	46,670	7,323				
Total assets	359,450	992,068	939,923	787,427	595,537	93,453				
Accounts payable	8,340	18,811	19,996	16,592	18,292	2,870				
Deferred revenue and customer deposits	49,557	59,483	77,561	109,182	119,991	18,829				
Accrued liabilities and other current liabilities	52,639	76,666	96,277	109,136	85,305	13,388				
Total liabilities	117,197	390,408	432,135	466,188	380,094	59,645				
Total mezzanine equity	466,637	_	_		_	_				
Total shareholders' deficit	(224,384)	601,660	507,788	321,239	215,443	33,808				
Total liabilities, mezzanine equity and equity	359,450	992,068	939,923	787,427	595,537	93,453				

	For the Year Ended December 31,							
	2017	2018	2019	2020	2021			
	RMB	RMB	RMB	RMB	RMB	US\$		
		(in thousands)						
Consolidated Cash Flow Data:								
Net cash (used in)/provided by operating activities	(75,532)	(97,925)	(25,758)	75,810	(76,650)	(12,027)		
Net cash (used in)/provided investing activities	(28,644)	(139,206)	(88,966)	(144,415)	26,442	4,150		
Net cash provided by/(used in) financing activities	217,446	614,884	(33,883)	315	(54,520)	(8,556)		
Effect of foreign currency exchange rate changes on cash and cash								
equivalents and restricted cash	(8,282)	(9,352)	3,504	(7,054)	3,080	483		
Net increase/(decrease) in cash and cash equivalents and restricted cash	104,988	368,401	(145,103)	(75,344)	(101,648)	(15,950)		
Cash and cash equivalents and restricted cash at the beginning of year	103,288	208,276	576,677	431,574	356,230	55,900		
Cash and cash equivalents and restricted cash at the end of year	208,276	576,677	431,574	356,230	254,582	39,950		

## B. Capitalization and Indebtedness

Not applicable.

## C. Reasons for the Offer and Use of Proceeds

Not applicable.

## D. Risk Factors

## **Summary of Risk Factors**

Investing in our ADSs involves significant risks. You should carefully consider all of the information in this annual report before making an investment in our ADSs. Below is a summary of material risks we and our VIE face, organized under relevant headings. These risks are discussed more fully in Item 3. Key Information—D. Risk Factors.

## Risks Related to Our Business and Industry

We and our VIE are subject to risks and uncertainties related to our business and industry, including, but not limited to, the following:

- We have experienced rapid growth in recent periods, and our recent growth rates may not be indicative of our future growth;
- We have incurred net losses in the past, which we may continue to experience in the future;
- If we cannot successfully execute our strategy and continue to develop and effectively market SAAS Businesses and our other business initiatives that anticipate and respond to the needs of app developers and our customers, our business, operating results and financial condition may suffer;
- If we are not able to continue to gain access to mobile data in the future, our business, operating results and financial condition could be materially and adversely affected;
- If the market for our SAAS Businesses and other business initiatives develops more slowly than we expect, our growth may slow or stall and our operating results could be harmed;
- Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicable laws relating to privacy and cybersecurity. The improper use or disclosure of data could have a material and adverse effect on our business and prospects;

- Our business depends on strong brand and failing to maintain and enhance our brand would hurt our ability to expand our base of app developers and customers;
- If we fail to keep up with rapid changes in technologies, our future success may be adversely affected; and
- We may not be able to compete successfully with our current or future competitors.

## Risks Related to Our Corporate Structure

We and our VIE are also subject to risks and uncertainties related to our corporate structure, including, but not limited to, the following:

- Aurora is a Cayman Islands holding company with no equity ownership in our VIE, and we conduct our operations in China primarily through (i) our PRC subsidiary and (ii) our VIE with which we have maintained contractual arrangements. Investors in our ADSs thus are not purchasing equity interest in our operating entities in China but instead are purchasing equity interest in Cayman Islands holding company. If the PRC government finds that the agreements that establish the structure for operating some of our business operations in China do not comply with PRC regulations relating to the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we and our VIE could be subject to severe penalties, or be forced to relinquish our interest in those operations. Our holding company in the Cayman Islands, our PRC subsidiary, our VIE, and investors of Aurora face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements without VIE and, consequently, significantly affect the financial performance of our VIE and our company as a whole;
- We rely on contractual arrangements with our VIE and its shareholders for substantially all of our business operation, which may not be as effective as direct ownership. we rely on the performance by our VIE and its shareholders of their obligations under the contracts to exercise control over our VIE. However, the shareholders of our consolidated VIE may not act in the best interests of our company or may not perform their obligations under these contracts. Such risks exist throughout the period in which we intend to operate certain portions of our business through the contractual arrangements with our VIE;
- Any failure by our VIE or its shareholders to perform their obligations under our contractual arrangements with them would have a material and adverse effect on our business. if our VIE or its shareholders fail to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under PRC law, including seeking specific performance or injunctive relief, and claiming damages, which we cannot assure will be effective under PRC law; and
- The shareholders of our VIE may have potential conflicts of interest with Aurora, which may materially and adversely affect our business and financial condition. These shareholders may breach, or cause our VIE to breach, or refuse to renew, the existing contractual arrangements we have with them and our VIE, which would have a material and adverse effect on our ability to effectively control our VIE and receive economic benefits from them. If we cannot resolve any conflict of interest or dispute between us and the shareholders of our VIE, we would have to rely on legal proceedings, which could result in disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

## Risks Related to Doing Business in China

We and our VIE face risks and uncertainties related to doing business in China in general, including, but not limited to, the following:

• Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business and operations. The enforcement of laws and rules and regulations in China may change quickly with little advance notice, which could result in a material adverse change in our operations and the value of our ADSs;

- We and our VIE may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet-related businesses and companies, and any lack of requisite approvals, licenses or permits applicable to our business may have a material adverse effect on our business and results of operations;
- The approval and/or other requirements of the CSRC or other PRC governmental authorities may be required in connection with an offering under PRC rules, regulations or policies, and, if required, we cannot predict whether or how soon we will be able to obtain such approval. Any failure to obtain or delay in obtaining the requisite governmental approval for an offering, or a rescission of such approval, would subject us to sanctions imposed by the relevant PRC regulatory authority;
- The PRC government's significant oversight over our business operation could result in a material adverse change in our operations and the value of our ADSs. The Chinese government may intervene or influence our operations at any time, or may exert more control over offerings conducted overseas and/or foreign investment in China-based issuers. Any actions by the Chinese government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or become worthless:
- 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
- Our ADSs will be prohibited from trading in the United States under the Holding Foreign Companies Accountable Act, or 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.

## Risks Related to our ADSs

We face risks and uncertainties related to our ADSs, including, but not limited to, the following:

- The trading price of the ADSs is likely to be volatile, which could result in substantial losses to investors;
- We cannot guarantee that any share repurchase program will be fully consummated or that any share repurchase program will enhance long-term shareholder value, and share repurchases could increase the volatility of the trading price of the ADSs and could diminish our cash reserves:
- We are an emerging growth company within the meaning of the Securities Act and may take advantage of certain reduced reporting requirements;
- 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 common shares and the ADSs may view as beneficial; and
- The sale or availability for sale, or perceived sale or availability for sale, of substantial amounts of the ADSs could adversely affect their market price.

## Risks Related to Our Business and Industry

## We have experienced rapid growth in recent periods, and our recent growth rates may not be indicative of our future growth.

We started operation in 2012. As a result of our relatively limited operating history, our ability to forecast our future results of operations is limited and subject to a number of uncertainties, including our ability to plan for and model future growth. Our revenue has increased substantially since our inception, but we may not be able to sustain revenue growth consistent with our recent history, or at all. Our revenue growth in recent periods may not be indicative of our future performance. In future periods, our revenue could decline or grow more slowly than we expect. We believe growth of our revenue depends on a number of factors, including our ability to:

• attract new app developers and customers, including from diversified industry verticals, and retain and expand our relationships with existing app developers and customers on a cost-effective basis:

- maintain the breadth of our ad publisher network and attract new publishers;
- innovate and adapt our services and solutions to meet evolving needs of current and potential customers, including to address market trends:
- maintain and increase our access to data necessary for the development and performance of our solutions;
- maintain the proper functioning of SAAS Businesses which include Developer Services and Vertical Applications, and other business initiatives as we continue to collect increasing amounts of data from a growing user base;
- continuously improve on the algorithms underlying the products and the technologies;
- adapt to a changing regulatory landscape governing privacy matters;
- keep pace with the new technological development in the industry;
- invest sufficiently in our technology and infrastructure, at the pace required to support our growth;
- productize new solutions;
- introduce our services and solutions to new geographic markets;
- · increase awareness of our brand among more businesses; and
- attract and retain employees.

We cannot assure you that we will be able to successfully accomplish any of these objectives.

## We have incurred net losses in the past, which we may continue to experience in the future.

We have incurred net losses since our inception, including loss from operations of RMB147.2 million, RMB189.8 million and RMB138.1 million (US\$21.7 million) for the years ended December 31, 2019, 2020 and 2021, and net losses of RMB109.8 million, RMB225.1 million, and RMB140.6 million (US\$22.1 million) for the years ended December 31, 2019, 2020 and 2021, respectively. These losses reflect the substantial investments we made to grow our business, including commercialization of our platform, development of our AI and machine learning capabilities, improvement of our technology infrastructure, and our sales and marketing efforts. We cannot assure you that we will be able to generate net profits in the future.

We expect to continue to make significant future expenditures related to the continuous development and expansion of our business, including:

- investments in our research and development team and in the development of new solutions and enhancement of our solutions;
- investments in sales and marketing, including expanding our sales force, increasing our customer base and increasing market awareness of our platform;
- · expanding our operations and infrastructure, including internationally; and
- · incurring costs associated with general administration, including legal, accounting and other expenses related to being a public company.

As a result of these increased expenses, we will have to generate and sustain increased revenue to be profitable in future periods. Further, in future periods, our revenue growth rate could decline, and we may not be able to generate sufficient revenue to offset higher costs and achieve or sustain profitability. If we fail to achieve, sustain or increase profitability, our business and operating results could be adversely affected.

If we cannot successfully execute our strategy and continue to develop and effectively market SAAS Businesses and our other business initiatives that anticipate and respond to the needs of app developers and our customers, our business, operating results and financial condition may suffer.

The market for SAAS Businesses and other business initiatives is characterized by constant change and innovation, and we expect it to continue to rapidly evolve. Moreover, many of our customers operate in industries characterized by changing technologies and business models, which require them to develop and manage increasingly complex mobile application and IT infrastructure environments. Our historical success has been based on our ability to offer high quality in-app functionalities needed by app developers and innovative SAAS and other products with industry-specific and actionable insights for our customers, and the resulting benefits to customers' businesses and brands. Our success has also depended upon our ability to identify, target and reach customers that need our services and SAAS Businesses and targeted marketing and successfully convert app developers into paying customers through our sales and marketing activities and then increase the cross-sale among each line of our businesses. If we do not respond to the rapidly changing needs of our customers by developing and enhancing our SAAS Businesses and other business initiatives, developing new products on a timely basis that can address evolving customer needs, and selling and marketing them effectively, our competitive position and business prospects will be harmed.

Additionally, the process of developing new technology, SAAS Businesses may be complex and uncertain, and if we fail to accurately predict developers' and customers' changing needs and emerging technological trends, our business could be harmed. We believe that we must continue to dedicate significant resources to our research and development efforts. Our enhancement of existing services, SAAS Businesses and targeted marketing development of new products could fail to attain sufficient market acceptance for many reasons, including:

- the failure to accurately predict market or customer demands;
- defects, errors or failures in the design or performance of our new products or product enhancements;
- negative publicity about the performance or effectiveness of our SAAS Businesses;
- delays in developing and enhancing existing products or releasing our new products to the market;
- the introduction or anticipated introduction of competing products by our competitors;
- poor business conditions for our customers, causing them to delay purchases; and
- the perceived value of our services and SAAS Businesses relative to their cost.

To the extent we are not able to continue to execute on our business model to timely and effectively develop and market our SAAS Businesses and other business initiatives to address these challenges, our business, operating results and financial condition will be adversely affected.

There can be no assurance that we will successfully identify new opportunities, develop and bring new SAAS Businesses and other business initiatives to market on a timely basis or achieve market acceptance of our services and products, or that products and technologies developed by others will not render our comprehensive suite of services obsolete or non-competitive. Further, we may make changes to our services and products that our customers do not like or find useful. We may also discontinue certain features, begin to charge for certain features that are currently free, such as certain developer services, or increase fees for any of our features or usage of our SAAS Businesses and other business initiatives. If our services or products do not achieve adequate acceptance in the market, our competitive position will be impaired, our revenue may decline or grow more slowly than expected and the negative impact on our operating results may be particularly acute and we may not receive a return on our investment because of the upfront research and development, sales and marketing and other expenses we incur.

If we are not able to continue to gain access to mobile data in the future, our business, operating results and financial condition could be materially and adversely affected.

By providing services to mobile app developers, we gain access to massive mobile data that we use to develop our industry-specific SAAS Businesses and targeted marketing. Data is sourced only based on our services provided to developers and primarily consists of unstructured anonymous meta data. Based on our centralized proprietary data processing platform and leveraging our AI and machine learning capabilities, we are able to gain actionable and effective insights from the data and develop a variety of SAAS Businesses and targeted marketing. Our business plan assumes that the demand for SAAS Businesses will increase.

We may not be able to maintain and grow the number of app developers we serve. Furthermore, certain of our app developers may prohibit or limit our access to or use of this data. The broad adoption of certain end-user computer software or programs may pose technical restrictions on our ability to access user data or end-users may dispute our use of the data. Interruptions, failures or defects in our data access and processing systems, as well as privacy concerns regarding the user data, could also limit our ability to analyze data. In addition, our ability to collect data may be restricted by new laws and regulations. If we are not able to continue to gain access to extensive mobile data in the future, we will lose our competitive strengths, and we may not be able to effectively and efficiently offer and improve our existing SAAS Businesses or develop new products that respond to the needs of our customers. Accordingly, demand for our solutions may not continue to develop as we anticipate, or at all, and because we derive a substantial portion of our revenue from SAAS Businesses and targeted marketing, the growth of our business and results of operations may be adversely affected.

If the market for our SAAS Businesses and other business initiatives develops more slowly than we expect, our growth may slow or stall and our operating results could be harmed.

The market for SAAS Businesses and other business initiatives is rapidly growing. Our future success will depend in large part on our ability to penetrate the existing market, as well as the continued growth and expansion of that market. It is difficult to predict customer adoption and renewals of our subscriptions, customer demand for our platform, the size, growth rate and expansion of this market, the entry of competitive products or the success of existing competitive products. Our ability to penetrate the existing market for SAAS Businesses and other business initiatives any expansion of that market depends on a number of factors, including the cost, performance and perceived value associated with our service and products, as well as potential customers' willingness to adopt our service and products. If we or other SAAS Businesses or other providers experience security incidents, loss of customer or user data, disruptions in delivery or other problems, the market as a whole, including our business, may be negatively affected. If our service and products, especially SAAS Businesses, do not achieve widespread adoption, or there is a reduction in demand caused by a lack of customer acceptance, technological challenges, weakening economic conditions, security or privacy concerns, competing technologies and products, decreases in corporate spending or otherwise, it could result in decreased revenue and our business could be adversely affected.

Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicable laws relating to privacy and cybersecurity. The improper use or disclosure of data could have a material and adverse effect on our business and prospects.

Our and our VIE's business generates and processes a large quantity of data. We face risks inherent in handling and protecting large volume of data. In particular, we face a number of challenges relating to data from transactions, developer services, and other activities on our platforms, including:

- protecting the data in and hosted on our system, including against attacks on our system by outside parties or fraudulent behavior or improper use by our employees;
- addressing concerns related to privacy and sharing, safety and other factors; and
- complying with applicable laws, rules and regulations relating to the collection, use, storage, transfer and disclosure of personal
  information, including any requests from regulatory and government authorities relating to these data.

In general, we expect that data privacy and data protection compliance will receive greater attention and focus from regulators, both domestically and globally, as well as attract continued or greater public scrutiny and attention going forward, which could increase our compliance costs and subject us to heightened risks and challenges associated with data security and protection. If we are unable to manage these risks, we could become subject to penalties, including fines, suspension of business and revocation of required licenses, and our reputation and results of operations could be materially and adversely affected.

The PRC regulatory and enforcement regime with regard to data privacy and data protection is evolving and may be subject to different interpretations or significant changes. Moreover, different PRC regulatory bodies, including the Standing Committee of the NPC, the Ministry of Industry and Information Technology, or the MIIT, the CAC, the MPS and the SAMR, have enforced data privacy and protections laws and regulations with varying standards and applications. See "Item 4. Information on the Company—B. Business Overview—Regulations on Privacy Protection." The following are examples of certain recent PRC regulatory activities in this area:

- The Anti-monopoly Guidelines for the Platform Economy Sector published by the Anti-monopoly Committee of the State Council, effective on February 7, 2021, prohibits collection of user information through coercive means by online platforms operators.
- In August 2021, the Standing Committee of the NPC promulgated the Personal Information Protection Law, which integrates the scattered rules with respect to personal information rights and privacy protection and took effect on November 1, 2021. We update our privacy policies from time to time to meet the latest regulatory requirements of PRC government authorities and adopt technical measures to protect data and ensure cybersecurity in a systematic way. Nonetheless, the Personal Information Protection Law elevates the protection requirements for personal information processing, and many specific requirements of this law remain to be clarified by the CAC, other regulatory authorities, and courts in practice. We may be required to make further adjustments to our business practices to comply with the personal information protection laws and regulations.

Many of the data-related legislations are relatively new and certain concepts thereunder remain subject to interpretation by the regulators. Although we only gain access to anonymous device-level mobile behavioral data 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 PRC Cyber Security Law and related data privacy and protection laws and regulations. As such, we have adopted a series of measures in order to comply with the laws and regulations relating to the protection of personal information. We enter into a service agreement with each app developer that uses our developer services in their mobile apps, and we display privacy policies on our official website. Our service agreement and the privacy policies require each app developer to obtain consent from the end users of its apps in connection with data collection and use pursuant to the PRC Cyber Security Law and related laws and regulations. We periodically check the app developers' own agreements with their end users on a sampling basis, and we remind the app developers to rectify the situation where we find instances of non-compliance with our service agreements, such as their failure to obtain sufficient consents from their end users. Moreover, once the original mobile behavioral data is collected through developer services, our data processing platform immediately stores, cleanses, structures and encrypts the data, and we then utilize AI and machine learning technologies to conduct modeling exercises and data mining and develop SAAS Businesses and targeted marketing that offer industry-specific, actionable insights for customers, in aggregated and anonymized form. In addition, we have adopted rigorous data security measures to prevent our data from unauthorized access or use or being retrieved to establish any connection with the device owners' identities.

While we take all these measures to comply with all applicable data privacy and protection laws and regulations, we cannot guarantee the effectiveness of the measures undertaken by us, app developers and business partners. If any data that we possess belongs to data categories that are subject to heightened scrutiny, we may be required to adopt stricter measures for protection and management of such data. The Cybersecurity Review Measures and the Draft Regulations remain unclear on whether the relevant requirements will be applicable to companies that are already listed in the United States, such as us. We cannot predict the impact of the Cybersecurity Review Measures and the Draft Regulations, if any, at this stage, and we will closely monitor and assess any development in the rule-making process. If the Cybersecurity Review Measures and the enacted version of the Draft Regulations mandate clearance of cybersecurity review and other specific actions to be taken by issuers like us, we face uncertainties as to whether these additional procedures can be completed by us timely, or at all, which may subject us to government enforcement actions and investigations, fines, penalties, suspension of our non-compliant operations, or removal of our app from the relevant application stores, and materially and adversely affect our business and results of operations. As of the date of this annual report, we have not been involved in any formal investigations on cybersecurity review made by the CAC on such basis.

In general, compliance with the existing PRC laws and regulations, as well as additional laws and regulations that PRC regulatory bodies may enact in the future, related to data security and personal information protection, may be costly and result in additional expenses to us, and subject us to negative publicity, which could harm our reputation and business operations. There are also uncertainties with respect to how such laws and regulations will be implemented and interpreted in practice.

In addition, regulatory authorities around the world have adopted or are considering a number of legislative and regulatory proposals concerning data protection. These legislative and regulatory proposals, if adopted, and the uncertain interpretations and application thereof could, in addition to the possibility of fines, result in an order requiring that we change our data practices and policies, which could have an adverse effect on our business and results of operations. The European Union General Data Protection Regulation ("GDPR"), which came into effect on May 25, 2018, includes operational requirements for companies that receive or process personal data of residents of the European Economic Area. The GDPR establishes new requirements applicable to the processing of personal data, affords new data protection rights to individuals and imposes penalties for serious data breaches. Individuals also have a right to compensation under the GDPR for financial or non-financial losses. Although we do not conduct any business in the European Economic Area, in the event that residents of the European Economic Area access our website or our mobile platform and input protected information, we may become subject to provisions of the GDPR.

## Security and privacy breaches may hurt our business.

We currently retain data from other parties, including data from mobile devices in secure database servers. It is essential for us to maintain the security of data that we store and process properly. We maintain a data security program. Once the original anonymous device-level mobile behavioral data is collected and aggregated, our platform stores, cleanses, structures and encrypts data. We also design and adopt other security controls to protect our data from breaches, including separation of data from external servers by firewalls, granting of limited access to designated employees, and maintaining a proper visit log. See "Item 4. Information on the Company—B. Business Overview—Our AI-Powered Data Processing Platform—Data Security."

Given the nature of our business as an internet services provider to developers, we face the challenge of protecting the data in and hosted on our system, including against attacks on our system by outside parties or fraudulent behavior or improper use by our employees. Any security breach and data decryption, including those resulting from a cybersecurity attack, or any unauthorized access, unauthorized usage, virus or similar breach or disruption could result in the loss of the information that we gain access to and store, damage to our reputation, early termination of our contracts, litigation, regulatory investigations or other liabilities.

Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate these techniques or to implement adequate preventative measures. If an actual or perceived security breach occurs, the market perception of our data security measures could be harmed and we could lose sales and customers.

In addition, the PRC regulatory and enforcement regime with regard to data security and data protection is evolving and may be subject to different interpretations or significant changes. For instance:

In June 2021, the Standing Committee of the NPC promulgated the Data Security Law, which took effect in September 2021. The Data Security Law, among other things, provides for security review procedure for data-related activities that may affect national security. In July 2021, the state council promulgated the Regulations on Protection of Critical Information Infrastructure, which became effective on September 1, 2021. Pursuant to this regulation, critical information infrastructure means key network facilities or information systems of critical industries or sectors, such as public communication and information service, energy, transportation, water conservation, finance, public services, e-government affairs and national defense science, the damage, malfunction or data leakage of which may endanger national security, people's livelihoods and the public interest. In December 2021, the CAC, together with other authorities, jointly promulgated the Cybersecurity Review Measures, which became effective on February 15, 2022 and replaces its predecessor regulation. Pursuant to the Cybersecurity Review Measures, critical information infrastructure operators that procure internet products and services must be subject to the cybersecurity review if their activities affect or may affect national security. The Cybersecurity Review Measures further stipulates that critical information infrastructure operators or network platform operators that hold personal information of over one million users shall apply with the Cybersecurity Review Office for a cybersecurity review before any public offering at a foreign stock exchange. As of the date of this annual report, no detailed rules or implementation rules have been issued by any authority and we have not been informed that we are a critical information infrastructure operator by any government authorities. Furthermore, the exact scope of "critical information infrastructure operators" under the current regulatory regime remains unclear, and the PRC government authorities may have wide discretion in the interpretation and enforcement of the applicable laws. Therefore, it is uncertain whether we would be deemed to be a critical information infrastructure operator under PRC law. If we are deemed to be a critical information infrastructure operator under the PRC cybersecurity laws and regulations, we may be subject to obligations in addition to what we have fulfilled under the PRC cybersecurity laws and regulations.

• In November 2021, the CAC released the Regulations on the Network Data Security (Draft for Comments), or the Draft Regulations. The Draft Regulations provide that data processors refer to individuals or organizations that, during their data processing activities such as data collection, storage, utilization, transmission, publication and deletion, have autonomy over the purpose and the manner of data processing. In accordance with the Draft Regulations, data processors shall apply for a cybersecurity review for certain activities, including, among other things, (i) the listing abroad of data processors that process the personal information of more than one million users and (ii) any data processing activity that affects or may affect national security. However, there have been no clarifications from the relevant authorities as of the date of this annual report as to the standards for determining whether an activity is one that "affects or may affect national security." In addition, the Draft Regulations requires that data processors that process "important data" or are listed overseas must conduct an annual data security assessment by itself or commission a data security service provider to do so, and submit the assessment report of the preceding year to the municipal cybersecurity department by the end of January each year. As of the date of this annual report, the Draft Regulations was released for public comment only, and their respective provisions and anticipated adoption or effective date may be subject to change with substantial uncertainty.

The uncertainties with respect to how such laws and regulations will be implemented and interpreted in practice, and the potential further enactment of laws and regulations by the PRC regulatory bodies may result in additional expenses to us, and subject us to negative publicity, which could harm our reputation and business operations.

Moreover, if a high-profile security breach occurs with respect to another SAAS Businesses, our customers and potential customers may lose trust in the security of our SAAS Businesses generally, which could adversely impact our ability to retain existing customers or attract new ones.

## Our business depends on strong brand and failing to maintain and enhance our brand would hurt our ability to expand our base of app developers and customers.

We believe that maintaining and enhancing our "Jiguang" brand identity and increasing market awareness of our company and products, particularly among app developers and publishers, is critical to achieving widespread acceptance of our platform, to strengthening our relationships with our existing customers and to our ability to attract new customers. The successful promotion of our brand will depend largely on our continued marketing efforts, our ability to continue to offer high quality products, our ability to maintain our leadership position and our ability to successfully differentiate our products and platform from competing products and services. Our brand promotion activities may not be successful or yield increased revenue. In addition, independent industry analysts may provide reviews of our products and competing products and services, which may significantly influence the perception of our products in the market. If the reviews are negative or not as strong as reviews of our competitors' products and services, then our brand may be harmed.

In addition, if we do not handle product complaints effectively, then our brand and reputation may suffer, app developers and customers may lose confidence in us and they may reduce or cease their use of our products. App developers and our customers may post and discuss on social media about internet-based products and services, including our products and platform. Our reputation depends, in part, on our ability to generate positive feedback and minimize negative feedback on social media channels where existing and potential customers seek and share information. If actions we take or changes we make to our products or platform upset these app developers and our customers, then their online commentary could negatively affect our brand and reputation. Complaints or negative publicity about us, our products or our platform could materially and adversely impact our ability to attract and retain users and customers, our business, results of operations and financial condition.

The promotion of our brand also requires us to make expenditures, and we anticipate that these expenditures will increase as our market becomes more competitive and as we expand into new markets. To the extent that these activities increase revenue, this revenue still may not be enough to offset the increased expenses we incur. If we do not successfully maintain and enhance our brand, then our business may not grow, we may see our pricing power reduced relative to competitors and we may lose users and customers, all of which would adversely affect our business, results of operations and financial condition.

## If we fail to keep up with rapid changes in technologies, our future success may be adversely affected.

We utilize AI and machine learning technology and other advanced data technology tools to process data and productize our SAAS Businesses and targeted marketing. The success of our business will depend, in part, on our ability to adapt and respond effectively to the technology development on a timely basis. If we are unable to develop new products that satisfy our customers and provide enhancements and new features for our existing products that keep pace with rapid technological and industry change, our business, results of operations and financial condition could be adversely affected. If new technologies emerge that are able to deliver competitive products and services at lower prices, more efficiently, more conveniently or more securely, such technologies could adversely impact our ability to compete effectively.

Our platform integrates with a variety of network, hardware, mobile and software platforms and technologies, and we need to continuously modify and enhance our products and platform to adapt to changes and innovation in these technologies. If app developers or customers adopt new software platforms or infrastructure, we may be required to develop new versions of our products to work with those new platforms or infrastructure. This development effort may require significant resources, which would adversely affect our business, results of operations and financial condition. Any failure of our products and platform to operate effectively with evolving or new platforms and technologies could reduce the demand for our products. We must continue to invest substantial resources in research and development to enhance our technology. If we are unable to respond to these changes in a cost-effective manner, our products may become less marketable and less competitive or obsolete, and our business, results of operations and financial condition could be adversely affected.

## We may not be able to compete successfully with our current or future competitors.

The market for SAAS Businesses and other business initiatives is intensely competitive and characterized by rapid changes in technology, developer and customer requirements, industry standards and frequent new product introductions and improvements. We face competition in all lines of business. In the future, as we further grow, we anticipate continued challenges from current competitors, as well as by new entrants into the industry including major online media networks, which may enjoy greater resources than us. See "Item 4. Information On the Company—B. Business Overview —Competition." If we are unable to anticipate or effectively react to these competitive challenges, our competitive position could be weakened, and we could experience a decline in our growth rate or revenue that could adversely affect our business and results of operations.

Some of our existing competitors, especially the competitors for our SAAS Businesses and targeted marketing have, and our potential competitors could have, substantial competitive advantages such as:

- greater name recognition, longer operating histories and larger user bases;
- broader, deeper or otherwise more established relationships with technology, channel and business partners, including ad publishers and customers;
- greater resources to make acquisitions;
- larger and more mature intellectual property portfolios;
- larger sales and marketing budgets and resources and the capacity to leverage their sales efforts and marketing expenditures across a broader portfolio of products; and

 substantially greater financial, technical and other resources to provide support, to make acquisitions and to develop and introduce new products.

We may not compete successfully against our current or potential competitors. If we are unable to compete successfully, or if competing successfully requires us to take costly actions in response to the actions of our competitors, our business, financial condition and results of operations could be adversely affected. In addition, companies competing with us may have an entirely different pricing or distribution model. Increased competition could result in fewer customer subscriptions and transactions, price reductions, reduced operating margins and loss of market share. Further, we may be required to make substantial additional investments in research, development, marketing and sales in order to respond to such competitive threats, and we cannot assure you that we will be able to compete successfully in the future.

## If any system failure, interruption or downtime occurs, our business, financial condition and results of operations may be materially and adversely affected.

Although we seek to reduce the possibility of disruptions and other outages, our platform may be disrupted by problems with our own cloud-based technology and system, such as malfunctions in our software or other facilities or network overload. Our systems may be vulnerable to damage or interruption caused by telecommunication failures, power loss, human error, computer attacks or viruses, earthquakes, floods, fires, terrorist attacks and similar events. While we locate our servers in multiple data centers across China, our system may not be fully redundant or backed up, and our disaster recovery planning may not be sufficient for all eventualities. Despite any precautions we may take, the occurrence of natural disasters or other unanticipated problems at our hosting facilities could result in interruptions in the availability of our products and services. Any interruption in the ability of app developers or customers to use our services and solutions could damage our reputation, reduce our future revenues, harm our future profits, subject us to regulatory scrutiny and lead users to seek alternative products.

Our servers may experience downtime from time to time, which may adversely affect our operations, brands and user perception of the reliability of our systems. Any scheduled or unscheduled interruption in the ability of users to use our servers could result in an immediate, and possibly substantial, loss of revenues.

We currently host our cloud service from third-party data center facilities operated by several different providers located in China. Any damage to, or failure of, our cloud service that is hosted by these third parties, whether as a result of our actions, actions by the third-party data centers, actions by other third parties, or acts of God, could result in interruptions in our cloud service and/or the loss of data. While the third-party hosting centers host the server infrastructure, we manage the cloud services through our technological operations team and need to support version control, changes in cloud software parameters and the evolution of our solutions. As we continue to add data centers and capacity in our existing data centers, we may move or transfer our data and our customers' data. Despite precautions taken during this process, any unsuccessful data transfers may impair the delivery of our service. Impairment of, or interruptions in, our cloud services may reduce our revenues, subject us to claims and litigation, cause our customers to terminate their subscriptions and adversely affect our subscription renewal rates and our ability to attract new customers. Our business will also be harmed if app developers, customers and potential customers believe our services are unreliable.

We do not control, or in some cases have limited control over, the operation of the data center facilities we use, and they are vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures and similar events. They may also be subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct, and to adverse events caused by operator error. We cannot rapidly switch to new data centers or move customers from one data center to another in the event of any adverse event. Despite precautions taken at these facilities, the occurrence of a natural disaster, an act of terrorism or other act of malfeasance, a decision to close the facilities without adequate notice, or other unanticipated problems at these facilities could result in lengthy interruptions in our service and the loss of accumulated data and our business.

Interruption or failure of China's internet infrastructure or information technology and communications systems of app developers and customers could impair our ability to effectively deliver our products.

Our business depends on the performance and reliability of the internet infrastructure in China and the stability of information technology and communications systems of app developers, customers and publishers. The availability of our SAAS Businesses and targeted marketing, in part, depends on telecommunications carriers and other third-party providers for communications and storage capacity, including bandwidth and server storage, among other things. Almost all access to the internet in China is maintained through state-owned telecommunication carriers under administrative control, and we obtain access to developers' networks operated by such telecommunications carriers and internet service providers to deliver our developer services. We have experienced internet interruptions in the past, which were typically caused by service interruption of the value-added telecommunications service providers. In addition, since we rely on the performance of our publishers to deliver the ads, any interruption or failure of their information technology and communications systems may undermine the effectiveness of our advertising services and solutions and cause us to lose customers, which may harm our operating results.

## We may not be able to prevent unauthorized use of our intellectual property, which could harm our business and competitive position.

We regard our trademarks, service marks, patents, domain names, trade secrets, proprietary technologies, know-how and similar intellectual property as critical to our success, and we rely on trademark and patent law, trade secret protection and confidentiality and invention assignment agreements with our employees and third parties to protect our proprietary rights. As of December 31, 2021, within China, we had 59 patent applications pending and 20 patents registered. We own 92 computer software copyrights, relating to various aspects of our SAAS Businesses and targeted marketing. In addition, we have filed 37 trademark applications and have maintained 55 trademark registrations and 4 artwork copyrights in China. We also registered 22 domain names, including www.jiguang.cn. There can be no assurance that any of our pending patent, trademark, software copyrights or other intellectual property applications will issue or be registered. Any intellectual property rights we have obtained or may obtain in the future may not be sufficient to provide us with a competitive advantage, and could be challenged, invalidated, circumvented, infringed or misappropriated. Given the potential cost, effort, risks and disadvantages of obtaining patent protection, we have not and do not plan to apply for patents or other forms of intellectual property protection for certain of our key technologies. If some of these technologies are later proven to be important to our business and are used by third parties without our authorization, especially for commercial purposes, our business and competitive position may be harmed.

Monitoring for infringement or other unauthorized use of our intellectual property rights is difficult and costly, and we cannot be certain that we can effectively prevent such infringement or unauthorized use of our intellectual property. From time to time, we may need to resort to litigation or other proceedings to enforce our intellectual property rights, which could result in substantial cost and diversion of resources. Our efforts to enforce or protect our intellectual property rights may be ineffective and could result in the invalidation or narrowing of the scope of our intellectual property or expose us to counterclaims from third parties, any of which may adversely affect our business and operating results.

In addition, it is often difficult to create and enforce intellectual property rights in China and other countries outside of the United States. Even where adequate, relevant laws exist in China and other countries outside of the United States, it may not be possible to obtain swift and equitable enforcement of such laws, or to enforce court judgments or arbitration awards delivered in another jurisdiction. Accordingly, we may not be able to effectively protect our intellectual property rights in such countries. Additional uncertainty may result from changes to intellectual property laws enacted in the jurisdictions in which we operate, and from interpretations of intellectual property laws by applicable courts and government bodies.

Our confidentiality and invention assignment agreements with our employees and third parties, such as consultants and contractors, may not effectively prevent unauthorized use or disclosure of our confidential information, intellectual property or technology and may not provide an adequate remedy in the event of such unauthorized use or disclosure. Trade secrets and know-how are difficult to protect, and our trade secrets may be disclosed, become known or be independently discovered by others. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our service and solution features, software and functionality or obtain and use information that we consider confidential and proprietary. If we are not able to adequately protect our trade secrets, know-how and other confidential information, intellectual property or technology, our business and operating results may be adversely affected.

We may be subject to intellectual property infringement claims or other allegations, which could result in our payment of substantial damages, penalties and fines, removal of data or technology from our system.

Third parties may own technology patents, copyrights, trademarks, trade secrets and internet content, which they may use to assert claims against us. Our internal procedures and licensing practices may not be effective in completely preventing the unauthorized use of copyrighted materials or the infringement of other rights of third parties by us or our users. The validity, enforceability and scope of protection of intellectual property rights in internet-related industries, particularly in China, is uncertain and still evolving. For example, as we face increasing competition and as litigation becomes a more common way to resolve disputes in China, we face a higher risk of being the subject of intellectual property infringement claims.

Although we have not been subject to claims or lawsuits outside China, we cannot assure you that we will not become subject to intellectual property laws in other jurisdictions, such as the United States. If a claim of infringement brought against us in the United States or another jurisdiction is successful, we may be required to pay substantial penalties or other damages and fines, enter into license agreements which may not be available on commercially reasonable terms or at all or be subject to injunction or court orders. Even if allegations or claims lack merit, defending against them could be both costly and time consuming and could significantly divert the efforts and resources of our management and other personnel.

Competitors and other third parties may claim that our officers or employees have infringed, misappropriated or otherwise violated their software, confidential information, trade secrets or other proprietary technology in the course of their employment with us. Although we take steps to prevent the unauthorized use or disclosure of such third-party information, intellectual property or technology by our officers and employees, we cannot guarantee that any policies or contractual provisions that we have implemented or may implement will be effective. If a claim of infringement, misappropriation or violation is brought against us or one of our officers or employees, we may suffer reputational harm and may be required to pay substantial damages, subject to injunction or court orders or required to remove the data and redesign our products or technology, any of which could adversely affect our business, financial condition and results of operations.

Further, we license and use technologies from third parties in our applications and platform. These third-party technology licenses may not continue to be available to us on acceptable terms or at all, and may expose us to liability. Any such liability, or our inability to use any of these third-party technologies, could result in disruptions to our business that could materially and adversely affect our operating and financial results.

## Our use of open-source technology could impose limitations on our ability to develop our products and platform.

We use open-source software in our applications and platform and expect to continue to use open-source software in the future. Although we monitor our use of open-source software to avoid subjecting our applications and platform to conditions we do not intend, we may face allegations from others alleging ownership of, or seeking to enforce the terms of, an open-source license, including by demanding release of the open-source software, derivative works, or our proprietary source code that was developed using such software. These allegations could also result in litigation. The terms of many open-source licenses have not been interpreted by U.S. courts or foreign courts. As a result, there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to develop our applications and technology and further commercialize our products and platform. In such an event, we could be required to seek licenses from third parties to continue applying our applications, to make our proprietary code generally available in source code form, to re-engineer our applications or to discontinue the offering of our service if re-engineering could not be accomplished on a timely basis, any of which could adversely affect our business, operating results and financial condition. In addition to risks related to license requirements, our use of certain open-source software may lead to greater risks than use of third-party commercial software, as open-source licensors generally do not provide warranties or controls on the origin of the software. Additionally, because any software source code we contribute to open-source projects is publicly available, our ability to protect our intellectual property rights with respect to such software source code may be limited or lost entirely, and we are unable to prevent our competitors or others from using such contributed software source code. Any of these risks could be difficult to eliminate or manage and, if not addressed, could

Our technologies may include design or performance defects and may not achieve their intended results, any of which may impair our future revenue.

Our technologies for data processing and solutions are relatively new, and they may contain design or performance defects that are not detectable even after extensive internal testing and may become apparent only after widespread and long term of commercial use. Any defect in those technologies as well as their subsequent alterations and improvements could hinder the effectiveness of our platform, which would have a material and adverse effect on our competitiveness, reputation and future prospects. It is not clear whether China's existing product liability laws apply to software systems like ours. We cannot assure you that if our technologies are found to have design or performance defects, we will not be liable for product liability claims in China. Although we have not experienced any product liability claims to date, we cannot assure you that we will not do so in the future.

App developer growth and engagement depend upon effective interoperation with the apps, mobile operating systems, networks, mobile devices and standards that we do not control.

We make our developer services available across a variety of mobile apps, mobile operating systems and devices. We are dependent on the interoperability of our services with popular mobile apps and devices and mobile operating systems that we do not control, such as Android and iOS. Any changes in such app functions, mobile operating systems or devices that degrade the functionality of our developer services or give preferential treatment to competitive services could adversely affect usage of our services. Mobile operating systems or device manufacturers may develop competing solutions which may interface more effectively with their operating systems and devices. In order to deliver high quality services, it is important that our services work well across a range of apps, mobile operating systems, networks, mobile devices and standards that we do not control.

We may not be successful in developing relationships with key participants in the mobile industry or in developing services that operate effectively with these apps, operating systems, networks, devices and standards. In the event that it is difficult for our app developers to access and use our services, our app developer growth and engagement could be harmed, our data resources may be limited and our business and operating results could be adversely affected.

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

The internet and mobile industries in China are highly regulated. Our VIE is 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 scheme, a number of regulatory agencies, including but not limited to the Ministry of Industry and Information Technology, or MIIT, and Cyberspace Administration of China, jointly regulate all major aspects of the internet industry, including the mobile internet business. Our VIE also provides mobile app data analysis product to both domestic and foreign financial industry clients, and may be considered as engaging in foreign-related investigation business. Under the current PRC regulatory scheme, our VIE may be required to obtain a foreign-related investigation license. Operators must obtain various government approvals and licenses for relevant internet or mobile business. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Services and Foreign Ownership Restrictions" and "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Foreign-related Investigation."

We have obtained two value-added telecommunication business licenses covering different scope of operations and a foreign-related investigation license. These licenses are essential to the operation of our business and are generally subject to regular government review or renewal. However, we cannot assure you that we can successfully renew these licenses in a timely manner or that these licenses are sufficient to conduct all of our present or future business.

We may also be required to obtain the personal credit reporting business license. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Credit Reporting." The PRC government has adopted several regulations governing personal credit reporting businesses. According to the Administrative Regulations on the Credit Reporting Industry, which was promulgated by the State Council and became effective in 2013, "personal credit reporting business" means the activities of collecting, organizing, storing and processing "information related to the credit standing" of individuals as well as providing the information to others, and a "credit reporting agency" refers to a duly established agency whose primary business is credit reporting. These regulations, together with the Administrative Measures for Credit Reporting Agencies, which was promulgated by the People's Bank of China and became effective in 2013, set forth qualification standards for entities conducting a credit reporting business in China, rules and requirements for credit reporting businesses and operating standards for credit reporting agencies. According to these regulations and measures, no entity may engage in personal credit reporting business without approval by the credit reporting industry regulatory department under the State Council. If any entity directly engages in personal credit reporting business without such approval, the entity is subject to penalties including suspension of business, confiscation of revenues related to personal credit reporting business, fines of RMB50,000 to RMB500,000 and criminal liabilities. On September 27, 2021, the PBOC promulgated the Administrative Measures for Credit Information Services, or the Credit Information Services Measures, which took effect on January 1, 2022. Pursuant to the Credit Information Services Measures, Credit Information Services, shall mean the collection, sorting, retention, and processing of credit information of enterprises and individuals, and the provision of the foregoing information to information users. Credit information, shall mean the basic individual information, lending information and other relevant information used for identification and determination of creditworthiness status of enterprises and individuals, and collected pursuant to the law for the purpose of providing services for financial activities, as well as the analyzed and evaluated information formed based on the foregoing information. Persons engaging in personal credit information services shall obtain the personal credit information organization license issued by the PBOC pursuant to the Credit Information Services Measures. We provide financial risk management solutions to financial institutions as well as emerging technology companies based on device-level mobile behavior data. Due to the lack of further interpretations of the current regulations governing personal credit reporting businesses, the exact definition and scope of "information related to credit standing" and "personal credit reporting business" under the current regulations are unclear. It is therefore uncertain whether we would be deemed to engage in personal credit reporting business because of our financial risk management solutions. As of the date of this annual report, we have not been subject to any fines or other penalties under any PRC laws or regulations related to personal credit reporting business. However, given the evolving regulatory environment of the personal credit reporting industry, we cannot assure you that we will not be required in the future by the relevant governmental authorities to obtain approval or license for personal credit reporting business in order to continue offering our financial risk management solutions. Our business may also subject to other rules and requirements related to credit reporting business, or new rules and requirements (including approval or license regime) promulgated by the relevant authorities in the future. The existing and future rules and regulations may be costly to comply with, and we may not be able to obtain any required license or other regulatory approvals in a timely manner, or at all. If we are subject to penalties for any of the foregoing reasons, our business, financial condition, results of operations and prospects could be materially and adversely affected.

Considerable uncertainties exist regarding the interpretation and implementation of existing and future laws and regulations governing our business activities. We cannot assure you that we will not be found in violation of any future laws and regulations or any 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 the net revenues that were generated through the unlicensed internet or mobile activities, the imposition of fines and the discontinuation or restriction of our operations. Any such penalties may disrupt our business operations and materially and adversely affect our business, financial condition and results of operations.

Future acquisitions, strategic investments, partnerships or alliances could be difficult to integrate, and could require significant management attention, disrupt our business, dilute shareholder value, involve anti-monopoly concerns and adversely affect our results of operations.

We may seek to acquire, or make investment in additional businesses, products or technologies in both domestic and overseas markets. For example, we acquired a majority equity interest of Wuhan SendCloud Technology Co., Ltd., or SendCloud, in March 2022 for a total cash consideration of RMB34.5 million (US\$5.4 million). We also acquired the MLINK as an intangible asset, from Shanghai Liehong Information Technology Limited Company in March 2019 for a total consideration of RMB8.0 million (US\$1.2 million). However, we have limited experience in acquiring, investing in and integrating businesses, products and technologies. If we identify an appropriate candidate for acquisition or investment, we may not be successful in negotiating the terms and/or financing of the transaction, and our due diligence may fail to identify all of the problems, liabilities or other shortcomings or challenges of an acquired business, product or technology, including issues related to intellectual property, product quality or architecture, regulatory compliance practices, revenue recognition or other accounting practices or employee or customer issues.

Any acquisition or investment may require us to use significant amounts of cash, issue potentially dilutive equity securities or incur debt. In addition, acquisitions involve numerous risks, any of which could harm our business, including:

- difficulties in integrating the operations, technologies, services and personnel of acquired businesses, especially if those businesses operate
  outside of our core competency;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- reputation and perception risks associated with the acquired product or technology by the general public;
- ineffectiveness or incompatibility of acquired technologies or services;
- potential loss of key employees of acquired businesses;
- inability to maintain the key business relationships and the reputations of acquired businesses;
- diversion of management's attention from other business concerns;
- litigation for activities of the acquired company, including claims from terminated employees, clients, former shareholders or other third parties;
- failure to identify all of the problems, liabilities or other shortcomings or challenges of an acquired company, technology, or solution, including issues related to intellectual property, solution quality or architecture, regulatory compliance practices, revenue recognition or other accounting practices or employee or client issues;
- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries;
- costs necessary to establish and maintain effective internal controls for acquired businesses;
- failure to successfully further develop the acquired technology in order to recoup our investment; and
- increased fixed costs.

If we are unable to successfully integrate any future business, product or technology we acquire, our business and results of operations may suffer.

## Any loss of key personnel or inability to attract, retain and motivate qualified personnel may impair our ability to expand our business.

Our success is substantially dependent upon the continued service and performance of our senior management team and key technical, marketing and sales personnel, including our senior management. The replacement of any members of our senior management team likely would involve significant time and costs and may significantly delay or prevent the achievement of our business objectives.

Our future success also depends, in part, on our ability to continue to attract, integrate and retain highly skilled personnel. Competition for highly skilled personnel, including, in particular, engineers, is frequently intense. We must offer competitive compensation and opportunities for career growth in order to attract and retain these highly skilled employees. Any failure to successfully attract, integrate, or retain qualified personnel to fulfill our current or future needs may negatively impact our growth.

## Allegations or lawsuits against us or our management may harm our reputation and business.

We have been, and may in the future be, subject to allegations or lawsuits brought by our competitors, customers, employees or other individuals or entities, including claims of breach of contract or unfair competition. As of the date of this annual report, there were no lawsuit in respect of labor dispute pending against us. Any potential allegation or lawsuits, with or without merit, or any perceived unfair, unethical, fraudulent or inappropriate business practice by us or perceived malfeasance by our management could harm our reputation and user base and distract our management from our daily operations. Allegations or lawsuits against us may also generate negative publicity that significantly harms our reputation, which may materially and adversely affect our user base and our ability to attract app developers and customers. In addition to the related cost, managing and defending litigation and related indemnity obligations can significantly divert management's attention. We may also need to pay damages or settle the litigation with a substantial amount of cash. All of these could have a material adverse impact on our business, results of operation and cash flows.

## If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

Since our initial public offering of our ADSs on Nasdaq in July 2018, we have become subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act required that we include a report from management on the effectiveness of 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, 2019. 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 an adverse report 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. Furthermore, we have incurred and anticipate that we will continue to incur considerable costs, management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act. We may be unable to timely complete our evaluation testing and any required remediation.

Our management conducted an evaluation of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting was effective as of December 31, 2021. See "Item 15. Controls and Procedures." However, there is no assurance that we will not have any material weakness in the future. Failure to discover and address any control deficiencies could result in inaccuracies in our financial statements and impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis. Moreover, ineffective internal control over financial reporting could significantly hinder our ability to prevent fraud. If we fail to develop or maintain an effective system of internal control over financial reporting, our management and our independent registered public accounting firm may not conclude on an on-going basis that our internal control over financial reporting is effective. This conclusion could adversely impact the market price of our ADSs due to a loss of investor confidence in the reliability of our reporting processes.

In addition, our internal control over financial reporting may not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of our ADSs could decline and we could be subject to sanctions or investigations by the Nasdaq, SEC or other regulatory authorities.

Our results of operations may be subject to seasonal fluctuation due to a number of factors, any of which could adversely affect our business and operation results.

The historical seasonality of our business has been relatively mild due to our rapid growth but it may increase further in the future. Due to our limited operating history, the seasonal trends that we have experienced in the past may not apply to, or be indicative of, our future operating results. As we grow, our quarterly revenues and operating results may be subject to seasonal fluctuations, depending upon a number of factors which may be out of our control. We may experience weaker demands for targeted marketing business in the first quarter of each year due to the Chinese New Year holidays. Expenditures by advertisers vary in cycles and tend to reflect overall economic conditions, both in China and globally, as well as budgeting and buying patterns in different industries and companies. Advertisers may alternate between periods with major advertising campaigns and periods of relative inactivity. Because most advertising campaigns are short in duration and we typically sign contracts on a campaign-by-campaign basis, it is difficult for us to forecast our results of operations for future quarters. Our quarterly revenues and our costs and expenses as a percentage of our revenues may be significantly different from our historical or projected rates. Our operating results in future quarters may fall below expectations. Any of these events could cause the price of the ADSs to fall. If our revenues for a particular quarter are lower than expected, we may be unable to reduce our operating expenses and cost of revenues for that quarter by a corresponding amount, which would harm our operating results for that quarter relative to our operating results from prior quarters.

We may be the subject of anti-competitive, harassing or other detrimental conduct that could harm our reputation and cause us to lose users and customers.

In the future we may be the target of anti-competitive, harassing, or other detrimental conduct by third parties. Allegations, directly or indirectly against us or any of our executive officers, may be posted in internet chat-rooms or on blogs or websites by anyone, whether or not related to us, on an anonymous basis. The availability of information on social media platforms and devices is virtually immediate, as is its impact. Social media platforms and devices immediately publish the content their subscribers and participants post, often without filters or checks on the accuracy of the content posted. Information posted may be inaccurate and adverse to us, and it may harm our business, annual report or financial performance. The harm may be immediate without affording us an opportunity for redress or correction. In addition, such conduct may include complaints, anonymous or otherwise, to regulatory agencies. We may be subject to regulatory or internal investigation as a result of such third-party conduct and may be required to expend significant time and incur substantial costs to address such third-party conduct, and there is no assurance that we will be able to conclusively refute each of the allegations within a reasonable period of time, or at all. Additionally, our reputation could be harmed as a result of the public dissemination of anonymous allegations or malicious statements about our business, which in turn may cause us to lose users and customers and adversely affect the price of the ADSs.

Non-compliance on the part of third parties with whom we cooperate to conduct business, deterioration of their service quality or termination of their services, could disrupt our business and adversely affect our results of operations.

Our business partners, including publishers and third-party data service providers, may be subject to regulatory penalties or punishments because of their regulatory compliance failures, which may disrupt our business. Any legal liabilities of, or regulatory actions against, our business partners may affect our business activities and reputation and, in turn, our results of operations. For example, we collaborate with third-party data service providers who supplement our dataset and maintain a strict vetting process before engaging such third-party data service providers to ensure the integrity and quality data, but we cannot assure that these service providers have accessed and processed data in a proper and legal manners and any noncompliance on their part may cause potential liabilities to us and disrupt our operations.

We exercise no control over the third parties with whom we have business arrangements. If such third parties increase their prices, fail to provide their services effectively or in high quality, terminate their service or agreements or discontinue their relationships with us, we could suffer service interruptions, reduced revenues or increased costs, any of which may have a material adverse effect on our business, financial condition and results of operations.

## We have granted and may continue to grant share options or other equity incentives in the future, which may result in increased share-based compensation expenses.

We adopted a stock incentive plan in July 2014, or the 2014 Plan, a stock incentive plan in March 2017, or the 2017 Plan and a stock incentive plan in December 2021, or the 2021 Plan. Under the 2014 Plan, we are authorized to grant share awards for issuance of up to a maximum of 5,500,000 common shares. Under the 2017 Plan, as amended, we are authorized to grant awards for issuance of up to a maximum of 6,015,137 Class A common shares. Under the 2021 Plan, we are authorized to grant share awards for issuance of up to a maximum of 4,000,000 common shares. In 2019, 2020 and 2021, we recorded RMB47.3 million, RMB28.9 million and RMB30.2 million (US\$4.7 million) in share-based compensation expenses, respectively. The amount of these expenses is based on the fair value of the share-based compensation awards we granted, and the recognition of unrecognized share-based compensation cost will depend on the forfeiture rate of our unvested restricted shares. Expenses associated with share-based compensation have affected our net income and may reduce our net income in the future, and any additional securities issued under share-based compensation schemes will dilute the ownership interests of our shareholders, including holders of the ADSs. We believe the granting of share-based compensation is of significant importance to our ability to attract and retain key personnel, employees and consultants, and we will continue to grant share-based compensation 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.

## We may need additional capital, and financing may not be available on terms acceptable to us, or at all.

We believe our cash and cash equivalents on hand will be sufficient to meet our current and anticipated needs for general corporate purposes for at least the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we find and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions. If we determine in the future that our cash requirements exceed the amount of cash and cash equivalents we have on hand, we may seek to issue equity or equity linked securities or obtain debt financing. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased 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.

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

The global macroeconomic environment is facing numerous challenges. The growth rate of the Chinese economy has gradually slowed since 2010 and the trend may continue. There is considerable uncertainty over the long-term effects of the expansionary 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. The conflict in Ukraine and the imposition of broad economic sanctions on Russia could raise energy prices and disrupt global markets. Unrest, terrorist threats, and the potential for war in the Middle East and elsewhere may increase market volatility across the globe. There have also been concerns about the relationship between China and other countries, including the surrounding Asian countries, which may potentially have economic effects. 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 Chinese economy may materially and adversely affect our business, results of operations and financial condition.

## We are subject to changing law and regulations regarding regulatory matters, corporate governance and public disclosure that have increased both our costs and the risk of non-compliance.

We are subject to rules and regulations by various governing bodies, including, for example, the Securities and Exchange Commission, which is charged with the protection of investors and the oversight of companies whose securities are publicly traded, and the various regulatory authorities in China and the Cayman Islands, and to new and evolving regulatory measures under applicable law. Our efforts to comply with new and changing laws and regulations have resulted in and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

Moreover, because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices. If we fail to address and comply with these regulations and any subsequent changes, we may be subject to penalty and our business may be harmed.

## We have limited business insurance coverage.

The insurance companies in China currently offer limited business-related insurance products. We do not maintain business interruption insurance or general third-party liability insurance, nor do we maintain property insurance, product liability insurance or key-man insurance. We consider this practice to be reasonable in light of the nature of our business and the insurance products that are available in China and in line with the practices of other companies in the same industry of similar size in China. Any uninsured risks may result in substantial costs and the diversion of resources, which could adversely affect our results of operations and financial condition.

We face risks related to health epidemics, severe weather conditions and other outbreaks. Our business could be adversely affected by the effects of avian influenza, severe acute respiratory syndrome (SARS), the influenza A virus, Ebola virus, severe weather conditions or other epidemics or outbreaks. Health or other government regulations adopted in response to an epidemic, severe weather conditions such as snowstorms, floods or hazardous air pollution, or other outbreaks may require temporary closure of our offices. Such closures may disrupt our business operations and adversely affect our results of operations. In recent years, there have been outbreaks of epidemics in China and globally.

In recent years, there have been outbreaks of epidemics in China and globally. In early 2020, in response to intensifying efforts to contain the spread of COVID-19, the Chinese government took a number of actions, which included extending the Chinese New Year holiday, quarantining individuals infected with or suspected of having COVID-19, prohibiting residents from free travel, encouraging employees of enterprises to work remotely from home and canceling public activities, among others. Customer demand has gradually recovered since the second quarter of 2020, and our business and financial condition have seen sequential growth for the second half of 2020. We cannot guarantee you that the COVID-19 pandemic will not further escalate or have a material adverse effect on our results of operations, especially our financial condition, our cash flows or our prospects. Recently, there has been an increasing number of COVID-19 cases, including the COVID-19 Delta and Omicron variant cases, in multiple cities in China. The Chinese local authorities have reinstated certain measures to keep COVID-19 in check, including varying levels of travel restrictions and stay-at-home orders. In March 2022, due to the spread of COVID-19 in China, Chinese government imposed lockdown in certain cities and districts, including Shanghai. In addition, the highly-transmissible Delta and Omicron variants of COVID-19 have caused authorities in various countries and regions to reimpose restrictions such as mask mandates, curfews and prohibitions on large gatherings. There remain significant uncertainties surrounding COVID-19, including the existing and new variants of COVID-19, the duration and severity of COVID-19, the extent and severity of new waves of outbreak in China and other countries, the development and progress of distribution of COVID-19 vaccine and other medical treatment and the effectiveness of such vaccine and other medical treatment, and the actions taken by government authorities to contain the outbreak, all of which are beyond our control. Substantially all of our revenues and our workforce are concentrated in China. Consequently, our results of operations have been adversely affected, and could be further affected, to the extent that the COVID-19 or any other epidemic harms the Chinese and global economy in general. Potential impacts include, but are not limited to, the following:

- temporary closure of offices, travel restrictions or suspension of services of our customers and suppliers have negatively affected, and could continue to negatively affect, the demand for our services;
- our customers in industries that are negatively impacted by the outbreak of COVID-19, including healthcare, travel, auto/transportation, and financial services sectors, may reduce their budgets on advertising and marketing, which may materially adversely impact our revenue from advertisement; and

• our customers may require additional time to pay us or fail to pay us at all, which could significantly increase the amount of accounts receivable and require us to record additional allowances for doubtful accounts.

Because of the uncertainty surrounding the COVID-19 outbreak, as we will continue to incur costs for our operations, the financial impact related to the outbreak of and response to the coronavirus cannot be reasonably estimated at this time and our revenues during this period are difficult to predict.

We are also vulnerable to natural disasters and other calamities. Fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks or similar 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 content and services on our platform.

Certain of our leasehold interests in leased properties have not been registered with the relevant PRC governmental authorities as required by relevant PRC laws. The failure to register leasehold interests may expose us to potential fines.

We have not registered certain of our lease agreements with the relevant government authorities. Under the relevant PRC laws and regulations, we may be required to register and file with the relevant government authority executed leases. The failure to register the lease agreements for our leased properties will not affect the validity of these lease agreements, but the competent housing authorities may order us to register the lease agreements in a prescribed period of time and impose a fine ranging from RMB1,000 to RMB10,000 for each non-registered lease if we fail to complete the registration within the prescribed timeframe.

We lease premises and may not be able to fully control the rental costs, quality, maintenance and our leasehold interest in these premises, nor can we guarantee that we will be able to successfully renew or find suitable premises to replace our existing premises upon expiration of the existing leases.

We lease all the premises used in our operations from third parties. We require the landlords' cooperation to effectively manage the condition of such premises, buildings and facilities. In the event that the condition of the office premises, buildings and facilities deteriorates, or if any or all of our landlords fail to properly maintain and renovate such premises, buildings or facilities in a timely manner or at all, the operation of our offices could be materially and adversely affected.

Moreover, certain lessors have not provided us with valid ownership certificates or authorization of sublease for our leased properties. Under the relevant PRC laws and regulations, if the lessors are unable to obtain certificate of title because such real estates were built illegally or failed to pass the inspection, such lease contracts may be recognized as void. In addition, if our lessors are not the owners of the properties and they have not obtained consents from the owners or their lessors or permits from the relevant government authorities, our leases could be invalidated. If this occurs, we may have to renegotiate the leases with the owners or the parties who have the right to lease the properties, and the terms of the new leases may be less favorable to us.

As of the date of this annual report, we are not aware of any material claims or actions being contemplated or initiated by government authorities, property owners or any other third parties with respect to our leasehold interests in or use of such properties. However, we cannot assure you that our use of such leased properties will not be challenged.

## 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 our employees up to a maximum amount specified by the local government from time to time at locations where we operate our businesses. 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. Our PRC entities have not made adequate employee benefit payments 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 Related to Our Corporate Structure**

If the PRC government finds that the agreements that establish the structure for operating some of our business operations in China do not comply with PRC regulations relating to 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 interest in those operations.

Foreign ownership of certain parts of our businesses including value-added telecommunications services is subject to restrictions under current PRC laws and regulations. The PRC government regulates internet access, distribution of online information and online advertising through strict business licensing requirements and other government regulations. For example, foreign investors, with a few exceptions, are not allowed to own more than 50% of the equity interests in a value-added telecommunications service provider and any such foreign investor must have experience in providing value-added telecommunications services overseas and maintain a good track record. On March 29, 2022, the Decision of the State Council on Revising and Repealing Certain Administrative Regulations, which will take effect on May 1, 2022, was promulgated to amend certain provisions of regulations including the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises (2016 Revision), the requirement for major foreign investor to demonstrate a good track record and experience in operating value-added telecommunications businesses is deleted.

Aurora is a Cayman Islands exempted company and our PRC subsidiary, namely our WFOE, is a foreign-invested enterprise. Accordingly, our WFOE is not eligible to provide value-added telecommunications services in China. As a result, our variable interest entity in PRC, namely Hexun Huagu, holds value-added telecommunications business operation licenses as a value-added telecommunications service provider. We entered into a series of contractual arrangements with Hexun Huagu, or our VIE, and its shareholders, which enable us to (i) exercise effective control over our VIE, (ii) receive substantially all of the economic benefits of our VIE, and (iii) have an exclusive call option to purchase all or part of the equity interests and assets in our VIE when and to the extent permitted by PRC law. As a result of these contractual arrangements, we have control over and are the primary beneficiary of our VIE and hence consolidate its financial results into our consolidated financial statements under U.S. GAAP. In 2019, 2020 and 2021, we derived 98.6%, 97.7% and 95.0% of our external revenues from our VIE, respectively.

In the opinion of our PRC legal counsel, Han Kun Law Offices, (i) the ownership structure of our VIE in China and our WFOE are not in violation of applicable PRC laws and regulations currently in effect; and (ii) the contractual arrangements between our WFOE, our VIE and its shareholders governed by PRC laws and regulations are valid, binding and enforceable, and will not result in any violation of applicable PRC laws and regulations. However, our PRC legal counsel has also advised us that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws and regulations. Accordingly, the PRC regulatory authorities may take a view that is contrary to the opinion of our PRC legal counsel.

However, Aurora is a Cayman Islands holding company with no equity ownership in our VIE and we conduct our operations in China through (i) our PRC subsidiary and (ii) our VIE with which we have maintained contractual arrangements. Investors in our Class A common shares or the ADSs thus are not purchasing equity interest in our consolidated affiliated entities 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 VIE 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 and our VIE could be subject to severe penalties or be forced to relinquish our interests in those operations. Our holding company in the Cayman Islands, our VIE, and investors of Aurora face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with our VIE and, consequently, significantly affect the financial performance of our VIE and our company as a group.

There are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including, but not limited to, the laws and regulations governing our and our VIE's business, or the enforcement and performance of our contractual arrangements with our VIE and its shareholders. These laws and regulations may be subject to change, and their official interpretation and enforcement may involve substantial uncertainty. New laws and regulations that affect existing and proposed future businesses may also be applied retroactively. Due to the uncertainty and complexity of the regulatory environment, we cannot assure you that we and our VIE would always be in full compliance with applicable laws and regulations, the violation of which may have adverse effect on our and our VIE's business and our reputation.

Although we believe we, our PRC subsidiary and our VIE are not in violation of current PRC laws and regulations, we cannot assure you that the PRC government would agree that our contractual 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. The PRC government has broad discretion in determining rectifiable or punitive measures for non-compliance with or violations of PRC laws and regulations. If the PRC government determines that we or our VIE do not comply with applicable law, it could revoke our VIE's business and operating licenses, require our VIE to discontinue or restrict our VIE's operations, restrict our VIE' right to collect revenues, block our VIE's websites, require our VIE to restructure our operations, impose additional conditions or requirements with which our VIE may not be able to comply, impose restrictions on our VIE's business operations or on their customers, or take other regulatory or enforcement actions against our VIE that could be harmful to their business. Any of these or similar occurrences could significantly disrupt our or our VIE' business operations or restrict our VIE from conducting a substantial portion of their business operations, which could materially and adversely affect our VIE's business, financial condition and results of operations. If any of these occurrences results in our inability to direct the activities of any of our VIE that most significantly impact its economic performance, and/or our failure to receive the economic benefits from any of our VIE, we may not be able to consolidate these entities in our consolidated financial statements in accordance with U.S. GAAP. In addition, our shares may decline in value or become worthless if we are unable to assert our contractual control rights over the assets of our PRC subsidiaries that conduct a significant part of our operations.

The approval, filing or other requirements of the China Securities Regulatory Commission or other PRC government authorities may be required under PRC law in connection with our issuance of securities overseas.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, purport to require offshore special purpose vehicles that are controlled by PRC companies or individuals and that have been formed for the purpose of seeking a public listing on an overseas stock exchange through acquisitions of PRC domestic companies or assets to obtain CSRC approval prior to publicly listing their securities on an overseas stock exchange. The interpretation and application of the regulations remain unclear. If CSRC approval under the M&A Rules is required, it is uncertain whether it would be possible for us to obtain the approval, and any failure to obtain or delay in obtaining CSRC approval for our future issuance of securities overseas would subject us to sanctions imposed by the CSRC and other PRC regulatory agencies.

Furthermore, the recently issued Opinions on Strictly Cracking Down on Illegal Securities Activities emphasized the need to strengthen the administration over "illegal securities activities" and the supervision on overseas listings by China-based companies, and proposed to take effective measures, such as promoting the construction of relevant regulatory systems to deal with the risks and incidents faced by China- based overseas-listed companies, although such opinions did not specify the definition of "illegal securities activities." On December 24, 2021, the CSRC published the draft Administrative Provisions of the State Council on the Overseas Issuance and Listing of Securities by Domestic Companies (Draft for Comments), or the Draft Overseas Listing Regulations, and the draft Measures for the Overseas Issuance and Listing of Securities Record-filings by Domestic Companies (Draft for Comments), the Draft Overseas Listing Measures, for public comments. These draft regulations stipulate that PRC domestic companies that seek to offer and list securities in overseas markets directly or indirectly shall complete the filing procedures with and report relevant information to the CSRC. Pursuant to these draft rules, if the issuer meets the following conditions, its securities offerings and listing will be deemed as an "indirect overseas offering and listing by a PRC domestic company" and is therefore subject to the filing requirement: (i) the revenues, profits, total assets or net assets of the Chinese operating entities in the most recent financial year accounts for more than 50% of the corresponding data in the issuer's audited consolidated financial statements for the same period; (ii) the majority of senior management in charge of business operation are Chinese citizens or have domicile in PRC, and its principal place of business is located in PRC or main business activities are conducted in PRC. In addition, these draft rules prescribe that the domestic enterprises submit filing documents to CSRC within three business days after the submission of the application for overseas initial public offering, and after completing the filing procedures for an overseas initial public offering and listing, for the purposes of implementing and strengthening the CSRC's supervision, the issuer will need to comply with continuous filing and reporting requirements after such offering and listing, among others, including the following: (i) reporting material events which arose prior to such offering and listing, (ii) filing for follow-on offerings after the initial offering and listing, (iii) filing for transactions in which the issuer issues securities to acquire assets, and (iv) reporting material events after the initial offering and listing. In a Q&A released on its official website, the respondent CSRC official indicated that the CSRC will start applying the filing requirements to new offerings and listings. New initial public offerings and refinancing by existing overseas listed Chinese companies will be required to go through the filing process. As for the other filings for the existing companies, the regulator will grant adequate transition period to complete their filing procedures. On April 2, 2022, the CSRC published the Provisions on Strengthening the Management of Confidentiality and Archives Related to the draft Overseas Issuance of Securities and Overseas Listing by Domestic Companies (Draft for Public Comments), or the Draft Archives Rules, for public comments. In the overseas listing activities of domestic companies, domestic companies, as well as securities companies and securities service institutions providing relevant securities services hereof, should establish a sound system of confidentiality and archival work, shall not disclose state secrets, or harm the state and public interests. Where a domestic company provides or publicly discloses to the relevant securities companies, securities service institutions, overseas regulatory authorities and other entities and individuals, or provides or publicly discloses through its overseas listing entity, any document or material involving any state secret or any work secret of organs and organizations, it shall report to the competent authority for approval in accordance with the law, and submit to the secrecy administration department for filing. Domestic companies shall not provide accounting records to an overseas accounting firm that has not performed the corresponding procedures. Securities companies and securities service organizations shall comply with the confidentiality and archive management requirements, and keep the documents and materials properly. Securities companies and securities service institutions that provide domestic enterprises with relevant securities services for overseas issuance and listing of securities shall keep such archives they compile within the territory of the PRC and shall not transfer such archives to overseas institutions or individuals, by any means such as carriage, shipment or information technology, without the approval of the relevant competent authorities. If the archives or duplicates of such archives are of important value to the state and society and needed to be taken abroad, approval shall be obtained in accordance with relevant provisions.

However, the Draft Overseas Listing Regulations, the Draft Overseas Listing Measures and the Draft Archives Rules were released for public comment only, there remains substantial uncertainty, including but not limited to its final content, adoption timeline, effective date or relevant implementation rules. As of the date of this annual report, we cannot predict the impact of these regulations on maintain the listing status of our ADSs and/or other securities, or any of our future offerings of securities overseas.

In addition, on December 28, 2021, the CAC and several other regulatory authorities in China jointly promulgated the Cybersecurity Review Measures, which came into effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, (i) where the relevant activity affects or may affect national security, a CIIO that purchases network products and services, or an internet platform operator that conducts data process activities, shall be subject to the cybersecurity review, (ii) an application for cybersecurity review shall be made by an issuer who is an internet platform operator holding personal information of more than one million users before such issuer applies to list its securities on a foreign stock exchange, and (iii) relevant governmental authorities in the PRC may initiate cybersecurity review if they determine an operator's network products or services or data processing activities affect or may affect national security. As the Cybersecurity Review Measures was newly issued, there remain uncertainties as to how it would be interpreted and enforced, and to what extent it may affect us.

If the CSRC or other relevant PRC regulatory agencies subsequently determine that prior approval is required for any of our future offerings of securities overseas or to maintain the listing status of our ADSs, we cannot guarantee that we will be able to obtain such approval in a timely manner, or at all. The CSRC or other PRC regulatory agencies also may take actions requiring us, or making it advisable for us, not to proceed with such offering or maintain the listing status of our ADSs. If we proceed with any of such offering or maintain the listing status of our ADSs without obtaining these regulatory agencies' approval to the extent it is required, or if we are unable to comply with any new approval requirements which might be adopted for offerings that we have completed prior to the publication of the above- referenced opinions, we may face regulatory actions or other sanctions from these regulatory agencies. These regulatory agencies may impose fines and penalties on our operations in China, limit our ability to pay dividends outside of China, limit our operating privileges in China, delay or restrict the repatriation of the proceeds from offering of securities overseas into China or take other actions that could have a material adverse effect on our business, financial condition, results of operations and prospects, as well as the trading price of the ADSs.

Furthermore, if there are any other approvals, filings and/or other administration procedures to be obtained from or completed with the CSRC or other PRC regulatory agencies as required by any new laws and regulations for any of our future proposed offering of securities overseas or the listing of the ADSs, we cannot assure you that we can obtain the required approval or complete the required filings or other regulatory procedures in a timely manner, or at all. Any failure to obtain the relevant approvals or complete the filings and other relevant regulatory procedures may subject us to regulatory actions or other sanctions from the CSRC or other PRC regulatory agencies, which may have a material adverse effect on our business, financial condition or results of operations.

## Our business may be significantly affected by the newly enacted PRC Foreign Investment Law

On March 15, 2019, the National People's Congress adopted the PRC Foreign Investment Law, which became effective on January 1, 2020 and replace three existing laws regulating foreign investment in China, namely, the Wholly Foreign-Invested Enterprise Law of the PRC, the Sino-Foreign Cooperative Joint Venture Enterprise Law of the PRC and the Sino-Foreign Equity Joint Venture Enterprise Law of the PRC, together with their implementation rules and ancillary regulations. The PRC Foreign Investment Law embodies an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. However, since it is relatively new, uncertainties still exist in relation to its interpretation and implementation. For example, the PRC Foreign Investment Law adds a catch-all clause to the definition of "foreign investment" so that foreign investment, by its definition, includes "investments made by foreign investors in China through other means defined by other laws or administrative regulations or provisions promulgated by the State Council" without further elaboration on the meaning of "other means". It leaves leeway for the future legislations promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. The most updated negative list, issued on December 27. 2021 and became effective on January 1, 2022, stipulates that any PRC domestic enterprise engaging in prohibited industries under the negative list shall obtain the consent of the relevant competent PRC authorities for overseas listing, and the foreign investors shall not participate in the operation and management of such enterprise, and the shareholding percentage of the foreign investors in such enterprise shall be subject to the relevant administrative provisions of the PRC domestic securities investment by foreign investors. Such negative list does not further elaborate whether existing overseas listed enterprise will be subject to such requirements. The staff of the National Development and Reform Commission, or the NDRC, addressed in an interview on December 27, 2021 that certain existing overseas listed enterprises whose foreign investors' shareholding percentage exceed the aforementioned threshold are not required to make adjustment or deduction. It is unclear as to whether the aforesaid provisions will apply to the companies adopting contractual arrangements. It is therefore uncertain whether our corporate structure will be seen as violating the foreign investment rules as we are currently leverage the contractual arrangement to operate certain businesses in which foreign investors are prohibited from or restricted to investing. Furthermore, if future legislations prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangement, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. If we fail to take appropriate and timely measures to comply with any of these or similar regulatory compliance requirements, our current corporate structure, corporate governance and business operations could be materially and adversely affected.

We rely on contractual arrangements with our VIE and its shareholders for substantially all of our business operation, which may not be as effective as direct ownership.

Our VIE contributed 99.3%, 98.6% and 95.2% of our consolidated total net revenues for the years ended December 31, 2019, 2020 and 2021, respectively. We have relied and expect to continue to rely on contractual arrangements with our VIE and its shareholders to conduct our business. These contractual arrangements may not be as effective as direct ownership in providing us with control over our VIE. For example, our VIE and its shareholders could breach their contractual arrangements with us by, among other things, failing to conduct our VIE's operations in an acceptable manner or taking other actions that are detrimental to our interests.

If we had direct ownership of our VIE, we would be able to exercise our rights as a shareholder to effect changes in the board of directors of our VIE, which in turn could implement changes, subject to any applicable fiduciary obligations, at the management and operational level. However, under the current contractual arrangements, we rely on the performance by our VIE and its shareholders of their obligations under the contracts to exercise control over our VIE. However, the shareholders of our consolidated VIE may not act in the best interests of our company or may not perform their obligations under these contracts. Such risks exist throughout the period in which we intend to operate certain portions of our business through the contractual arrangements with our VIE. If any disputes relating to these contracts remains unresolved, we will have to enforce our rights under these contracts through the operations of PRC law and arbitration, litigation and other legal proceedings and therefore will be subject to uncertainties in the PRC legal system. See "—Any failure by our VIE or its shareholders to perform their obligations under our contractual arrangements with them would have a material and adverse effect on our business." Therefore, our contractual arrangements with our VIE and it shareholders may not be as effective in ensuring our control over the relevant portion of our business operations as direct ownership would be.

# Any failure by our VIE or its shareholders to perform their obligations under our contractual arrangements with them would have a material and adverse effect on our business.

We refer to the shareholders of our VIE as its nominee shareholders because although they remain the holders of equity interests on record in our VIE, pursuant to the terms of the shareholder voting proxy agreement, each such shareholder has irrevocably authorized our company to exercise his rights as a shareholder of the VIE. However, if our VIE or its shareholders fail to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under PRC law, including seeking specific performance or injunctive relief, and claiming damages, which we cannot assure will be effective under PRC law. For example, if the shareholders of our VIE refuse to transfer their equity interest in our VIE to us or our designee if we exercise the purchase option pursuant to these contractual arrangements, or if they otherwise act in bad faith toward us, then we may have to take legal actions to compel them to perform their contractual obligations.

All of these contractual arrangements are governed by and interpreted in accordance with PRC law, and disputes arising from these contractual arrangements between us and our variable interest entity will be resolved through arbitration in China. These disputes do not include claims arising under the United States federal securities law and thus the arbitration provisions do not prevent our shareholders from pursuing claims under the United States federal securities law. The legal system in the PRC is not as developed as in some other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. See "—Risks Related to Doing Business in China—Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect us." Meanwhile, there are very few precedents and little formal guidance as to how contractual arrangements in the context of a VIE should be interpreted or enforced under PRC law. There remain significant uncertainties regarding the ultimate outcome of such arbitration should legal action become necessary. In addition, under PRC law, awards by arbitrators are final, which means parties cannot appeal the arbitration results in courts, and if the losing parties fail to carry out the arbitration awards within a prescribed time limit, the prevailing parties may only enforce the arbitration awards in PRC courts through arbitration award enforcement proceedings, which would require additional expenses and delay. In the event we are unable to enforce these contractual arrangements, or if we suffer significant delays or other obstacles in the process of enforcing these contractual arrangements, we may not be able to exert effective control over our VIE, and our ability to conduct our business may be negatively affected.

Contractual arrangements in relation to our VIE may be subject to scrutiny by the PRC tax authorities and they may determine that we or our VIE owe additional taxes, which could negatively affect our financial condition and the value of your investment.

Under applicable PRC laws and regulations, arrangements and transactions among related parties may be subject to audit or challenge by the PRC tax authorities. We could face material and adverse tax consequences if the PRC tax authorities determine that the VIE contractual arrangements were not entered into on an arm's length basis in such a way as to result in an impermissible reduction in taxes under applicable PRC laws, rules and regulations, and adjust the income of our VIE in the form of a transfer pricing adjustment. A transfer pricing adjustment could, among other things, result in a reduction of expense deductions recorded by our VIE for PRC tax purposes, which could in turn increase its tax liabilities without reducing our WFOE's tax expenses. In addition, the PRC tax authorities may impose late payment fees and other penalties on our VIE for the adjusted but unpaid taxes according to the applicable regulations. Our financial position could be materially and adversely affected if our VIE's tax liabilities increase or if it is required to pay late payment fees and other penalties.

The shareholders of our VIE may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition.

The shareholders of our VIE include Mr. Weidong Luo, Mr. Xiaodao Wang and Mr. Jiawen Fang. The shareholders of our VIE may have potential conflicts of interest with us. These shareholders may breach, or cause our VIE to breach, or refuse to renew, the existing contractual arrangements we have with them and our VIE, which would have a material and adverse effect on our ability to effectively control our VIE and receive economic benefits from them. For example, the shareholders may be able to cause our agreements with our VIE to be performed in a manner adverse to us by, among other things, failing to remit payments due under the contractual arrangements to us on a timely basis. We cannot assure you that when conflicts of interest arise any or all of these shareholders will act in the best interests of our company or such conflicts will be resolved in our favor.

Currently, we do not have any arrangements to address potential conflicts of interest between these shareholders and our company, except that we could exercise our purchase option under the exclusive option agreements with these shareholders to request them to transfer all of their equity interests in the VIE to a PRC entity or individual designated by us, to the extent permitted by PRC law. We rely on Mr. Luo, Mr. Wang and Mr. Fang to abide by the laws of the Cayman Islands, which provide that directors owe a fiduciary duty to the company that requires them to act in good faith and in what they believe to be the best interests of the company and not to use their position for personal gains. If we cannot resolve any conflict of interest or dispute between us and the shareholders of our VIE, we would have to rely on legal proceedings, which could result in disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

The shareholders of our VIE may be involved in personal disputes with third parties or other incidents that may have an adverse effect on their respective equity interests in our VIE and the validity or enforceability of our contractual arrangements with our VIE and its shareholders. For example, in the event that any of the shareholders of our VIE divorces his or her spouse, the spouse may claim that the equity interest of our VIE held by such shareholder is part of their community property and should be divided between such shareholder and his or her spouse. If such claim is supported by the court, the relevant equity interest may be obtained by the shareholder's spouse or another third party who is not subject to obligations under our contractual arrangements, which could result in a loss of our effective control over the VIE. Similarly, if any of the equity interests of our VIE is inherited by a third party on whom the current contractual arrangements are not binding, we could lose our control over the VIE or have to maintain such control by incurring unpredictable costs, which could cause significant disruption to our business and operations and harm our financial condition and results of operations.

Although under our current contractual arrangements, it is expressly provided that all these agreements and the rights and obligations thereunder shall be equally effective and binding on the heirs and successors of the parties to the contractual arrangements, we cannot assure you that these undertakings and arrangements will be complied with or effectively enforced. In the event that any of them is breached or becomes unenforceable and leads to legal proceedings, it could disrupt our business, distract our management's attention and subject us to substantial uncertainties as to the outcome of any such legal proceedings.

We may rely on dividends paid by our PRC subsidiary to fund any cash and financing requirements we may have. Any limitation on the ability of our PRC subsidiary to pay dividends to us could have a material adverse effect on our ability to conduct our business and to pay dividends to holders of the ADSs and our Class A common shares.

We are a holding company, and we may rely on dividends to be paid by our wholly-owned PRC subsidiary for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to the holders of the ADSs and our Class A common shares and service any debt we may incur. If our wholly owned PRC subsidiary 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 the PRC, such as our WFOE, may pay dividends only out of its accumulated 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 board of director of the wholly foreign-owned enterprise, it may allocate a portion of its after-tax profits based on PRC accounting standards to 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 wholly-owned PRC subsidiary 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.

We may lose the ability to use and enjoy assets held by our VIE that are material to the operation of certain portion of our business if the VIE goes bankrupt or becomes subject to a dissolution or liquidation proceeding.

As part of our contractual arrangements with our VIE, our VIE holds certain assets that are material to the operation of certain portion of our business, including intellectual property and premise and value-added telecommunication business operation licenses. If our VIE goes bankrupt and all or part of their assets become subject to liens or rights of third-party creditors, we may be unable to continue some or all of our business activities, which could materially and adversely affect our business, financial condition and results of operations. Under the contractual arrangements, our VIE may not, in any manner, sell, transfer, mortgage or dispose of their assets or legal or beneficial interests in the business without our prior consent. If our VIE undergoes a voluntary or involuntary liquidation proceeding, independent third-party creditors may claim rights to some or all of these assets, thereby hindering our ability to operate our business, which could materially and adversely affect our business, financial condition and results of operations.

If the chops of our PRC subsidiary and our VIE 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.

In China, a company chop or seal serves as the legal representation of the company towards third parties even when unaccompanied by a signature. Each legally registered company in China is required to maintain a company chop, which must 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 subsidiary and VIE 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 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 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. In addition, if the chops are misused by unauthorized persons, we could experience disruption to our normal business operations. We may have to take corporate or legal action, which could involve significant time and resources to resolve while distracting management from our operations.

## Risks Related to Doing Business in China

The approval and/or other requirements of the CSRC or other PRC governmental authorities may be required in connection with an offering under PRC rules, regulations or policies, and, if required, we cannot predict whether or how soon we will be able to obtain such approval.

The Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, purport to require offshore special purpose vehicles that are controlled by PRC companies or individuals and that have been formed for the purpose of seeking a public listing on an overseas stock exchange through acquisitions of PRC domestic companies or assets to obtain CSRC approval prior to publicly listing their securities on an overseas stock exchange. The interpretation and application of the regulations remain unclear. If a governmental approval is required, it is uncertain how long it will take for us to obtain such approval, and, even if we obtain such approval, the approval could be rescinded. Any failure to obtain or a delay in obtaining the requisite governmental approval for an offering, or a rescission of such CSRC approval if obtained by us, may subject us to sanctions imposed by the relevant PRC regulatory authority, which could include fines and penalties on our and our VIE's operations in China, restrictions or limitations on our ability to pay dividends outside of China, and other forms of sanctions that may materially and adversely affect our business, financial condition, and results of operations.

However, our PRC counsel has further advised us that there remains some uncertainty as to how the M&A Rules will be interpreted or implemented in the context of an overseas offering, and its opinions summarized above are subject to any new laws, rules and regulations or detailed implementations and interpretations in any form relating to the M&A Rules. We cannot assure you that relevant PRC governmental authorities, including the CSRC, would reach the same conclusion as our PRC counsel, and hence, we may face regulatory actions or other sanctions from them. Furthermore, relevant PRC governmental authorities promulgated the Opinions on Strictly Cracking Down Illegal Securities Activities, which provided 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 domestic industry competent authorities and regulatory authorities. However, the Opinions on Strictly Cracking Down Illegal Securities Activities were only issued recently, leaving uncertainties regarding the interpretation and implementation of these opinions. It is possible that any new rules or regulations may impose additional requirements on us. In addition, on December 28, 2021, the Cyberspace Administration of China issued the Cybersecurity Review Measures, which came into effect on February 15, 2022, according to which, among others, operators of "critical information infrastructure" or data processors holding over one million users' personal information shall apply to the Cybersecurity Review Office for a cybersecurity review before any listing on a foreign stock exchange. As of the date of this annual report, we have not been involved in any investigations on cybersecurity review made by the Cyberspace Administration of China on such basis, and we have not received any inquiry, notice, warning, or sanctions in such respect. However, the governmental authorities may impose restrictions and penalties on our operations in China, such as the suspension of our apps and services, revocation of our licenses, or shutting down part or all of our operations, limit our ability to pay dividends outside of China, delay or restrict the repatriation of the proceeds from an offering into China or take other actions that could have a material adverse effect on our business, financial condition, results of operations and prospects, as well as the trading price of the ADSs. The PRC governmental authorities may also take actions requiring us, or making it advisable for us, to halt an offering before settlement and delivery of the ADSs offered hereby. Consequently, if you engage in market trading or other activities in anticipation of and prior to settlement and delivery, you do so at the risk that settlement and delivery may not occur. In addition, if the PRC governmental authorities later promulgate new rules or explanations requiring that we obtain their approvals for filings, registrations or other kinds of authorizations for an offering, we cannot assure you that we can obtain the approval, authorizations, or complete required procedures or other requirements in a timely manner, or at all, or obtain a waiver of the requisite requirements if and when procedures are established to obtain such a

## Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect us.

We conduct our business primarily through our PRC subsidiary and consolidated VIE in China. Our operations in China are governed by PRC laws and regulations. Our PRC subsidiary is subject to laws and regulations applicable to foreign investment in China. The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions under the civil law system may be cited for reference but have limited precedential value. In addition, any new or changes in PRC laws and regulations related to foreign investment in China could affect the business environment and our ability to operate our business in China.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. Since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory provisions and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. These uncertainties may impede our ability to enforce the contracts we have entered into and could materially and adversely affect our business and results of operations.

Furthermore, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all and may have retroactive effect. As a result, we may not be aware of our violation of any of these policies and rules until sometime after the violation. Such unpredictability towards our contractual, property and procedural rights could adversely affect our business and impede our ability to continue our operations.

Changes in China's economic, political or social conditions or government policies could have a material adverse effect on our business and operations.

Substantially all of our assets and operations are located in China. Accordingly, our business, financial condition, results of operations and prospects may be influenced to a significant degree by political, economic and social conditions in China generally. The Chinese economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. Although the Chinese government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets, and the establishment of improved corporate governance in business enterprises, a substantial portion of productive assets in China is still owned by the government. In addition, the Chinese government continues to play a significant role in regulating industry development by imposing industrial policies. The Chinese government also exercises significant control over China's economic growth through allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies.

While the Chinese economy has experienced significant growth over the past decades, growth has been uneven, both geographically and among various sectors of the economy, and the rate of growth has been slowing since 2012. Any adverse changes in economic conditions in China, in the policies of the Chinese government or in the laws and regulations in China could have a material adverse effect on the overall economic growth of China. Such developments could adversely affect our business and operating results, lead to reduction in demand for our services and adversely affect our competitive position. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall Chinese economy, but may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations. In addition, in the past the Chinese government has implemented certain measures, including interest rate adjustment, to control the pace of economic growth. These measures may cause decreased economic activity in China, which may adversely affect our business and operating results.

We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet-related businesses and companies, and any lack of requisite approvals, licenses or permits applicable to our business may have a material adverse effect on our business and results of operations.

The PRC government extensively regulates the internet industry, including foreign ownership of, and the licensing and permit requirements pertaining to, companies in the internet industry. These internet-related laws and regulations are relatively new and evolving, and their interpretation and enforcement involve significant uncertainties. As a result, in certain circumstances it may be difficult to determine what actions or omissions may be deemed to be in violation of applicable laws and regulations.

We only have contractual control over our website. We do not directly own the website due to the restrictions on foreign investment in businesses providing value-added telecommunications services in China, including internet information provision services. This may significantly disrupt our business, subject us to sanctions, compromise enforceability of related contractual arrangements, or have other harmful effects on us.

The evolving PRC regulatory system for the internet industry may lead to the establishment of new regulatory agencies. For example, in May 2011, the State Council announced the establishment of a new department, Cyberspace Administration of China (with the involvement of the State Council Information Office, the MITT, and the Ministry of Public Security). The primary role of this new agency is to facilitate the policy-making and legislative development in this field, to direct and coordinate with the relevant departments in connection with online content administration and to deal with cross-ministry regulatory matters in relation to the internet industry.

The interpretation and application of existing PRC laws, regulations and policies and possible new laws, regulations or policies relating to the internet industry have created substantial uncertainties regarding the legality of existing and future foreign investments in, and the businesses and activities of, internet businesses in China, including our business. We cannot assure you that we have obtained all the permits or licenses required for conducting our business in China or will be able to maintain our existing licenses or obtain new ones. If the PRC government considers that we were operating without the proper approvals, licenses or permits or promulgates new laws and regulations that require additional approvals or licenses or imposes additional restrictions on the operation of any part of our business, it has the power, among other things, to levy fines, confiscate our income, revoke our business licenses, and require us to discontinue our relevant business or impose restrictions on the affected portion of our business. Any of these actions by the PRC government may have a material adverse effect on our business and results of operations.

If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders.

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of the PRC with a "de facto management body" within the PRC is considered a "resident enterprise" and will be subject to the enterprise income tax on its global income at the rate of 25%. The implementation rules define the term "de facto management body" as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In 2009, the State Administration of Taxation, or SAT, issued a circular, known as SAT Circular 82, which provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is located in China. Although this circular only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners, the criteria set forth in the circular may reflect the SAT's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises. According to SAT Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China and will be subject to PRC enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management and the places where they perform their duties are in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitu

We believe that we are not a PRC resident enterprise for PRC tax purposes. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Tax—PRC Enterprise Income Tax." However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body." If the PRC tax authorities determine that we are a PRC resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax, unless a reduced rate is available under an applicable tax treaty, from dividends we pay to our shareholders that are non-resident enterprises, including the holders of the ADSs. In addition, non-resident enterprise shareholders (including ADS holders) may be subject to PRC tax on gains realized on the sale or other disposition of ADSs or Class A common shares, if such income is treated as sourced from within the PRC. Furthermore, if we are deemed a PRC resident enterprise, dividends payable to our non-PRC individual shareholders (including ADS holders) and any gain realized on the transfer of ADSs or Class A common shares by such shareholders may be subject to PRC tax at a rate of 20% unless a reduced rate is available under an applicable tax treaty. It is unclear whether non-PRC shareholders of our company would be able to claim the benefits of any tax treaties between their country of tax residence and the PRC in the event that we are treated as a PRC resident enterprise. Any such tax may reduce the returns on your investment in the ADSs or our Class A common shares.

## We face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies.

Pursuant to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises, or SAT Circular 698, issued by the SAT in 2009 with retroactive effect from January 1, 2008, where a non-resident enterprise transfers the equity interests of a PRC resident enterprise indirectly by disposition of the equity interests of an overseas holding company, or an Indirect Transfer, and such overseas holding company is located in a tax jurisdiction that: (i) has an effective tax rate less than 12.5% or (ii) does not tax foreign income of its residents, the non-resident enterprise, being the transferor, shall report to the competent tax authority of the PRC resident enterprise this Indirect Transfer.

On February 3, 2015, the SAT issued the Announcement of the State Administration of Taxation on Several Issues Concerning the Enterprise Income Tax on Indirect Property Transfer by Non-Resident Enterprises, or SAT Bulletin 7. SAT Bulletin 7 supersedes the rules with respect to the Indirect Transfer under SAT Circular 698. SAT Bulletin 7 has introduced a new tax regime that is significantly different from the previous one under SAT Circular 698. SAT Bulletin 7 extends the PRC's tax jurisdiction to not only Indirect Transfers set forth under SAT Circular 698 but also transactions involving transfer of other taxable assets through offshore transfer of a foreign intermediate holding company. In addition, SAT Bulletin 7 provides clearer criteria than SAT Circular 698 for assessment of reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Bulletin 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of taxable assets. Where a non-resident enterprise transfers taxable assets indirectly by disposing of the equity interests of an overseas holding company, which is an Indirect Transfer, the non-resident enterprise, being the transferor, or the transferee, or the PRC entity that directly owns the taxable assets, may report such Indirect Transfer to the relevant tax authority. Using a "substance over form" principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such Indirect Transfer may be subject to PRC enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10% for the transferee fails to withhold the taxes and the transferor fails

On October 17, 2017, the SAT issued the Announcement of the State Administration of Taxation on Matters Concerning Withholding of Income Tax of Non-resident Enterprises at Source, or SAT Bulletin 37, which, among others, repealed the SAT Circular 698 on December 1, 2017. SAT Bulletin 37 further details and clarifies the tax withholding methods in respect of income of non-resident enterprises under SAT Circular 698. And certain rules stipulated in SAT Bulletin 7 are replaced by SAT Bulletin 37. Where the non-resident enterprise fails to declare the tax payable pursuant to Article 39 of the PRC Enterprise Income Tax Law, the tax authority may order it to pay the tax due within required time limits, and the non-resident enterprise shall declare and pay the tax payable within such time limits specified by the tax authority; however, if the non-resident enterprise voluntarily declares and pays the tax payable before the tax authority orders it to do so within required time limits, it shall be deemed that such enterprise has paid the tax in time.

We face uncertainties as to the reporting and other implications of certain past and future transactions where PRC taxable assets are involved, such as offshore restructuring, sale of the shares in our offshore subsidiaries and investments. Our company may be subject to filing obligations or taxed if our company is transferor in such transactions, and may be subject to withholding obligations if our company is transferee in such transactions, under SAT Bulletin 7 and SAT Bulletin 37. For transfer of shares in our company by investors who are non-PRC resident enterprises, our PRC subsidiary may be requested to assist in the filing under SAT Bulletin 7 and SAT Bulletin 37. As a result, we may be required to expend valuable resources to comply with SAT Bulletin 7 and SAT Bulletin 37 or to request the relevant transferors from whom we purchase taxable assets to comply with these circulars, or to establish that our company should not be taxed under these circulars, which may have a material adverse effect on our financial condition and results of operations.

If our preferential tax treatments are revoked, become unavailable or if the calculation of our tax liability is successfully challenged by the PRC tax authorities, we may be required to pay tax, interest and penalties in excess of our tax provisions, and our results of operations could be materially and adversely affected.

The Chinese government has provided various tax incentives to our VIE in China. These incentives include reduced enterprise income tax rates. For example, under the Enterprise Income Tax Law and its implementation rules, the statutory enterprise income tax rate is 25%. However, enterprises which obtained a new software enterprise certification were entitled to an exemption of enterprise income tax for the first two years and a 50% reduction of enterprise income tax for the subsequent three years, commencing from the first profit-making year. In addition, the income tax of an enterprise that has been determined to be a high and new technology enterprise can be reduced to a preferential rate of 15%. The certificate of high and new technology enterprise of our VIE was obtained in November 2016 and expired in November 2019. Our VIE obtained the certificate of high and new technology enterprise in December 2019 with a validity period of three years starting from December 2019 onwards. Any increase in the enterprise income tax rate applicable to our PRC subsidiary or VIE in China, or any discontinuation or retroactive or future reduction of any of the preferential tax treatments currently enjoyed by our PRC subsidiary or VIE in China, could adversely affect our business, financial condition and results of operations. In addition, in the ordinary course of our business, we are subject to complex income tax and other tax regulations and significant judgment is required in the determination of a provision for income taxes. Although we believe our tax provisions are reasonable, if the PRC tax authorities successfully challenge our position and we are required to pay tax, interest and penalties in excess of our tax provisions, our financial condition and results of operations would be materially and adversely affected.

Uncertainties exist with respect to the interpretation and implementation of Anti-Monopoly Guidelines for Internet Platforms and how it may impact our business operations.

In February 2021, the Anti-Monopoly Guidelines for Internet Platforms was promulgated by the Anti-monopoly Commission of the PRC State Council. The Anti-Monopoly Guidelines for Internet Platforms is consistent with the Anti-Monopoly Law of PRC and prohibits monopoly agreements, abuse of dominant position and concentration of undertakings that may have the effect of eliminating or restricting competitions in the field of platform economy. More specifically, the Anti-Monopoly Guidelines for Internet Platforms outlines certain practices that may, if without justifiable reasons, constitute abuse of dominant position, including without limitation, tailored pricing using big data and analytics, actions or arrangements seen as exclusivity arrangements, using technology means to block competitors' interface, using bundled services to sell services or products, and compulsory collection of user data. Besides, Anti-Monopoly Guidelines for Internet Platforms expressly states that concentration involving VIE will also be subject to antitrust filing requirements.

In April 2021, the State Administration for Market Regulation (the "SAMR"), together with certain other PRC government authorities convened an administrative guidance meeting, focusing on unfair competition acts in community group buying, self-inspection and rectification by major internet companies of possible violations of anti-monopoly, anti-unfair competition, tax and other related laws and regulations, and requesting such companies to comply with relevant laws and regulations strictly and be subject to public supervision. In addition, many internet companies, including the over 30 companies which attended such administrative guidance meeting, are required to conduct a comprehensive self-inspection and make necessary rectification accordingly. The SAMR has stated it will organize and conduct inspections on the companies' rectification results. If the companies are found to conduct illegal activities, more severe penalties are expected to be imposed on them in accordance with the laws.

In October 2021, the Standing Committee of the NPC issued a second draft amendment to the amended Anti-Monopoly Law for public comments, which proposes to increase the fines on business operators for illegal concentration to "no more than ten percent of the preceding year's sales revenue of the business operators if the concentration of business operators has or may have an effect of excluding or limiting competition; or a fine of up to RMB5 million if the concentration of business operators does not have an effect of excluding or limiting competition." The draft also proposes for the relevant authority to investigate transaction where there is evidence that the concentration has or may have the effect of eliminating or restricting competition, even if such concentration does not reach the filing threshold. Due to the enhanced implementation of the Anti-Monopoly Law, we may be under heightened regulatory scrutiny, which will increase our compliance costs and subject us to heightened risks and challenges. In addition, there are significant uncertainties on the evolving legislative activities and varied local implementation practices of anti-monopoly and competition laws and regulations in China, especially with respect to the enactment timetable, final content, interpretation and implementation of the amended Anti-Monopoly Law. If it is enacted as proposed, transacting parties may be subject to a higher regulatory requirement in completing an acquisition transaction.

Since the Anti-Monopoly Guidelines for Internet Platforms are relatively new, uncertainties still exist in relation to its interpretation and implementation, although we do not believe we engage in any foregoing situations, we cannot assure you that our business operations will comply with such regulation in all respects, and any failure or perceived failure by us to comply with such regulation may result in governmental investigations, fines and/or other sanctions on us.

PRC regulations relating to the establishment of offshore special purpose companies by PRC residents may subject our PRC resident beneficial owners or our PRC subsidiary to liability or penalties, limit our ability to inject capital into our PRC subsidiary, limit our PRC subsidiary's ability to increase their registered capital or distribute profits to us, or may otherwise adversely affect us.

In July 2014, SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment Through Special Purpose Vehicles, or SAFE Circular 37. SAFE Circular 37 requires PRC residents (including PRC individuals and PRC corporate entities as well as foreign individuals that are deemed as PRC residents for foreign exchange administration purpose) to register with SAFE or its local branches in connection with their direct or indirect offshore investment activities. SAFE Circular 37 is applicable to our shareholders who are PRC residents and may be applicable to any offshore acquisitions that we make in the future.

Under SAFE Circular 37, PRC residents who make, or have prior to the implementation of SAFE Circular 37 made, direct or indirect investments in offshore special purpose vehicles, or SPVs, will be required to register such investments with SAFE or its local branches. In addition, any PRC resident who is a direct or indirect shareholder of an SPV, is required to update its filed registration with the local branch of SAFE with respect to that SPV, to reflect any material change. Moreover, any subsidiary of such SPV in China is required to urge the PRC resident shareholders to update their registration with the local branch of SAFE. If any PRC shareholder of such SPV fails to make the required registration or to update the previously filed registration, the subsidiary of such SPV in China may be prohibited from distributing its profits or the proceeds from any capital reduction, share transfer or liquidation to the SPV, and the SPV may also be prohibited from making additional capital contributions into its subsidiary in China. On February 13, 2015, SAFE promulgated a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, which became effective on June 1, 2015. Under SAFE Notice 13, applications for foreign exchange registration of inbound foreign direct investments and outbound overseas direct investments, including those required under SAFE Circular 37, will be filed with qualified banks instead of SAFE. The qualified banks will directly examine the applications and accept registrations under the supervision of SAFE.

We have requested PRC residents who we know hold direct or indirect interest in our company to make the necessary applications, filings and registrations as required under SAFE Circular 37 and those PRC resident shareholders that hold direct interest in our company have completed all necessary registrations with the local SAFE branch or qualified banks as required by SAFE Circular 37. However, we may not be informed of the identities of all the PRC residents holding direct or indirect interest in our company, and we cannot provide any assurance that these PRC residents will comply with our request to make or obtain any applicable registrations or comply with other requirements under SAFE Circular 37 or other related rules. The failure or inability of our PRC resident shareholders to comply with the registration procedures set forth in these regulations may subject us to fines and legal sanctions, restrict our cross-border investment activities, limit the ability of our wholly foreign-owned subsidiary in China to distribute dividends and the proceeds from any reduction in capital, share transfer or liquidation to us, and we may also be prohibited from injecting additional capital into the subsidiary. Moreover, failure to comply with the various foreign exchange registration requirements described above could result in liability under PRC law for circumventing applicable foreign exchange restrictions. As a result, our business operations and our ability to distribute profits to you could be materially and adversely affected.

Furthermore, as these foreign exchange regulations are still relatively new and their interpretation and implementation has been constantly evolving, it is unclear how these regulations, and any future regulation concerning offshore or cross-border transactions, will be interpreted, amended and implemented by the relevant government authorities. For example, we may be subject to a more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our financial condition and results of operations. In addition, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company, as the case may be, will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the foreign exchange regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

PRC regulation of loans to and direct investment in PRC entities by offshore holding companies and governmental control of currency conversion may delay or prevent us from using the proceeds of our initial public offering to make loans or additional capital contributions to our PRC subsidiary, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

We are an offshore holding company conducting our operations in China through our PRC subsidiary and VIE. We may make loans to our PRC subsidiary and VIE subject to the approval or registration from governmental authorities and limitation of amount, or we may make additional capital contributions to our wholly foreign-owned subsidiary in China. Any loans to our wholly foreign-owned subsidiary in China, which are treated as foreign-invested enterprises under PRC law, are subject to foreign exchange loan registrations. In addition, a foreign-invested enterprise, or FIE, shall use its capital pursuant to the principle of authenticity and self-use within its business scope. The capital of an FIE shall not be used for the following purposes: (i) directly or indirectly used for payment beyond the business scope of the enterprises or the payment prohibited by relevant laws and regulations; (ii) directly or indirectly used for investment in securities or investments other than banks' principal-secured products unless otherwise provided by relevant laws and regulations; (iii) the granting of loans to non-affiliated enterprises, except where it is expressly permitted in the business license; and (iv) paying the expenses related to the purchase of real estate that is not for self-use (except for the foreign-invested real estate enterprises).

In light of the various requirements imposed by PRC regulations on loans to and direct investment in PRC entities by offshore holding companies, we cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals on a timely basis, if at all, with respect to future loans by us to our PRC subsidiary or VIE or with respect to future capital contributions by us to our PRC subsidiary. If we fail to complete such registrations or obtain such approvals, our ability to use the proceeds from our initial public offering and to capitalize or otherwise fund our PRC operations may be negatively affected, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

We may rely on dividends and other distributions on equity paid by our PRC subsidiary to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC subsidiary to make payments to us could have a material and adverse effect on our ability to conduct our business.

We are a Cayman Islands holding company and we rely principally on dividends and other distributions on equity from our PRC subsidiary for our cash requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders for services of any debt we may incur. If our PRC subsidiary incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us. Under PRC laws and regulations, our PRC subsidiary, which is a wholly foreign-owned enterprise, may pay dividends only out of its respective accumulated 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 accumulated after-tax profits each year, if any, to fund a certain statutory reserve fund, until the aggregate amount of such fund reaches 50% of its registered capital. Such reserve funds cannot be distributed to us as dividends. At its discretion, a wholly foreign-owned enterprise may allocate a portion of its after-tax profits based on PRC accounting standards to an enterprise expansion fund, or a staff welfare and bonus fund.

Our PRC subsidiary generates primarily all of their revenue in Renminbi, which is not freely convertible into other currencies. As result, any restriction on currency exchange may limit the ability of our PRC subsidiary to use their Renminbi revenues to pay dividends to us.

The PRC government may continue to strengthen its capital controls, and more restrictions and substantial vetting process may be put forward by SAFE for cross-border transactions falling under both the current account and the capital account. Any limitation on the ability of our PRC subsidiary to pay dividends or make other kinds of payments 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.

In addition, the Enterprise Income Tax Law and its implementation rules provide that a withholding tax rate of up to 10% will be applicable to dividends payable by Chinese companies to non-PRC-resident enterprises unless otherwise exempted or reduced according to treaties or arrangements between the PRC central government and governments of other countries or regions where the non-PRC-resident enterprises are incorporated.

## Fluctuations in exchange rates could have a material and adverse effect on our results of operations and the value of your investment.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The value of Renminbi against the U.S. dollar 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 the Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

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 U.S. dollars. For example, to the extent that we need to convert U.S. dollars we receive from our initial public offering into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our Class A common shares or the ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. As of the date of this annual report, we have not entered into any effective hedging arrangements in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into 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 have a material adverse effect on your investment.

## Governmental control of currency conversion may limit our ability to utilize our cash balance effectively and affect the value of your investment.

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. We receive substantially all of our revenues in Renminbi. Under our current corporate structure, our Cayman Islands holding company primarily relies on dividend payments from our PRC subsidiary to fund any cash and financing requirements we may have. 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 approval of SAFE by complying with certain procedural requirements. Specifically, under the existing exchange restrictions, without prior approval of SAFE, cash generated from the operations of our PRC subsidiary in China may be used to pay dividends to our company. However, approval from or registration with appropriate 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. As a result, we need to obtain SAFE approval to use cash generated from the operations of our PRC subsidiary and VIE to pay off their respective debt in a currency other than Renminbi owed to entities outside China, or to make other capital expenditure payments outside China in a currency other than Renminbi. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of the ADSs.

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 Chinese 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 Holding Foreign Companies Accountable Act, or 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 Holding Foreign Companies Accountable Act, or the HFCAA, was signed into law on December 18, 2020. The HFCAA states if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspection for the PCAOB for three consecutive years beginning in 2021, the SEC shall 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. 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 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 on a non-U.S. exchange or that a market for our shares 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. Also, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on 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.

The potential enactment of the Accelerating Holding Foreign Companies Accountable Act 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 this bill were enacted, our ADS could be delisted from the exchange and prohibited from over-the-counter trading in the U.S. in 2023.

On June 22, 2021, the U.S. Senate passed a bill known as the Accelerating Holding Foreign Companies Accountable Act, to amend Section 104(i) of the Sarbanes-Oxley Act of 2002 (15 U.S.C. 7214(i)) to prohibit securities of any registrant from being listed on any of the U.S. securities exchanges or traded over-the-counter if the auditor of the registrant's financial statements is not subject to PCAOB inspection for two consecutive years, instead of three consecutive years as currently enacted in the HFCAA.

On February 4, 2022, the U.S. House of Representatives passed the America Competes Act of 2022 which includes the exact same amendments as the bill passed by the Senate. The America Competes Act however includes a broader range of legislation not related to the HFCAA in response to the U.S. Innovation and Competition Act passed by the Senate in 2021. The U.S. House of Representatives and U.S. Senate will need to agree on amendments to these respective bills to align the legislation and pass their amended bills before the President can sign into law. It is unclear when the U.S. Senate and U.S. House of Representatives will resolve the differences in the U.S. Innovation and Competition Act and the America Competes Act of 2022 bills currently passed, or when the U.S. President will sign on the bill to make the amendment into law, or at all.

In the case that the bill becomes the law, it will reduce the time period before our ADSs could be delisted from the exchange and prohibited from over-the-counter trading in the U.S. from 2024 to 2023.

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

We conduct our business primarily in China. Our operations in China are governed by PRC laws and regulations. The PRC government has significant oversight over the conduct of our business, and it may intervene or influence our operations, as the government deems appropriate to advance regulatory and societal goals and policy positions. The PRC government has recently published new policies that significantly affected certain industries and we cannot rule out the possibility that it will in the future release regulations or policies that directly or indirectly affect our industry or require us to seek additional permission to continue our operations, which could result in a material adverse change in our operation and/or the value of our ADSs. Therefore, investors of our company and our business face potential uncertainty from actions taken by the PRC government affecting our business.

# Rising international political tension, including changes in U.S. and international trade policies, particularly with regard to China, may adversely impact our business and operating results.

The U.S. government has made statements and taken certain actions that may lead to potential changes to U.S. and international trade policies towards China. In January 2020, the "Phase One" agreement was signed between the United States and China on trade matters. However, it remains unclear what additional actions, if any, will be taken by the U.S. or other governments with respect to international trade agreements, the imposition of tariffs on goods imported into the U.S., tax policy related to international commerce, or other trade matters Against this backdrop, China has implemented, and may further implement, measures in response to the changing trade policies, treaties, tariffs and sanctions and restrictions against Chinese companies initiated by the U.S. government. For example, for the purpose of counteracting the impact on China caused by unjustified extraterritorial application of foreign legislation and other measures, the Ministry of Commerce of China published the Rules on Counteracting Unjustified Extra-territorial Application of Foreign Legislation and Other Measures on January 9, 2021. Rising trade and political tensions could reduce levels of trades, investments, technological exchanges and other economic activities between China and other countries, which would have an adverse effect on global economic conditions, the stability of global financial markets, and international trade policies. It could also adversely affect the financial and economic conditions in the jurisdictions in which we operate, as well as our overseas expansion, our financial condition, and results of operations.

While cross-border business may not be an area of our focus, any unfavorable government policies on international trade, such as capital controls or tariffs, may affect the demand for our products and services, impact the competitive position of our products or prevent us from selling products in certain countries. If any new tariffs, legislation and/or regulations are implemented, or if existing trade agreements are renegotiated or, in particular, if the U.S. government takes retaliatory trade actions due to the recent U.S.-China trade tension, such changes could have an adverse effect on our business, financial condition and results of operations.

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

Shareholder claims or regulatory investigation that are common in the United States generally are difficult to pursue as a matter of law or practicality in China. For example, in China, there are significant legal and other obstacles to 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 Unities States may not be efficient in the absence of mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, or Article 177, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of the PRC. While detailed interpretation of or implementation rules under Article 177 have yet to be promulgated, the inability for an overseas securities regulator to directly conduct investigation or evidence collection activities within China may further increase difficulties faced by you in protecting your interests.

#### Risks Related to The ADSs

## The trading price of the ADSs is likely to be volatile, which could result in substantial losses to investors.

The trading price of the ADSs is likely to be volatile 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. In addition to market and industry factors, the price and trading volume for the ADSs may be highly volatile for factors specific to our own operations, including but not limited to, the following:

- variations in our net revenues, earnings and cash flow;
- 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;
- fluctuations in operating metrics;
- failure on our part to realize monetization opportunities as expected;
- changes in revenues generated from our significant business partners;
- additions or departures of key personnel;
- release of lock-up or other transfer restrictions on our outstanding equity securities or sales of additional equity securities;
- detrimental negative publicity about us, our management, our competitors or our industry;
- any share repurchase program;
- fluctuations of exchange rates between RMB and the U.S. dollar;
- regulatory developments affecting us or our industry;
- potential litigation or regulatory investigations; and
- general economic or political conditions in China or elsewhere in the world.

Any of these factors may result in large and sudden changes in the trading volume and price of the ADSs.

In the past, shareholders of public companies have often brought securities class action suits against those 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 have a material adverse effect on our financial condition and results of operations.

In addition, the stock market in general, and the market prices for internet-related companies and companies with operations in China in particular, have experienced volatility that often has been unrelated to the operating performance of such companies. The securities of some China-based companies that have listed their securities in the United States have experienced significant volatility since their initial public offerings in recent years, including, in some cases, substantial declines in the trading prices of their securities. The trading performances of these companies' securities after their offerings may affect the attitudes of investors towards Chinese companies listed in the United States in general, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or other matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in any inappropriate activities. In particular, the global financial crisis, the ensuing economic recessions and deterioration in the credit market in many countries have contributed and may continue to contribute to extreme volatility in the global stock markets. 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 options or other equity incentives.

We cannot guarantee that any share repurchase program will be fully consummated or that any share repurchase program will enhance long-term shareholder value, and share repurchases could increase the volatility of the trading price of the ADSs and could diminish our cash reserves.

In November 2018, our board of directors authorized the repurchase of up to US\$10 million of the ADSs or our common shares. Although our board of directors has authorized this program, we are not obligated to purchase any specific dollar amount or to acquire any specific number of shares. The timing and amount of repurchases, if any, will depend upon several factors, including market, business conditions, the trading price of the ADSs or our common shares and the nature of other investment opportunities. As of December 31, 2021, we repurchased approximately US\$5.9 million of the ADSs under the share repurchase program. Our share repurchase program could affect the price of the ADSs and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of the ADSs. For example, the existence of a share repurchase program could cause the price of the ADSs to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for the ADSs. Additionally, our share repurchase program could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities. There can be no assurance that any share repurchases will enhance shareholder value because the market price of the ADSs or our common shares may decline below the levels at which we determine to repurchase the ADSs or our common shares. Although our share repurchase program is intended to enhance long-term shareholder value, there is no assurance that it will do so and short-term share price fluctuations could reduce the program's effectiveness.

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

We are an "emerging growth company," as defined in the JOBS Act, and we may take advantage of certain exemptions from requirements applicable to other public companies that are not emerging growth companies including, most significantly, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 for so long as we remain an emerging growth company. As a result, if we elect not to comply with such auditor attestation requirements, our investors may not have access to certain information they may deem important.

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 common shares and the ADSs may view as beneficial.

We have a dual-class common share structure. Our common shares are divided into Class A common shares and Class B common shares. Holders of Class A common shares are, on a poll, entitled to one vote per share, while holders of Class B common shares are entitled to ten votes per share. Each Class B common share is convertible into one Class A common share at any time by the holder thereof, while Class A common shares are not convertible into Class B common shares under any circumstances. Upon any direct or indirect sale, transfer, assignment or disposition of Class B common shares or the voting power attached to such Class B common shares through a voting proxy or otherwise by a holder thereof to any person or entity that is not an affiliate of such holder, or the direct or indirect sale, transfer, assignment or disposition of a majority of the issued and outstanding voting securities of, or voting power attached to such voting securities through voting proxy or otherwise, or the direct or indirect sale, transfer, assignment or disposition of all or substantially all of the assets of a holder of Class B common shares that is an entity to any person that is not an affiliate of such holder, such Class B common shares shall be automatically and immediately converted into the equal number of Class A common shares

Mr. Weidong Luo, our founder, the chairman of our board of directors and our chief executive officer, beneficially owned an aggregate of 7,171,333 Class A common shares (including 71,333 Class A common shares represented by 107,000 ADSs) and 17,000,189 Class B common shares, which represent 76.4% of our total voting power, as of February 28, 2022. Therefore, Mr. Weidong Luo has decisive influence over matters requiring shareholders' approval, including election of directors and significant corporate transactions, such as a merger or sale of our company or our assets. 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 our Class A common shares and the ADSs may view as beneficial.

## The dual-class structure of our common shares may adversely affect the trading market for the ADSs.

S&P Dow Jones and FTSE Russell have announced changes to their eligibility criteria for inclusion of shares of public companies on certain indices, including the S&P 500, to exclude companies with multiple classes of shares and companies whose public shareholders hold no more than 5% of total voting power from being added to such indices. In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual class structure of our common shares may prevent the inclusion of the ADSs representing our Class A common shares in such indices and may cause shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any such exclusion from indices could result in a less active trading market for the ADSs representing our Class A common shares. Any actions or publications by shareholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of the ADSs.

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

The trading market for the 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 the ADSs, the market price for the 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 the ADSs to decline.

# The sale or availability for sale, or perceived sale or availability for sale, of substantial amounts of the ADSs could adversely affect their market price.

Sales of substantial amounts of the ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of the ADSs. As of February 28, 2022, we had 79,051,708 common shares outstanding, comprising of (i) 62,051,519 Class A common shares (excluding treasury shares), and (ii) 17,000,189 Class B common shares. Among these shares, 32,461,713 Class A common shares are in the form of ADSs, which are freely transferable without restriction or additional registration under the Securities Act. The remaining Class A common shares issued and outstanding and the Class B common shares will be available for sale, subject to volume and other restrictions as applicable under Rules 144 and 701 under the Securities Act. Certain holders of our common 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 shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. Sales of these registered shares in the form of ADSs in the public market could adversely affect the market price of the ADSs.

# Our memorandum and articles of association contain anti-takeover provisions that could have a material adverse effect on the rights of holders of our Class A common shares and the ADSs.

Our current memorandum and articles of association contain provisions to limit the ability of others to acquire control of our company or cause us to engage in change-of-control transactions. These provisions 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 Class A common shares, including common 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 the ADSs may fall and the voting and other rights of the holders of our Class A common shares and the 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 vote the underlying Class A common 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 which are carried by the underlying Class A common shares represented by your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. If we instruct the depositary to solicit voting instructions, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying Class A common shares represented by your ADSs in accordance with your instructions. If we do not instruct the depositary to ask for your instructions, the depositary may still vote in accordance with instructions you give, but it is not required to do so. You will not be able to directly exercise your right to vote with respect to the underlying Class A common shares unless you 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 Class A common 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 current 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 Class A common shares represented by your ADSs and 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. If we ask for your instructions, the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. If we will instruct the depositary to solicit voting instructions, we will give the depositary at least 30 days' prior notice of shareholder meetings. Nevertheless, 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 Class A common 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 Class A common shares represented by your ADSs are voted and you may have no legal remedy if the underlying Class A common 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.

We are entitled to amend the deposit agreement and to change the rights of ADS holders under the terms of such agreement, or to terminate the deposit agreement, without the prior consent of the ADS holders.

We are entitled to amend the deposit agreement and to change the rights of the ADS holders under the terms of such agreement, without the prior consent of the ADS holders. We and the depositary may agree to amend the deposit agreement in any way we decide is necessary or advantageous to us. Amendments may reflect, among other things, operational changes in the ADS program, legal developments affecting ADSs or changes in the terms of our business relationship with the depositary. In the event that the terms of an amendment are disadvantageous to ADS holders, ADS holders will only receive 30 days' advance notice of the amendment, and no prior consent of the ADS holders is required under the deposit agreement. Furthermore, we may decide to terminate the ADS facility at any time for any reason. For example, terminations may occur when we decide to list our shares on a non-U.S. securities exchange and determine not to continue to sponsor an ADS facility or when we become the subject of a takeover or a going-private transaction. If the ADS facility will terminate, ADS holders will receive at least 90 days' prior notice, but no prior consent is required from them. Under the circumstances that we decide to make an amendment to the deposit agreement that is disadvantageous to ADS holders or terminate the deposit agreement, the ADS holders may choose to sell their ADSs or surrender their ADSs and become direct holders of the underlying common shares, but will have no right to any compensation whatsoever.

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 Class A common 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 non-exclusive 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 waived 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 and / or the depositary. If a lawsuit is brought against us and/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 serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

# Because we do not expect to pay dividends in the foreseeable future, you must rely on price appreciation of the 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 the 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 subsidiary, our financial condition, contractual restrictions and other factors deemed relevant by our board of directors. Accordingly, the return on your investment in the ADSs will likely depend entirely upon any future price appreciation of the ADSs. There is no guarantee that the 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 the ADSs and you may even lose your entire investment in the ADSs.

You may not receive dividends or other distributions on our Class A common shares and you may not receive any value for them, if it is illegal or impractical to make them available to you.

The depositary has agreed to pay to you the cash dividends or other distributions it or the custodian receives on Class A common shares or other deposited securities underlying the ADSs, after deducting its fees and expenses. You will receive these distributions in proportion to the number of Class A common shares your ADSs represent. However, the depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any holders of ADSs. For example, it would be unlawful to make a distribution to a holder of ADSs if it consists of securities that require registration under the Securities Act of 1933 but that are not properly registered or distributed under an applicable exemption from registration. The depositary may also determine that it is not feasible to distribute certain property through the mail. Additionally, the value of certain distributions may be less than the cost of mailing them. In these cases, the depositary may determine not to distribute such property. We have no obligation to register under U.S. securities laws any ADSs, Class A common shares, rights or other securities received through such distributions. We also have no obligation to take any other action to permit the distribution of ADSs, Class A common shares, rights or anything else to holders of ADSs. This means that you may not receive distributions we make on our Class A common shares or any value for them if it is illegal or impractical for us to make them available to you. These restrictions may cause a material decline in the value of the ADSs.

## You may experience dilution of your holdings due to the 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.

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

We are now a public company and expect to 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 Securities and Exchange Commission, or the SEC, and Nasdaq, impose various requirements on the corporate governance practices of public companies. 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. An emerging growth company 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 of the Sarbanes-Oxley Act of 2002, or Section 404, in the assessment of the emerging growth company's internal control over financial reporting and permission to delay adopting new or revised accounting standards until such time as those standards apply to private 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. 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. For example, in comparison with a private company, we need an increased number of independent directors and have to adopt policies regarding internal controls and disclosure controls and procedures. Operating as a public company 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 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 the past, shareholders of a public company often brought securities class action suits against the company following periods of instability in the market price of that company's 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, which could harm our results of operations and require us to incur significant expenses to defend the suit. 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 have a material adverse effect on our financial condition and results of operations.

# 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.

We are an exempted company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our 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 precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than 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 standing to initiate a shareholder derivative action in 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 (save for our memorandum and articles of association, our register of mortgages and charges and special resolutions of our shareholders) or to obtain copies of lists of shareholders of these companies. Our directors have discretion under our current 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 the United States.

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

We are a Cayman Islands exempted company and substantially all of our assets are located outside of the United States. Our current operations are conducted in China. In addition, our current directors and officers are nationals and residents of countries other than the United States. Substantially all of the assets of these persons are located outside 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 the United States in the event that you believe that your rights have been infringed under 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.

As an exempted 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 Nasdaq listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the Nasdaq listing standards.

As a Cayman Islands exempted company listed on the Nasdaq Global Market, we are subject to the Nasdaq listing standards. However, Nasdaq 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 Nasdaq listing standards. As we rely on the home country practice exemption as described above, our shareholders may be afforded less protection than they would otherwise enjoy under the Nasdaq listing standards applicable to U.S. domestic issuers.

We are a "controlled company" within the meaning of the Nasdaq Stock Market Rules and, as a result, may rely on exemptions from certain corporate governance requirements that provide protection to shareholders of other companies.

We are a "controlled company" as defined under the Nasdaq Stock Market Rules because Mr. Weidong Luo, our founder, the chairman of our board of directors and our chief executive officer owns more than 50% of our total voting power. For so long as we remain a controlled company under that definition, we are permitted to elect to rely, and may rely, on certain exemptions from corporate governance rules. As a result, you will not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

We may be classified as a passive foreign investment company for U.S. federal income tax purposes, which could result in adverse U.S. federal income tax consequences to U.S. Holders of our ADSs or Class A common shares.

Depending upon the value of our assets, which is determined based, in part, on the market value of our ADSs, and the nature of our assets and income over time, we could be classified as a passive foreign investment company ("PFIC") for U.S. federal income tax purposes. A non-U.S. corporation, such as our company, will be classified as a PFIC for U.S. 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 or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year produce or are held for the production of passive income (the "asset test"). Although the law in this regard is not entirely clear, we treat our consolidated VIE as being owned by us for U.S. federal income tax purposes because we control its management decisions and are entitled to substantially all of the economic benefits associated with it, and, as a result, we consolidate its results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of the consolidated 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 for U.S. federal income tax purposes, and based upon our income and assets and the market value of our ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2021.

There can be no assurance regarding our PFIC status for the current taxable year or foreseeable future taxable years, however, because our PFIC status is a factual determination made annually that will depend, in part, upon the composition of our income and assets. The value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined in part by reference to the market price of our ADSs or Class A common shares from time to time (which may be volatile). Because we will generally take into account our current market capitalization in estimating the value of our goodwill and other unbooked intangibles, our PFIC status for the current taxable year and foreseeable future taxable years may be affected by our market capitalization. Recent fluctuations in our market capitalization create a material risk that we may be classified as a PFIC for the current taxable year and foreseeable future taxable years. In addition, the composition of our income and our assets will be affected by how, and how quickly, we spend our liquid assets. Under circumstances where our revenue from activities that produce passive income significantly increases relative to our revenue from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase. Because there are uncertainties in the application of the relevant rules, it is possible that the Internal Revenue Service may challenge our classification of certain income or assets as non-passive, or our valuation of our goodwill and other unbooked intangibles, each of which could cause us to become classified as a PFIC for the current or subsequent taxable years.

If we are a PFIC for any taxable year during which a U.S. Holder (as defined in "Item 10. Additional Information—E. Taxation—U.S. Federal Income Tax Considerations") holds our ADSs or Class A common shares, the U.S. Holder may be subject to certain adverse U.S. federal income tax consequences. Additionally, if we are a PFIC for any taxable year during which U.S. shareholders hold our ADSs or Class A common shares, we would generally continue to be treated as a PFIC with respect to such U.S. shareholders even if we do not satisfy either of the above tests to be classified as a PFIC in a subsequent year. See "Item 10. Additional Information—E. Taxation—U.S. Federal Income Tax Considerations—Passive Foreign Investment Company Rules."

## Item 4. INFORMATION ON THE COMPANY

## A. History and Development of the Company

Shenzhen Hexum Hungu Information Technology Co., Ltd., or Hexun Huagu, was incorporated in May 2012. The current shareholders of Hexun Huagu are Mr. Weidong Luo, Mr. Xiaodao Wang and Mr. Jiawen Fang, holding 80%, 10% and 10% equity interests in Hexun Huagu, respectively.

In May 2012, UA Mobile Limited was incorporated in the British Virgin Islands by KK Mobile Limited, a company wholly owned by Mr. Weidong Luo. UA Mobile Limited set up a wholly-owned subsidiary KK Mobile Investment Limited in Hong Kong in June 2012. In April 2014, we incorporated Aurora Mobile Limited in the Cayman Islands as our offshore holding company to facilitate financing and offshore listing. Subsequently, Mr. Weidong Luo transferred his entire ownership of UA Mobile Limited to Aurora Mobile Limited. In June 2014, KK Mobile Investment Limited established a wholly-owned subsidiary in China, JPush Information Consultation (Shenzhen) Co., Ltd., or Shenzhen JPush.

On August 5, 2014, we obtained control over Hexun Huagu through Shenzhen JPush by entering into a series of contractual arrangements with Hexun Huagu and its shareholders. We refer to Shenzhen JPush as our WFOE, and to Hexun Huagu as our VIE in this annual report. Our contractual arrangements with our VIE and its shareholders allow us to (i) exercise effective control over our VIE, (ii) receive substantially all of the economic benefits of our VIE, and (iii) have an exclusive call option to purchase all or part of the equity interests in and assets of our VIE when and to the extent permitted by PRC law. As a result of these contractual arrangements, Hexun Huagu is our consolidated variable interest entity, which generally refers to an entity in which we do not have any equity interests but whose financial results are consolidated into our consolidated financial statements in accordance with U.S. GAAP because we have effective financial control over, and are the primary beneficiary of, that entity. We treat Hexun Huagu and its subsidiaries as our consolidated affiliated entities under U.S. GAAP and have consolidated their financial results in our consolidated financial statements in accordance with U.S. GAAP. However, those contractual arrangements may not be as effective as direct ownership in terms of providing operational control.

On July 26, 2018, the ADSs representing our Class A common shares commenced trading on Nasdaq under the symbol "JG." We raised from our initial public offering approximately US\$68.0 million in net proceeds after deducting underwriting commissions and discounts and the offering expenses payable by us.

Our principal executive offices are located at 14/F, China Certification and Inspection Building, No.8 Keji South 12<sup>th</sup> Road, Nanshan District, Shenzhen, Guangdong 518057, People's Republic of China. Our telephone number at this address is +86 755-8388-1462. Our registered office in the Cayman Islands is located at the offices of Maples Corporate Services Limited at PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

## **B.** Business Overview

## **Our Mission**

Our mission is to improve productivity for businesses and society through harnessing the power of mobile big data to derive actionable insights and knowledge.

## Overview

We are a leading developer service platform in China. Through our developer services, we reached approximately 1.44 billion monthly active unique mobile devices, accounting for approximately 90% of mobile device coverage in China, in December 2021. From these mobile devices, we gain access to, aggregate, cleanse, structure and encrypt vast amounts of real-time and anonymous device-level mobile behavioral data. We utilize artificial intelligence (AI) and machine learning to derive actionable insights and knowledge from this data, enabling our customers to make better business decisions. We are proud to have received the "Trusted Brand of Digital Services in 2021" from the China Association of Communication Enterprises, "the 2021 Leading SaaS Enterprise in China's Software and Information Service Industry" from the Information Observation Network, "Best Social Marketing Case Study in Finance" and the "Best Big Data Marketing Case Study in Gaming" from Phoenix ADX Festival 2019, the "2018 Annual Global Award for Outstanding Achievement On Big Data Application Platform" from iiMedia Research, the "2017 Best Technology Company Award" from CCTV-Securities News Channel and have been recognized as the "2016 Most Influential Big Data Service Provider" from 36Kr, a well-known technology news platform in China, for our targeted marketing, AAA Credit Unit of Chinese Enterprise Credit Evaluation.

We provide a comprehensive suite of services to mobile app developers in China. Our developer services easily integrate with all types of mobile apps and provide core in-app functionalities needed by developers, including push notification, instant messaging, analytics, sharing and short message service (SMS), one-click verification, and other service under JG Alliance. Our services had been used by approximately 648,186 mobile app developers in a great variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, and education, as of December 31, 2021. We are the partner of choice for many major internet companies, as well as many leading brands in various industries. The number of mobile apps utilizing at least one of our developer services, or the cumulative app installations, increased from over 1,452,000 as of December 31, 2020 and further to over 1,807,000 as of December 31, 2021.

Since our inception through December 31, 2021, we have accumulated data from over 57.9 billion installations of our software development kits (SDKs) as part of our developer services. We only gain access to selected anonymous device-level data that is necessary for, and relevant to, the services provided. Once the original mobile behavioral data is collected, our data processing platform then stores, cleanses, structures and encrypts data for AI-powered modeling exercises in an aggregated and anonymized fashion. Our developer services can be integrated into multiple apps on the same device, which allows us to receive device-based data from different and multiple dimensions, both online and offline. We believe that our data is differentiated in its volume, variety, velocity and veracity.

AI and machine learning are the key technologies we utilize to gain actionable and marketing effective insights from our data and to develop and refine our vertical applications and targeted marketing. Leveraging these technologies built upon our massive and quality data foundation, we have developed a variety of solutions that offer industry-specific, actionable insights for customers in a number of different areas. Our solutions include:

- Vertical Applications mainly include market intelligence, financial risk management and location-based intelligence:
- Market intelligence: We provide investment funds and corporations with real-time market intelligence solutions, such as our product iApp, which provides analysis and statistical results on the usage and trends of mobile apps in China.
- Financial risk management: We assist financial institutions, licensed lenders and credit card companies in making informed lending and credit decisions.
- Location-based intelligence ("iZone"): We help retailers and those from other traditional brick-and-mortar industries, such as real estate developers, track and analyze foot traffic, conduct targeted marketing and make more informed and impactful operating decisions, such as site selection.

Collectively, the developer services and vertical applications are termed SAAS Businesses.

• *Targeted marketing* ("XiaoGuoTong"): We help advertisers improve their effectiveness by enabling them to target the right audience with the right content at the right time.

Throughout 2020, we have strategically winded down our targeted marketing business to focus on SAAS Businesses, and have exited the targeted marketing business by the end of 2020. Starting from January 2021, we will only operate and generate revenue from SAAS Businesses.

We have built a robust technology infrastructure to support the usage of SAAS Businesses and the legacy targeted marketing throughout China on a real-time basis. We have developed a proprietary network of over 9,100 servers, including cloud servers, strategically located around the country to provide high-quality and cost-effective services across all telecom providers throughout China. This extensive and carefully designed server network allows us to provide customers with real-time access and usage of our Software-as-a-service ("SAAS") products and targeted marketing with great stability, immense speed and high reliability.

## **Our Business Model**

We are a leading developer ecosystem service platform in China. Our business model is built upon our massive and quality data foundation, which we have established by leveraging the comprehensive suite of developer services we provide to mobile app developers in China. Our developer services provide core in-app functionalities, including push notification, instant messaging, analytics, sharing and short message service (SMS), one-click verification and other services under JG Alliance, device connection. Through our developer services, we gain access to selected and anonymous device-level data that is necessary for, and relevant to, the services provided. Our centralized data processing platform stores, cleanses, structures and encrypts data that was collected and aggregated. We utilize AI and machine learning technologies to conduct modeling exercises and in order to gain actionable and effective insights. Based on our data foundation and leveraging our AI-powered centralized processing platform, we have developed a variety of vertical applications that offer industry-specific, actionable insights for customers.



## **Developer Services**

We provide a comprehensive suite of services to mobile app developers in China. Starting from 2020, we further breakdown the Developer Service revenue into Subscription Service and Value-Added Service. Our subscription service under developer services provides core in-app functionalities needed by developers, including push notification, instant messaging, analytics, sharing and short message service (SMS), one-click verification and other services under JG Alliance. Our value-added service include both JG Alliance and Advertisement SAAS. The functionalities of our developer services are delivered in the form of SDKs that contain ready-to-use source codes and allow for simple integration into a wide variety of mobile apps. We also offer application programming interfaces (APIs) that create connectivity and automate the process of message exchange between the mobile apps and our backend network. Moreover, we also provide app developers using our services with an interactive web-based service dashboard, allowing them to utilize and monitor our services through simple controls on an ongoing basis. Our developer services easily integrate with all types of mobile apps and support all major mobile operating systems, including iOS, Android and Winphone. Through these functionalities, developers are able to accelerate the development and deployment of their apps into the market and focus their efforts on optimizing their app operations and improving end-user experience.

Our developer services had been used by a cumulative number of approximately 648,186 developers in mobile apps in a wide variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, and education, as of December 31, 2021. The number of mobile apps utilizing at least one of our developer services, or the cumulative app installations, increased from over 1,452,000 as of December 31, 2019 to over 1,698,000 as of December 31, 2020 and further to over 1,807,000 as of December 31, 2021. Almost all of the app developers who use our developer services use our push notification services, and a portion of those developers also use other developer services in addition to push notification. We believe as we expand and deepen our relationship with developers, more developers will utilize multiple services we offer. We are proud to have received "Best SaaS Service of the Year" and "User Recommended SaaS Products of the Year" from the sixth SaaS Application Conference in 2021, and Data Security Governance certification from China Academy of Information and Communications Technology, or CAICT, and our JPush has received the product compatibility certifications for Galaxy Kirin and China Standard Kirin and has passed CAICT's SDK security test and evaluation in 2021, and our JUMS has received the "2021 China SaaS Excellent Product Award" at the "Insights 2022-China Enterprise Service Annual Conference" and has been tested by CAICT to be compliant with the standards of the 5G Messaging Platform's Functional Completeness Test, and our JMessage has passed CAICT's SDK security test and evaluation in 2021, and have received "2018 Best Big Data Application Award" from China Electronic Commerce Committee and the "2018 Annual Global Award for Outstanding Achievement On Big Data Application Platform" from iiMedia Research in 2018, and have been recognized as the "2018 Brilliant Business Partner on Tencent Social Network KA Service" by Tencent and as "2018 Top 20 Fin-Tech Service Platform of Banking Industry" by Yibencaijing in 2018, and as the "Best 2016-2017 SAAS Service Provider" by China SAAS Application Conference Committee in 2017, and as the "InfoQ 2020 Best Technology Community Driver Award".

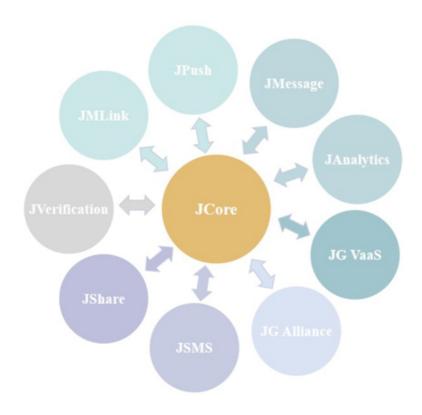
Our developer services (subscription services) are standardized to maximize efficiency and cohesiveness of operations. Our developer services are built upon our proprietary common module JCore, allowing developers to easily integrate additional and multiple functionalities provided by our developer services, as well as enabling us to react to market change and customer demand by developing and adding additional functionalities quickly and cost-effectively.

## JCore—Foundation of Our Developer Services

Our developer services are built as modules on top of JCore. JCore powers and seamlessly integrates with our other service functionality modules and provides uniform code-level support to other modules. The modularity brought by JCore allows developers to conveniently integrate additional modules, enabling mobile app developers to scale their business, reducing app development costs and improving efficiency.

JCore provides key functions that are shared across all of our developer services modules, including dynamic loading, which uploads and downloads code-level communications to and from servers, logging and uploading error messages, protecting core source code from leakage and tampering, and securing data sharing.

We integrate the basic and commonly used code-level functionalities, such as transmission protocols and dynamic loading, into JCore, and build our developer services based on JCore. This enables us to focus on addressing the specific needs of app developers, develop new services and add new functionalities to existing services quickly and cost-effectively and reduce potential errors.



## **Our Subscription Service**

## JPush—Push Notification

Our push notification service, JPush, effectively enables developers to deliver notifications across different formats and different types of internet access devices. Push notifications are a critical tool in mobile strategy as they go directly to the top of the notification stack for mobile users and the resulting higher open rates of push notifications drive increased engagement, retention and monetization. The challenge for app developers in effectively communicating with end users is establishing and maintaining a message distribution network from scratch that can meet the real-time communication demand generated by a growing mobile app user base and, at the same time, save costs. As the telecom networks in China are fragmented and inefficient in connecting with each other, the message distribution network required by the developers must be able to deliver messages across and between all of the China telecom networks effectively and efficiently. Establishing and maintaining such a message distribution network can be costly, time-consuming and technically challenging. JPush, leveraging our technology infrastructure and our strong technological capabilities, provides effective solutions to those challenges. See "—Technology Infrastructure."

Through JPush, developers can push customizable messages and rich media messages. Rich media includes advanced messaging functionality such as emoji, picture messaging and localized languages. Developers can also push notifications to a target group of end users classified by tagging those users automatically or manually.

We also share statistics regarding delivery results with developers that use JPush, including their history of notifications pushed. Other performance statistics include cumulative number of notifications transmitted, number of users who open the app, the time users spent in the app, daily active users (DAU) and the number of users who are using the app in real time. As part of the VIP premium package, certain developers choose to pay for additional capabilities, including the ability to monitor the results of transmissions in real time and access in-depth customized statistical reports.

Leveraging our technology infrastructure built upon a network of over 9,100 servers strategically located across China, JPush enables timely and reliable delivery of notifications, which can translate into a more engaged and larger active user base for developers and, ultimately, scalability of their businesses and higher return on their investment. JPush pushed over 9.9 billion messages to various app end users on an average daily basis in the three months ended December 31, 2021.

Currently, we offer a basic package of push notification services free of charge, and we charge subscription fees, primarily on a monthly basis, for our VIP premium package. Compared to the basic package, the VIP premium package includes more real-time pushes, more offline message storage, exclusive high-speed channels for VIP push notification traffic and customized SDK features.

## JAnalytics—Data Analytics

JAnalytics enables developers and business decision makers to quickly understand the operating performance of their apps and customer base. Leveraging our data analytics capabilities, we are able to process large amounts of device-level mobile behavioral and app operational data in an aggregated and anonymized fashion and generate market trend reports, industry rankings and other customizable statistical reports, allowing app developers to understand their own market position.

JAnalytics includes basic and customizable service offerings. For our basic service offering, we have ready-to-use event models for real-time querying. Events typically relate to device owners' in-app behavior. Based on the event type selected by the developer, JAnalytics processes and distills data to generate statistical reports. Our customizable service offering gives developers the flexibility to change the data dimension and the event type according to their choices.

Developers can review JAnalytics results on our proprietary dashboard and receive some results on their own backend system through APIs provided by us. Currently, we offer JAnalytics free of charge.

## JMessage—Instant Messaging

Our real-time internet-based instant messaging services, or JMessage, enables developers to easily embed instant messaging functionality into their apps. Built upon JPush's robust message distribution system, JMessage provides end users with stable and reliable chat features. JMessage features customizable personal chats, group chats and chat rooms. JMessage also supports rich media messaging, voice messaging, pictures, files, offline messaging and location sharing.

Similar to JPush, we currently offer a basic package of instant messaging services free of charge, and we charge subscription fees, primarily on a monthly basis, for our VIP premium package. In comparison to the basic package, the VIP premium package allows for more message exchanges, higher frequency usage of API, more chat rooms and dedicated communication channels.

## JSMS—SMS

Our SMS services, or JSMS, enable developers to easily integrate SMS text message functions for authentication and serves as an incremental channel for user communication in addition to JPush. Leveraging our strong message distribution system and telecom operators' networks, we provide fast and reliable delivery of messages to end users with low latency. Developers can also programmatically send, receive and track SMS messages. We charge a fee for JSMS based on the number of messages delivered.

# JUMS—Unified Messages System

Our JUMS integrates nine major messaging channels to one platform at no additional cost. JUMS supports various push notification models and provides reports on push notification statistics, message history, user reach analysis and other insights. By integrating operational metrics of various channels and analyzing conversion rates, JUMS helps businesses better understand their targeted markets and users, and plan accordingly to execute on operational and marketing initiatives. In August 2021, JUMS completed all tests required by the China Telecommunication Technology Labs, or CTTL in terms of system functions, push notification methods and performance, reflecting the full compatibility and compliance of its 5G messaging capabilities.

We provide free public cloud version of JUMS. For users with higher requirements for multi-channel push notifications and user management, they can upgrade to the premium version of JUMS and enjoy unlimited channel management, higher call frequency limits, message callbacks, blacklists and whitelists preferences and other exclusive premium services.

## JG VaaS - Video as a Service

Our JG VaaS provides extensive and high-quality short video resources. For apps without the short video feature, APP users can install JG VaaS SDK to allow their users to enjoy short video in both horizontal and vertical formats instantly; for APPs with video service capabilities but are lack of high-quality video contents, APP users can connect to JG VaaS API to access the video resources. Through JG VaaS, APP users can receive personalized video recommendations on a timely basis as all the video contents provided by JG VaaS are tailored to the user profiles. APP developers can also build customized video channels according to its target users base, enabling developers to effectively incentivize users' interest, optimize user experience, and increase users' average daily time spent and stickiness.

## JShare—Social Sharing

Our cross-platform social sharing services, or JShare, enable developers to quickly integrate social sharing functionality, such as the ability to share content with selected apps or to authenticate using credentials from another platform. Developers can also track end users' sharing behavior based on the analytics function integrated into JShare. Currently, JShare is offered free of charge.

## JVerification—One-click Verification

Our fast integration and one-click verification services, or JVerification, enable developers to quickly verify the cellphone number without verification code to improve conversion rate and user experience by integrating three major telecommunication operators in China. We provide stable and convenient access so that developers can quickly complete SDK integration without additional development cost. We charge a fee for JVerification based on the number of messages delivered.

#### **JMLink**

Our JMLink is an enterprise-level deep linking service. It creates a highly effective way to improve user growth and activity. JMLink, with its deep link technology, helps direct customers to service with one-link. Short linking service could be integrated into the shared contents. When end-users click the link, targeted app installed on the device would be awakened and the corresponding page would be loaded on the app. JMLink helps promote conversion rate of products and services, thereby improving user growth and engagement.

## Private Cloud-based Developer Services

While most of our developer services are provided through public-cloud servers, we also provide fee-based private cloud-based developer services. Our private cloud-based packages are designed to provide customizable services to app developers who want a more controlled software environment and more comprehensive technology and customer support. Currently, we offer a private cloud-based service option to our JPush, JSMS, JVerification and JUMS customers. We charge a fee for the private cloud-based packages on a project basis and a monthly fee for the ongoing maintenance of the private cloud.

## Others

We seek to develop more innovative services to meet the evolving demand of app developers. For example, we have customized our push notification services customers:

## Value Added Services

## Advertisement SAAS

Advertisement SAAS is our data management platform service, which provides tagged and de-identified population data package to customers who can utilize for ads placement without our direct involvement. We provide advertisement SAAS services by charging a fee based on a percentage of total value of advertisement placed.

## JG Alliance

We provide services in the form of integrated marketing campaigns to advertising customers through JG Alliance. We generate revenue using performance-based fee arrangements where we charge the advertising customers primarily on a cost-per-click (CPC) or cost-per-action (CPA) basis.

## **Our AI-Powered Data Processing Platform**

By providing services to mobile app developers, we gain access to and aggregate massive amounts of anonymous device-level mobile behavioral data that we use to develop our industry-specific solutions. We only gain access to selected device-level data that is necessary for, and relevant to, the services provided based on our agreements with app developers and the consents they obtain from end users. Our developer services can be integrated into various apps on a single device which allows us to receive data from different and multiple dimensions, both online and offline. The data received through developer services primarily consists of unstructured metadata.

We also collaborate with third-party data service providers to supplement our dataset and maintain a strict vetting process before engaging third-party data service providers to ensure the integrity and quality of our data.

## Four Vs of Our Data

We believe the key differentiating features of our data set is its volume, variety, velocity and veracity.

- *Volume—massive and ever-growing data pool.* We had accumulated data from over 57.9 billion installations of our SDKs as part of our developer services since our inception as of December 31, 2021. In December 2021, we generated data from approximately 1.44 billion monthly active unique mobile devices, which account for approximately 90% of mobile device coverage in China.
- Variety—multi-dimensional data. Our services had been used by a cumulative number of approximately 648,186 developers representing
  over 1.8 million mobile apps in a variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, and
  education, as of December 31, 2021. This allows us to have access to a diverse array of mobile behavioral data. For online activities, we
  have access to data relating to app installations and uninstallations, app usage and device and operating system information. Regarding
  offline activities, we have access to location-based data.
- *Velocity—data timeliness*. We access and process a large volume of data in real time. In December 2021, we captured data from 2.5 billion monthly active SDKs and 71 billion geographic location data records. To increase the speed of data processing and ensure data timeliness, we routinely and frequently upgrade our technology and infrastructure used for data processing and data analytics.
- *Veracity—data accuracy*. Through our data processing platform, we cleanse, structure and encrypt raw data to ensure its accuracy. We also have strict policies and internal procedures in place to ensure our data security. Moreover, our data is not associated with a specific family of apps, which increases the unbiasedness of the data we capture.

## Data Processing

The backbone of our technology is our centralized proprietary data processing platform. Once the original device-level mobile behavioral data is collected, the platform stores, cleanses, structures and encrypts data for modeling exercises in an aggregated and anonymized fashion. The centralized platform delivers speed and scalability, providing data and analytics support across our product lines.

- Storage. We systematically organize and store unstructured data in our Hadoop server cluster. As part of our data security measures, original data is all stored on our local servers protected by firewalls.
- Cleansing. The data processing platform cleanses data stored in our server cluster. Our cleansing system reduces noise in the unstructured data by detecting anomalies in the original data, evaluating data authenticity and sifting out non-usable, corrupted or redundant data.
- Structuring. The data processing platform further structures cleansed data and stores it as structured datasets.
- Encrypting. Our data processing platform then automatically encrypts device-level data to enhance data security.
- Modeling. We utilize AI technology, including machine learning algorithms, and other data processing and statistics tools to automate the
  process of finding patterns and generating basic tags associated with each mobile device that we reach through our developer services.
  Basic tags include, among others, demographic profile, app usage habits and consumption preference, which are widely used in our big
  targeted marketing as well as SAAS Businesses In addition to basic tags, we can further design and generate industry-specific tags based
  on the characteristics of a specific industry and tailored requests from customers.

## AI, Data Analytics and Data Mining

Our AI, data analytics and data mining capabilities form the basis of our vertical applications and targeted marketing, developed for specific industries. We utilize data analytics to gain further statistical insight and employ automated data mining processes to find meaningful correlations and intelligent patterns.

We believe we have the following advantages in our AI and machine learning capabilities:

- We have optimized our data warehouse structure to make it more suitable for AI and machine learning processes. We have also designed and built our data warehouse based on the types and features of our data to allow for flexible yet secured access by our engineers and data scientists for developing and maintaining multiple solutions.
- Based on the features of our data sets, we constantly refine rules engines and machine learning algorithms to improve the accuracy and comprehensiveness of tags generated.
- We design and tailor machine learning algorithms based on the nature of our solutions. For example, to enhance our financial risk management solutions, we improve traditional deep learning algorithms by utilizing the machine learning technique of GBDT (gradient boosting decision tree), which not only preserves the correlations between variables but also maximizes the explanatory ability of patterns.

Our team of data scientists works continually to optimize our proprietary analytical models and improve our analytics capabilities. First, our data scientists input and index more accurate sample training data to train machine learning models more effectively. Second, we also analyze various features of sample data and adopt more suitable and complex modeling algorithms such as deep learning. Third, by gaining access to more data, we can find more features that can be used to further improve the predictive capabilities of our data analytics engines. Fourth, our data scientists, equipped with industry knowledge and insights, can refine and optimize the parameters of algorithms by taking into account industry specific or event specific factors.

## Data Security

To ensure the confidentiality and integrity of our data, we maintain a comprehensive and rigorous data security program. We gain access to vast amounts of anonymous device-level mobile behavioral data based on services provided to app developers and store the data on our servers protected by firewalls. We generate internal IDs that label and identify mobile devices and encrypt device-level data to enhance data security. Our core data can only be accessed through computers designated for authorized use. These computers cannot be connected to the internet, and no data can be outputted to an external device. Only authorized staff can access those computers for designated purposes. Moreover, we maintain data access logs that record all attempted and successful access to our data and conduct routine manual verifications of large data requests. We also have clear and strict authorization and authentication procedures and policies in place. Our employees only have access to data which is directly relevant and necessary to their job responsibilities and for limited purposes and are required to verify authorization upon every access attempt. See also "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Security and privacy breaches may hurt our business."

## **Our Vertical Applications**

Our Vertical Applications currently comprise of market intelligence, financial risk management and location-based intelligence ("iZone"). Based on our deep understanding of the customer needs and the experience accumulated over the years, we are able to identify industry-specific problems that our data is particularly adept at solving and develop tailored solutions. We are constantly evaluating market opportunities and will strategically expand our solution offerings that use our data and insights to increase productivity for additional industries and customers.

From tag generation to product design to day-to-day deployment of our solutions, we leverage our high-quality and ever-growing data pool and utilize AI and machine learning technology and other advanced data technology to productize our vertical applications. During the development stage of our vertical applications, proprietary indices and tags are generated by our centralized data processing platform. These tags and indices cover multiple dimensions which we then selectively utilize for different solutions depending on solution specific requirements. We have been making continuous efforts to enhance our vertical applications by interacting with our customers and incorporating their feedback on our solutions. Over time, we have been able to shorten our product development cycle as we increase the size of our data pool and the depth of our data and accumulated more market intelligence and experiences through a trial-and-error process.

Moreover, by purposefully designing our vertical applications to be standardized, we make such vertical application services easily scalable to serve an increasing number of customers. Because of the comprehensiveness and inter-connectedness of our data and solutions, we can offer one-stop solutions to our customers and cross-sell other suitable or newly developed solutions to existing customers.

We have received numerous awards for our innovative vertical applications, including the "2021 Leading SaaS Enterprise in China's Software and Information Service Industry" from the Information Observation Network, the "2021 China SAAS Excellent Product" at the "Insights 2022—China Enterprise Service Annual Conference", the 2020 Pingwest's "SAAS Platform Most Trusted by Developers", "2019 -2020 Best SAAS Businesses of China SAAS Application Conference", "2019-2020 Most Valuable SAAS Service Provider", "2018 Big Data Application Award" from China E-commerce Committee, the "2017 Big Data Innovative Solution Award" from Big Data Magazine and the "2016 Innovative Big Data Company in China" from Data Technology Industry Innovative Institute.

## Market Intelligence

By leveraging our access to massive amounts of data relating to mobile app operations, our market intelligence solutions empower corporations and investors to make business and investment decisions.

We provide the following three versions of market intelligence solutions:

- Enterprise-oriented solutions: We provide industry ranking, competitive analysis and operational analysis for corporate customers.
- Fund-oriented solutions: We provide industry trends analysis, track portfolio company growth and conduct project-oriented case studies for fund managers.
- Project-based tailor-made solutions: We provide more in-depth analytics services and generate customized statistics reports based on customers' specific requirements.

Customers can subscribe to each version of our market intelligence solutions based on either the number of apps covered under the solution or the number of queries. Customers who subscribe to our market intelligence solution based on the number of apps covered can review the operating metrics of those apps they have subscribed to on our interactive dashboard. The query-based subscription package provides functions that accommodate ad hoc requests from customers and gives customers more flexibility when they want to search for and review the statistical results of a particular mobile app.

We primarily provide market intelligence solutions under annual subscriptions. Subscription prices are quoted based on either the number of apps customers subscribe to or the number of queries customers need within a subscription period.

## Financial Risk Management

Financial risk management solutions help our customers better assess and control their credit and fraud risk exposure, facilitating enterprise risk management and innovative decision-making. Our target customers for financial risk management solutions include financial institutions such as banks and insurance companies, as well as emerging financial technology companies. We provide three types of financial risk management solutions to help our customers make pre-lending decisions: anti-fraud risk features, and blacklist.

Anti-fraud risk features. We offer standard packages that include over 10,000 unique risk features that are similar to the basic tags we generate but are more advanced in terms of their structural complexity and tailored for risk assessment in financial industry. We provide anti-fraud risk features to customers through APIs that automate querying processes, enabling customers to incorporate these risk features into their own risk modeling.

We develop the risk features based on anonymous device-level mobile behavioral data. We only exchange such risk features with our customers' backend systems based on their queries, and we do not have access to credit applicants' identification information which is in our customers' sole control. We utilize our proprietary algorithms to help customers determine the broader creditworthiness of a borrower. Our algorithms can translate complex data and intelligently combine different types of data organized by advanced tags into explainable patterns of behavior that are relevant to the borrower's financial status and creditworthiness. We believe these selected risk features we offer, such as those relating to payment behaviors and usage of consumer finance mobile apps, are most relevant to credit assessments.

For customers who subscribe to our customizable package, we work closely with them to jointly develop credit assessment models, tailor-made risk features as well as internal risk management policies.

Blacklist. We maintain a blacklist that includes primarily potential defaults or frauds predicted based on our data analytics capabilities. We create an initial blacklist that contains default and delinquency history based on publicly available data and data provided by third parties. We then utilize our AI and data analytics capabilities to study this data, identify the behavioral features and patterns that may lead to future default or fraud, apply the identified features and patterns to our own data sets, predict potential default or fraud based on the features and patterns and include the results in our blacklist.

We provide our financial risk management solutions using a query-based model and charge our customers based on the volume of queries we process and the number of features they utilize. We also provide a yearly subscription package that sets an upper limit on the number of queries we process during the subscription period.

## Location-based Intelligence (iZone and iAudience)

Our location-based intelligence solutions track foot traffic, providing insights through real-time simulations that are generated based on carefully gauged sample data, helping our customers make smarter and more impactful operational decisions. To provide location-based intelligence solutions, we first build "geofences," virtual perimeters established around a real-world targeted location, such as car dealerships, shopping malls, tourism sites and neighborhoods. After the geofences are established, we process and analyze the location-based data within the "geofences" in an aggregated and anonymized fashion in order to quantify the impact of specific business decisions by tracking changes in foot traffic. JG iAudience is a user labeling solution that leverages massive information accumulated via mobile terminals to build a multi-dimensional, accurate and complete user profiling system. iAudience helps businesses to precisely target different customer demographics, develop personalized operational strategies, improve service quality and facilitate real-time decision-making process that drives business growth. Our target customers for location-based intelligence solutions include retailers and those from other traditional brick-and-mortar industries, such as auto dealerships, real estate developers and shopping malls. We intend to further broaden the customer base of our location-based intelligence solutions and expand into other industry verticals.

We offer three main categories of location-based intelligence solutions based on the different goals our customers wish to achieve:

- Customer insights: We utilize various data analytics and statistical tools to dissect and analyze a customer's user base, facilitating informed decision making and strategic planning. By tracking and analyzing foot traffic and sample subsets of foot traffic data within the "geofences," we generate simulated models and present these statistical results in easy-to-use and intuitive formats, such as in the form of customized interactive dashboards that visualize visitor volume and call customers' attention to emerging and existing trends in their visitors' behaviors. We charge monthly fees for subscription-based customer insights solutions and a single fee for each customer insights report delivered to the customers.
- Customer acquisition and re-targeting: Based on the location-based intelligence and other insights we have derived from our datasets, we provide targeted user acquisition and existing user re-engagement plans through our targeted marketing platform. We charge a performance-based fee for our customer acquisition and re-targeting solutions based on a CPC or CPA pricing model.
- Operation optimization: We help our customers optimize their business operations. For example, we provide site selection support and
  make recommendations to our retailer clients. We charge service fees on a project-by-project basis for our operation optimization
  solutions.

## **Targeted Marketing**

We generate targeted marketing revenue by providing targeted marketing solution in the form of integrated marketing campaign to advertiser through the *XiaoGuoTong* marketing platform and built upon its multi-dimensional device-level mobile behavioral data or other third-party marketing platforms such as Guangdiantong of Tencent, which is identified as one performance obligation. The ads are displayed on a wide spectrum of reputable publishers, through bidding for ad slots using rates directly negotiated with the various publishers. Moreover, volume rebates to customers under targeted marketing revenue were on a prospective basis as customers recharge their target marketing accounts above a specific threshold. Such rebates are accounted for as changes in total transaction price and allocated directly to the separate performance obligations.

We enter into contractual arrangements with advertisers where we stipulate the types of advertising to be delivered and the pricing. Advertising customers pay for the targeted marketing solutions primarily based on a cost-per-click ("CPC") or cost-per-action ("CPA") basis. Majority of the contracts last for one year. For certain arrangements, customers are required to pay us before the services are delivered. For other arrangements, we provided customers with a credit term less than one year. We act as the principal in the targeted marketing arrangements under which we have control over the fulfillment of the service and have discretion in pricing. Accordingly, we recognize revenue on a gross basis and at a point in time once agreed actions are performed. Revenues are presented net of value-added tax collected on behalf of the government.

We have received numerous awards for our targeted marketing, including the "Trusted Brand of Digital Services in 2021" from the China Association of Communication Enterprises, the "Best Social Marketing Case Study in Finance" and the "Best Big Data Marketing Case Study in Gaming" from Phoenix ADX Festival 2019.

Throughout 2020, we were strategically winding down our targeted marketing business to focus on SAAS Businesses, and exited the targeted marketing business by the end of 2020. Starting from January 2021, we only operate and generate revenue from SAAS Businesses.

# **Technology Infrastructure**

We have built a robust technology infrastructure to support the usage of our developer services and delivery of SAAS Businesses and targeted marketing throughout China on a real-time basis. In total, we manage over 9,100 servers, including cloud servers. We have strategically selected our data center locations in China. These six data centers are located in five cities in China, including Guangzhou, Beijing, Wuxi, Xiamen and Shenzhen, to ensure broad network coverage and minimize disruptions in our services. We also utilize cloud servers provided by industry leading third-party cloud service providers.

For our core data centers in Beijing, Guangzhou and Wuxi, we employ advanced active-active data center architecture that allows multiple data centers to service the same application at any given time, maximizing continuous availability of our servers and minimizing instability caused by single point failure. Specifically, our active-active data center architecture effectively addresses problems that are commonly encountered when communications are transmitted cross-regionally and across different telecom providers in China.

Our technology infrastructure delivers the stability needed to support our high messaging and data volume, the high speed required for real-time apps, the scalability to support increased volumes over time and the flexibility to allow for new product development and the integration of multiple developer services into a single app. Leveraging our extensive and carefully designed technology infrastructure, we are able to provide app developers and vertical applications customers with more cost-effective solutions with great stability, immense speed and high reliability.

# **Research and Development**

We invest substantial resources in research and development to improve our technology, develop new solutions that are complementary to existing ones and find ways to better support app developers and our vertical applications and targeted marketing customers. We believe our ability to develop innovative solutions and enhance our existing service offerings is the key to maintaining our leadership. We incurred RMB176.2 million, RMB174.6 million and RMB206.7 million (US\$32.4 million) of research and development expenses in 2019, 2020 and 2021, respectively.

In November 2020, we entered into relevant agreements and became a 5G strategic partner and 5G messaging partner of a major telecommunications company in China, which started a new chapter in our research and development track records by promoting 5G messaging applications in China.

Our research and development teams are primarily organized into three groups. A team of software engineers and technology infrastructure architects work closely together to develop and upgrade new and existing developer services. We have a dedicated team of data scientists who focus on data modeling using machine learning technology and maintain and upgrade our data processing platform. We also have another team of product developers who identify the potential market demand and lead the development of new SAAS Businesses and enhancement of existing solutions. Most of our research and development personnel are based in Shenzhen, and we also maintain a research and development center in Beijing.

#### **Our Customers**

We have a broad and diverse customer base, which has expanded rapidly since our inception. In 2019, 2020 and 2021, we had 3,456, 3,521 and 3,516 customers who purchased our SAAS Businesses and targeted marketing within the periods, respectively. We define customers in a given period as those that purchase at least one of our paid-for SAAS Businesses and targeted marketing during the same period. No single customer represented more than 10% of our total revenues in the years ended December 31, 2019, 2020 and 2021.

Customers of SAAS Businesses. Our paying customers for SAAS Businesses increased from 2,676 in 2019 to 3,323 in 2020 and further to 3,516 in 2021. The following describes our customer base for each of our SAAS Businesses:

- Developer services. While we adopt a freemium model for most of our developer services, we charge a fee for JSMS based on the number of messages delivered, and we also charge a subscription fee for the VIP premium package of certain developer services such as JPush and JMessage and a project-based fee for private cloud-based services provided upon the request of customers.
- *Market intelligence*. Our customers for our market intelligence solutions primarily consist of investment funds and corporations that have specific needs to capture real-time market intelligence.

- *Financial risk management*. Our customers for financial risk management solutions are mainly financial institutions including banks and insurance companies and financial technology companies.
- Location-based intelligence ("iZone"). Our customers for our location-based intelligence solutions primarily include retailers such as automobile dealers and those from other traditional brick-and-mortar industries ranging from real estate developers to shopping malls.

Customers of targeted marketing. Our targeted marketing customers include companies across multiple industries, including financial institutions, media and entertainment app publishers, online game companies and e-commerce platforms. We strategically wind down the targeted marketing business and completely exit from this business in 2021.

### Sales and Marketing

#### Sales

We sell our solutions through our experienced direct sales force. Our sales force is first organized by product line, with each team responsible for one line of our SAAS Businesses or targeted marketing offerings, and then further organized into multiple regional teams covering different regions across China.

We incentivize our sales teams by setting specific key performance goals for each team responsible for the corresponding line of SAAS Businesses or targeted marketing by adopting a commission-based reward mechanism linked to the sales personnel's performance. We design the mechanism to encourage and incentivize our sales teams to sell not only newly developed service or solution offerings but also the existing SAAS Businesses and targeted marketing.

Our sales teams focus on expanding our customer base and increasing the spending by existing customers, seeking to capture follow-on and cross-selling opportunities to drive purchases and subscriptions of additional functionalities and solutions. Due to the comprehensiveness and interconnectedness of our products and solutions, we can offer one-stop solutions to our customers across their full customer lifecycle management and cross-sell other suitable and newly developed solutions to our customers. For example, we provide targeted marketing to financial institutions clients to help them acquire new users, provide push notification services for continued user engagement and offer our financial risk management solutions to assist them with assessing the creditworthiness of borrowers. We are also able to use our own vertical applications for more precise targeted marketing on our own behalf.

We also operate a proprietary customer management system comprising a number of functions, including customer management, contract management and processing and keeping records of financial related matters. Our sales teams use our customer management system to manage our customers, contracts and orders. This integrated system enhances our ability to manage our customers and allows us to react to customer needs in a fast and efficient way. We believe that our customer management system has been a key factor in enabling us to manage the rapid growth of our business to date and provides us with scalability going forward.

### Service Support

At the stage of initial engagement with a customer, we have our research and development personnel that is responsible for developing and enhancing the relevant SAAS Businesses and targeted marketing provide technical and customer support to the customer, and our sales personnel serves as the contact point for the customer and facilitates communication between the customer and support personnel.

The vast majority of our developers use automated self-service tools that are available on our website for support features. We share a wide variety of information directly with developers on our website, Jiguang.cn, including detailed service information, downloadable SDKs and APIs, and post technical support threads on Jiguang developer community sites. Our developer services team is available for online and email support. We also provide tailored one-on-one customer support to a portion of developers who pay for our developer services.

We also have dedicated account managers to ensure customer satisfaction by gathering ongoing feedback and seek to expand their usage of our solutions once they reach a certain spending level with us. We also encourage them to use our customer portal to facilitate self-service after sales, except for customers who purchase customized solutions such as targeted marketing. Customers can log into their web-based user portals to track the status of usage and renew their subscriptions with a few clicks.

### Marketing

We have a marketing team responsible for increasing the awareness of our brand, promoting our new and existing solutions, maintaining our relationship with business partners and managing public relations. We deploy comprehensive strategies for our marketing efforts, including:

- *Collaboration with media partners*. We have established collaboration selectively with traditional and online media partners, published 75 corporate releases and product releases on media and also issued 51 data reports in 2021.
- Offline events. We host and participate in various events, such as seven industry conferences and six developer and industry salons in 2021, to develop and maintain relationships with industry participants and app developers.
- Online channels. We also utilize online channels to deepen the interaction with developers, engage developers in our online communities and create more traffic for our follow-up marketing attempts.
- Online customer acquisition. We conduct online targeted marketing for ourselves mainly in cooperation with our marketing partners. For
  example, we work with leading search engine companies to enable our potential customers to locate us more easily by searching certain
  keywords.

### **Intellectual Property**

We seek to protect our technology, including our proprietary technology infrastructure and core software system, through a combination of patent, copyright, trademark and trade secret laws, as well as license agreements and other contractual protections. In addition, we enter into confidentiality and non-disclosure agreements with our employees and business partners. The agreements we enter into with our employees also provide that all software, inventions, developments, works of authorship and trade secrets created by them during the course of their employment are our property.

Our intellectual property rights are critical to our business. As of December 31, 2021, we have 59 patent applications pending in China and own 92 computer software copyrights in China, relating to various aspects of our SAAS Businesses and targeted marketing. In addition, we have filed 37 trademark applications and maintained 55 trademark registrations and 4 artwork copyrights in China. We have also registered 22 domain names, including *jiguang.cn*, among others.

We intend to protect our technology and proprietary rights vigorously. We have employed internal policies, confidentiality agreements, encryptions and data security measures to protect our proprietary rights. However, there can be no assurance that our efforts will be successful. Even if our efforts are successful, we may incur significant costs in defending our rights. From time to time, third parties may initiate litigation against us alleging infringement of their proprietary rights or declaring their non-infringement of our intellectual property rights. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—We may not be able to prevent unauthorized use of our intellectual property, which could harm our business and competitive position" and "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—We may be subject to intellectual property infringement claims or other allegations, which could result in our payment of substantial damages, penalties and fines, removal of data or technology from our system."

# Competition

We believe that we are positioned favorably against our competitors. However, the markets for SAAS Businesses and targeted marketing are rapidly evolving. Our competitors may compete with us in a variety of ways, including by launching competing products, expanding their product offerings or functionalities, conducting brand promotions and other marketing activities and making acquisitions. In addition, many of our competitors are large, incumbent companies who are better capitalized than we are.

We face competition in all lines of business. Our developer services face competition from other major mobile app developer services providers in China. For our targeted marketing, we may face competition from major internet companies, such as Tencent, Baidu and Alibaba, in the future as we further grow, although we currently collaborate with them to source ad inventory from them. We also face competition from traditional media for advertising spending. We also directly compete with market intelligence service providers with respect to our market intelligence solutions and financial risk management service providers with respect to our financial risk management solutions.

As we introduce new SAAS Businesses and targeted marketing, as our existing solutions continue to evolve or as other companies introduce new products and services, we may become subject to additional competition. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—We may not be able to compete successfully with our current or future competitors."

### Regulations

This section sets forth a summary of the most significant rules and regulations that affect our business activities in China or our shareholders' rights to receive dividends and other distributions from us.

### Regulations on M&A Rules and Overseas Listings

In 2006, six PRC regulatory agencies, including the China Securities Regulatory Commission, or the CSRC, jointly adopted the M&A Rules, amended in 2009. The M&A Rules purport, among other things, to require an offshore special purpose vehicle controlled by PRC companies or individuals and formed for overseas listing purposes through acquisitions of PRC domestic interest held by such PRC companies or individuals, to obtain the approval from the CSRC prior to publicly listing their securities on an overseas stock exchange. In 2006, the CSRC published a notice on its official website specifying documents and materials required to be submitted to it by the offshore special purpose vehicle seeking CSRC approval of its overseas listing. While the application of the M&A Rules remains unclear, our PRC counsel, Han Kun Law Offices, has advised us that based on its understanding of current PRC laws, rules and regulations and the M&A Rules, prior approval from the CSRC is not required under the M&A Rules for the listing and trading of the ADSs given that (i) our PRC subsidiaries were directly established by us as wholly foreign-owned enterprises and we have not acquired any equity interest or assets of a PRC domestic company owned by PRC companies or individuals as defined under the M&A Rules that are our beneficial owners after the effective date of the M&A Rules, and (ii) no provision in the M&A Rules clearly classifies the contractual arrangements as a type of transaction subject to the M&A Rules.

However, our PRC counsel has further advised us that there remains some uncertainty as to how the M&A Rules will be interpreted or implemented in the context of an overseas offering, and its opinions summarized above are subject to any new laws, rules and regulations or detailed implementations and interpretations in any form relating to the M&A Rules. If the CSRC or other PRC regulatory agencies subsequently determine that prior CSRC approval was required, we may face regulatory actions or other sanctions from the CSRC or other PRC regulatory agencies.

The M&A Rules also establish procedures and requirements that could make some acquisitions of PRC companies by foreign investors more time-consuming and complex, including requirements in some instances that the anti-monopoly law enforcement agency 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 Rules on Implementation of Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors issued by the Ministry of Commerce in 2011 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 activities attempting to bypass such security review, including by structuring the transaction through a proxy or contractual control arrangement. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—The approval and/or other requirements of the CSRC or other PRC governmental authorities may be required in connection with an offering under PRC rules, regulations or policies, and, if required, we cannot predict whether or how soon we will be able to obtain such approval."

On July 6, 2021, the General Office of the Communist Party of China Central Committee and the General Office of the State Council jointly issued a document to crack down on illegal activities in the securities market and promote the high-quality development of the capital market, which, among other things, requires the relevant governmental authorities to strengthen cross-border oversight of law-enforcement and judicial cooperation, to enhance supervision over China-based companies listed overseas, and to establish and improve the system of extraterritorial application of the PRC securities laws.

On December 24, 2021, the China Securities Regulatory Commission and relevant departments of the State Council published the Draft Rules Regarding Overseas Listings, which aim to regulate overseas securities offerings and listings by China-based companies, are available for public consultation. The Draft Rules Regarding Overseas Listing aim to lay out the filing regulation arrangement for both direct and indirect overseas listing, and clarify the determination criteria for indirect overseas listing in overseas markers. The Draft Rules Regarding Overseas Listing, among other things, stipulate that, after making initial applications with overseas stock markets for initial public offerings or listings, all China-based companies shall file with the CSRC within three working days. After completing the filing procedures for an overseas initial public offering and listing, for the purposes of implementing and strengthening the CSRC's supervision, issuer will need to comply with continuous filing and reporting requirements after such offering and listing, among others, including the following: (i) a reporting obligation in respect of a material event which arose prior to such offering and listing, (ii) filing for follow-on offerings after the initial offering and listing, (iii) filing for share exchanges where by the issuer issues securities to acquire assets, and (iv) a reporting obligation for material events after the initial offering and listing. In a Q&A released on its official website, the respondent CSRC official indicated that the CSRC will start applying the filing requirements to new offerings and listings. New initial public offerings and refinancing by existing overseas listed Chinese companies will be required to go through the filing process. As for the other filings for the existing companies, the regulator will grant adequate transition period to complete their filing procedures. On April 2, 2022, the CSRC published the Provisions on Strengthening the Management of Confidentiality and Archives Related to the draft Overseas Issuance of Securities and Overseas Listing by Domestic Companies (Draft for Public Comments), or the Draft Archives Rules, for public comments. In the overseas listing activities of Domestic Companies, Domestic Companies, as well as securities companies and securities service institutions providing relevant securities services hereof, should establish a sound system of confidentiality and archival work, shall not disclose state secrets, or harm the state and public interests. Where a domestic company provides or publicly discloses to the relevant securities companies, securities service institutions, overseas regulatory authorities and other entities and individuals, or provides or publicly discloses through its overseas listing entity, any document or material involving any state secret or any work secret of organs and organizations, it shall report to the competent authority for approval in accordance with the law, and submit to the secrecy administration department for filing. Domestic Companies shall not provide accounting records to an overseas accounting firm that has not performed the corresponding procedures. Securities companies and securities service organizations shall comply with the confidentiality and archive management requirements, and keep the documents and materials properly. Securities companies and securities service institutions that provide domestic enterprises with relevant securities services for overseas issuance and listing of securities shall keep such archives they compile within the territory of the PRC and shall not transfer such archives to overseas institutions or individuals, by any means such as carriage, shipment or information technology, without the approval of the relevant competent authorities. If the archives or duplicates of such archives are of important value to the state and society and needed to be taken abroad, approval shall be obtained in accordance with relevant provisions.

However, the Draft Overseas Listing Regulations, the Draft Overseas Listing Measures and the Draft Archives Rules were released for public comment only, there remains substantial uncertainty, including but not limited to its final content, adoption timeline, effective date or relevant implementation rules. As of the date of this annual report, we cannot predict the impact of these regulations on maintain the listing status of our ADSs and/or other securities, or any of our future offerings of securities overseas

# Regulations on Foreign Investment

The PRC Foreign Investment Law, adopted by the National People's Congress on March 15, 2019 and its Implementing Regulation adopted by the State Council on December 12, 2019 became effective on January 1, 2020. Pursuant to the PRC Foreign Investment Law, China will grant national treatment to foreign invested entities, except for those foreign invested entities that operate in industries that fall within "restricted" or "prohibited" categories as prescribed in the "negative list" to be released or approved by the State Council. In addition, the Ministry of Commerce promulgated the Measures on Reporting of Foreign Investment Information, effective on January 1, 2020, which provides detailed submission requirements for foreign investors. Foreign investors carrying out investment activities in China directly or indirectly shall submit investment information to the commerce administrative authorities pursuant to these Measures.

The Ministry of Commerce and the National Development and Reform Commission jointly promulgated the Special Administrative Measures for Entrance of Foreign Investment (Negative List) (2021 Version), or the Negative List (2021 Version), which became effective on January 1, 2022. The Negative List (2021 Version) requires that any PRC domestic enterprise engaging in prohibited industries under the negative list shall obtain the consent of the relevant competent PRC authorities for overseas listing, and the foreign investors shall not participate in the Negative List (2021 Version), and operation and management of such enterprise, and the shareholding percentage of the foreign investors in such enterprise shall be subject to the relevant administrative provisions of the PRC domestic securities investment by foreign investors. Such negative list does not further elaborate whether existing overseas listed enterprise will be subject to such requirements. The staff of the National Development and Reform Commission addressed in an interview on December 27, 2021 that certain existing overseas listed enterprises whose foreign investors' shareholding percentage exceed the aforementioned threshold are not required to make adjustment or deduction. It is unclear as to whether the aforesaid provisions will apply to the companies adopting contractual arrangements.

In December 2020, the National Development and Reform Commission and Ministry of Commerce promulgated the Measures for the Security Review of Foreign Investment, which came into effect on January 18, 2021. The National Development and Reform Commission and the Ministry of Commerce will establish a working mechanism office in charge of the security review of foreign investment. Such measures define foreign investment as direct or indirect investment by foreign investors in the PRC, including (i) investment in new onshore projects or establishment of wholly foreign owned onshore companies or joint ventures with foreign investors; (ii) acquiring equity or asset of onshore companies by merger and acquisition; and (iii) onshore investment by and through any other means. Foreign investment in certain key areas with national security concerns, such as important cultural products and services, important information technology and internet products and services, key technologies and others which results in the acquisition of de facto control of invested companies, shall be filed with a specifically established office before such investment is carried out. What may constitute "onshore investment by and through any other means" or "de facto control" is not clearly defined under such measures, and could be broadly interpreted. It is likely that control through contractual arrangement be regarded as de facto control based on provisions applied to security review of foreign investment. Failure to make such filing may subject such foreign investor to rectification within a prescribed period, and the foreign investors will be negatively recorded in the relevant national credit information system, which would then subject such investors to joint punishment as provided by relevant rules. If such investor fails to or refuses to undertake such rectification, it would be ordered to dispose of the equity or asset and to take any other necessary measures so as to return to the status quo and to erase the impact to national security.

We are a Cayman Islands company and our businesses by nature in China are mainly value-added telecommunication services, which are restricted for foreign investors by the Negative List (2021 Version). We conduct business operations that are restricted for foreign investment through our VIE.

# Regulations on Telecommunications Services and Foreign Ownership Restrictions

The PRC Telecommunications Regulations, which became effective on September 25, 2000 and was latest amended on February 6, 2016, are the core regulations on telecommunications services in China. The PRC Telecommunications Regulations set out basic guidelines on different types of telecommunications business activities, including the distinction between "basic telecommunications services" and "value-added telecommunications services." According to the latest revised Catalog of Classification of Telecommunication Business, which took effect on March 1, 2016 and was amended on June 6, 2019, information services, whether provided via internet networks or public communication networks, and domestic call center services, are classified as B2 type of value-added telecommunications services. The PRC Telecommunications Regulations require the operators of value-added telecommunications services to obtain value-added telecommunications business operation licenses from MIIT or its provincial delegates prior to the commencement of such services.

The Regulations on the Administration of Foreign-Invested Telecommunications Enterprises, or the FITE Regulations, which took effect on January 1, 2002 and were amended on September 10, 2008, and February 6, 2016, respectively, are the major rules on foreign investment in telecommunications companies in China. The FITE Regulations stipulate that except as otherwise provided by the MIIT, a foreign investor is prohibited from holding more than 50% of the equity interest in a foreign-invested enterprise that provides value-added telecommunications services, including internet information services. Moreover, such foreign investor shall demonstrate a good track record and experience in operating value-added telecommunications services when a company invested by such foreign investor applies for the value-added telecommunications business operation license from the MIIT. On March 29, 2022, the Decision of the State Council on Revising and Repealing Certain Administrative Regulations, which will take effect on May 1, 2022, was promulgated to amend certain provisions of regulations including the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises (2016 Revision), the requirement for major foreign investor to demonstrate a good track record and experience in operating value-added telecommunications businesses is deleted.

On July 13, 2006, the MIIT issued the Circular on Strengthening the Administration of Foreign Investment in Value-added Telecommunications Services, or the MIIT Circular 2006, which stipulates that (a) foreign investors may only operate a telecommunications business in China through establishing a telecommunications enterprise with a valid telecommunications business operation license; (b) domestic license holders are prohibited from leasing, transferring or selling telecommunications business operation licenses to foreign investors in any form, or providing any resources, sites or facilities to foreign investors to facilitate the unlicensed operation of telecommunications business in China; (c) value-added telecommunications service provider must directly own the domain names and registered trademarks used by such service provider in their daily operations; (d) each value-added telecommunications service provider must have the necessary facilities for its approved business operations and maintain such facilities in the geographic regions covered by its license; and (e) all value-added telecommunications service providers should improve network and information security, enact relevant information safety administration regulations and set up emergency plans to ensure network and information safety. The provincial communications administration bureaus, as local authorities in charge of regulating telecommunications services, may revoke the value-added telecommunications business operation licenses of those that fail to comply with the above requirements and fail to rectify such non-compliance within specified time limits. Due to the lack of any additional interpretation from the regulatory authorities, it remains unclear what impact MIIT Circular 2006 will have on us or the other PRC internet companies with similar corporate and contractual structures.

Pursuant to the Negative List (2021 Version), foreign investors must refrain from making investment in any of the prohibited sectors specified in the Negative List (2021 Version), any PRC domestic enterprise engaging in prohibited industries under the negative list shall obtain the consent of the relevant competent PRC authorities for overseas listing, and the foreign investors shall not participate in the Negative List (2021 Version), and operation and management of such enterprise, and the shareholding percentage of the foreign investors in such enterprise shall be subject to the relevant administrative provisions of the PRC domestic securities investment by foreign investors. Such negative list does not further elaborate whether existing overseas listed enterprise will be subject to such requirements. The staff of the National Development and Reform Commission addressed in an interview on December 27, 2021 that certain existing overseas listed enterprises whose foreign investors' shareholding percentage exceed the aforementioned threshold are not required to make adjustment or deduction. In addition, foreign investors are not allowed to own more than 50% of the equity interests in a value-added telecommunications service provider (excluding e-commerce, domestic multi-party communications, store-and-forward and call center services). Nonetheless, on March 29, 2022, the Decision of the State Council on Revising and Repealing Certain Administrative Regulations, which will take effect on May 1, 2022, was promulgated to amend certain provisions of regulations including the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises (2016 Revision), the requirement for major foreign investor to demonstrate a good track record and experience in operating value-added telecommunications businesses is deleted.

To comply with such foreign ownership restrictions, we operate our businesses in China through Hexun Huagu which is owned by PRC citizens. Hexun Huagu is controlled by the WFOE, our wholly-owned subsidiary, through a series of contractual arrangements. See "Item 4. Information on the Company—C. Organizational Structure." Based on our PRC legal counsel, Han Kun Law Offices' understanding of the current PRC laws and regulations, our corporate structure complies with all applicable PRC laws and regulations in all material respects, and subject to the risks disclosed under "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure", our contractual arrangements are valid and binding on all parties to these arrangements and do not violate current PRC laws or regulations. However, we were further advised by our PRC legal counsel that there are substantial uncertainties with respect to the interpretation and application of existing or future PRC laws and regulations and whether there will be new rules issued which would establish further requirements and restrictions on our contractual arrangements. Thus, there is no assurance that Chinese governmental authorities would take a view consistent with the opinions of our PRC legal counsel.

# Internet Information Services

The Administrative Measures on Internet Information Services, or the ICP Measures, issued by the State Council on September 25, 2000 and amended on January 8, 2011, regulate the provision of internet information services. According to the ICP Measures, "internet information services" refer to services that provide internet information to online users, and are categorized as either commercial services or non-commercial services. Pursuant to the ICP Measures, internet information commercial service providers shall obtain a value-added telecommunications business operation license concerning internet information services, or the ICP License, from the relevant local authorities before engaging in the provision of any commercial internet information services in China. In addition, if the internet information services involve provision of news, publication, education, medicine, health, pharmaceuticals, medical equipment and other services that statutorily require approvals from other additional governmental authorities, such approvals must be obtained before applying for the ICP License.

We currently hold a valid value-added telecommunications business operation license through our VIE Hexun Huagu, covering the provision of internet information services and the provision of call center, issued by MIIT. Besides, the ICP Measures and other relevant measures also ban the internet activities that constitute publication of any content that propagates obscenity, pornography, gambling and violence, incite the commission of crimes or infringe upon the lawful rights and interests of third parties, among others. If an internet information service provider detects information transmitted on their system that falls within the specifically prohibited scope, such provider must terminate such transmission, delete such information immediately, keep records and report to the governmental authorities in charge. Any provider's violation of these prescriptions will lead to the revocation of its ICP License and, in serious cases, the shutting down of its internet systems.

### Short Message Services

The Administrative Provisions on Short Message Services issued by MIIT on May 19, 2015, which became effective in June 30, 2015, regulate the provisions of short message services. According to the Administrative Provisions on Short Message Services, in case of operation of short message services, a telecommunications business operating license shall be obtained in accordance with the law. The Administrative Provisions on Short Message Services further regulate that (a) short message services refer to the telecommunications services of providing the limited-length information including characters, data, voices and images for the users of such communications terminals as mobile phone and fixed-line telephone via the telecommunications network; (b) short message services providers refer to the telecommunications business operators that render the basic network services relating to sending, storage, forwarding and receipt of short messages and take advantage of basic network facilities and services to offer a platform for sending short messages for other organizations and individuals (including but not limited to the operators of the basic telecommunications business and the information service business and mobile communications resale business among the value-added telecommunications business).

We currently hold a valid value-added telecommunications business operation license through our VIE Hexun Huagu covering information services of the B2 type of value-added telecommunication business (excluding Internet information services) issued by the MIIT.

### Regulations on Mobile Internet Applications

In June 2016, the Cyberspace Administration of China promulgated the Administrative Provisions on Mobile Internet Application Information Services, or the Mobile Application Administrative Provisions, which entered into force on August 1, 2016. Pursuant to the Mobile Application Administrative Provisions, a mobile internet app refers to an app software that runs on mobile smart devices providing information services after being pre-installed, downloaded or embedded through other means. Mobile internet app providers refer to the owners or operators of mobile internet apps.

Pursuant to the Mobile Application Administrative Provisions, a mobile internet app provider must not enable functions that can collect a user's geographical location information, access user's contact list, activate the camera or recorder of the user's mobile smart device or other functions irrelevant to its services, nor is it allowed to conduct bundle installations of irrelevant app programs, unless it has clearly indicated to the user and obtained the user's consent on such functions and app programs. If an app provider violates the regulations, the internet app store service provider must take measures to stop the violations, including giving a warning, suspension of release, withdrawal of the app from the platform, keeping a record of the incident and reporting the incident to the relevant governmental authorities.

### Regulations on Advertising Business

The PRC government regulates advertising, including online advertising, principally through the State Administration for Market Regulation, or SAMR. The PRC Advertising Law, as amended in April 2015, October 2018 and April 2021, outlines the regulatory framework for the advertising industry, and allows foreign investors to own up to all equity interests in PRC advertising companies.

We conduct advertising business through our VIE in China and holds a business license that covers advertising in its business scope. Our targeted marketing business may be subject to the PRC Advertising Law and related regulations.

Advertisers, advertising operators and advertising distributors are required by the PRC Advertising Law to ensure that the contents of the advertisements they prepare or distribute are true and in full compliance with applicable laws and regulations. For example, pursuant to the PRC Advertising Law, advertisements must not contain, among other prohibited contents, terms such as "the state-level," "the highest grade," "the best" or other similar words. In addition, where a special government review is required for certain categories of advertisements before publishing, the advertisers, advertising operators and advertising distributors are obligated to confirm that such review has been performed and the relevant approval has been obtained.

In addition to the above regulations, the Interim Measures for the Administration of Internet Advertising, effective on September 1, 2016, or the Internet Advertising Measures, also set forth certain compliance requirements for online advertising businesses. Pursuant to the PRC Advertising Law and the Internet Advertising Measures, the use of the internet to distribute advertisements shall not affect the normal use of the internet by users. Particularly, advertisements distributed on internet pages such as pop-up advertisements shall be indicated with a conspicuous mark for "close" to ensure the close of such advertisements by one click. Where internet information service providers know or should know that illegal advertisements are being distributed using their services, they shall prevent such advertisements from being distributed.

Further, the Internet Advertising Measures provide that all online advertisements must be marked "advertisement" so that consumers can distinguish them from non-advertisement information. Moreover, the Internet Advertising Measures require that, among other things, sponsored search advertisements shall be prominently distinguished from normal research results and it is forbidden to send advertisements or advertisement links by email without the recipient's permission or induce internet users to click on an advertisement in a deceptive manner. Besides, advertising operators and distributors of internet advertisements must examine, verify and record identity information, such as name, address and contact information, of advertisers, and maintain an updated verification record on a regular basis. Moreover, advertising operators and advertising distributors must examine supporting documentation provided by advertisers and verify the contents of the advertisements against supporting documents before publishing. If the contents of advertisements are inconsistent with the supporting documentation, or the supporting documentation is incomplete, advertising operators and distributors must refrain from providing design, production, agency or publishing services. The Internet Advertising Measures also prohibit the following activities: (i) providing or using apps and hardware to block, filter, skip over, tamper with, or cover up lawful advertisements; (ii) using network access, network equipment and apps to disrupt the normal transmission of lawful advertisements or adding or uploading advertisements without authorization; and (iii) harming the interests of a third party by using fake statistics or traffic data.

On November 26, 2021, the SMAR promulgated the draft of the Measures for the Administration of Internet Advertisements for public comment until December 25, 2021. The draft measures further strengthen the management of pop-up advertisements and product placement, and require that, among others, advertisement of after-school tutoring targeted at pre-school children and primary and middle school students shall not be released via the Internet. The Internet platform operators are obliged to cooperate with advertising monitoring and assist in supervision and provide statistical data.

Violation of these regulations may result in penalties, including fines, confiscation of advertising income, orders to cease dissemination of the advertisements and orders to publish an advertisement correcting the misleading information. In the case of serious violations, the SAMR or its local branches may force the violator to terminate its advertising operation or even revoke its business license. Furthermore, advertisers, advertising operators or advertising distributors may be subject to civil liability if they infringe on the legal rights and interests of third parties.

### Regulations on Information Security

The PRC government has enacted laws and regulations with respect to internet information security. Internet information in China is regulated and restricted from a national security standpoint. On December 28, 2000, the Standing Committee of the National People's Congress enacted the Decision on the Protection of Internet Security, as amended on August 27, 2009, which imposes criminal penalties for any effort 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. In addition, the Ministry of Public Security has promulgated the Administrative Measures on Security Protection for International Connections to Computer Information Networks on December 16, 1997 and amended it on January 8, 2011, prohibiting use of the internet in ways which result in a leak of state secrets or a spread of socially destabilizing content, among other things. If an internet information service provider violates any of these measures, competent authorities may revoke its operating license and shut down its websites.

The PRC Cyber Security Law, which was promulgated on November 7, 2016 and took effect on June 1, 2017, requires a network operator, including internet information services providers among others, to adopt technical measures and other necessary measures in accordance with applicable laws and regulations as well as compulsory national and industrial standards to safeguard the safety and stability of network operations, effectively respond to network security incidents, prevent illegal and criminal activities, and maintain the integrity, confidentiality and availability of network data. The PRC Cyber Security Law emphasizes that any individuals and organizations that use networks must not endanger network security or use networks to engage in unlawful activities such as those endangering national security, economic order and the social order or infringing the reputation, privacy, intellectual property rights and other lawful rights and interests of others. Any violation of the provisions and requirements under the PRC Cyber Security Law may subject an internet service provider to warnings, fines, confiscation of illegal gains, revocation of licenses, cancellation of filings, closedown of websites or even criminal liabilities.

On April 29, 2021, the Standing Committee of the National Peoples' Congress issued a Second Draft for review of the Personal Information Protection Law, or the Draft Personal Information Protection Law, which integrates the scattered rules with respect to personal information rights and privacy protection. The PRC Data Security Law, which was promulgated by the Standing Committee of the National People's Congress on June 10, 2021 and took effect on September 1, 2021, requires data processing (which includes the collection, storage, use, processing, transmission, provision, publication of data, etc.) to be conducted in a legitimate and proper manner. The PRC Data Security Law provides for data security and privacy obligations on entities and individuals carrying out data activities. The PRC Data Security Law also introduces a data classification and hierarchical protection system based on the importance of data in economic and social development, and the degree of harm it shall cause to national security, public interests, or legitimate rights and interests of individuals or organizations if such data are tampered with, destroyed, leaked, illegally acquired or illegally used. The appropriate level of protection measures is required to be taken for each respective category of data. For example, a processor of important data is required to designate the personnel and the management body responsible for data security, carry out risk assessments of its data processing activities and file the risk assessment reports with the competent authorities. Moreover, the PRC Data Security Law provides a national security review procedure for those data activities which may affect national security and imposes export restrictions on certain data and information. As the PRC Data Security Law was recently promulgated and has not yet taken effect, we may be required to make further adjustments to our business practices to comply with this law, as well as any adjustments that may be required by the ultimate Personal Information Pro

On December 28, 2021, the CAC and several other regulatory authorities in China jointly promulgated the Cybersecurity Review Measures, which came into effect on February 15, 2022. Pursuant to the Cybersecurity Review Measures, (i) where the relevant activity affects or may affect national security, a CIIO that purchases network products and services, or an internet platform operator that conducts data process activities, shall be subject to the cybersecurity review, (ii) an application for cybersecurity review shall be made by an issuer who is an internet platform operator holding personal information of more than one million users before such issuer applies to list its securities on a foreign stock exchange, and (iii) relevant governmental authorities in the PRC may initiate cybersecurity review if they determine an operator's network products or services or data processing activities affect or may affect national security. Namely, the scope of review under the Cybersecurity Review Measures extend to critical information infrastructure operators (CIIO), data processors carrying out data processing activities, and national security risks related to a non-PRC listing, especially the "risks of core data, important data or substantial personal information being stolen, leaked, damaged, illegally used or exported; risks of Critical Information Infrastructure, core data, important data or substantial personal information data being affected, controlled and maliciously used by foreign governments after a foreign listing."

Our VIE, Hexun Huagu, is an internet information services provider, and is therefore subject to the regulations relating to information security. Hexun Huagu has adopted data security, data recovery and backup measures to comply with these regulations and holds valid information security management system certificate of conformity issued by Beijing Zhong-An-Zhi-Huan Certification Center. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicable laws relating to privacy and cybersecurity. The improper use or disclosure of data could have a material and adverse effect on our business and prospects" and "—Security and privacy breaches may hurt our business."

### Regulations on Personal Information Protection

In December 2012, the Standing Committee of the NPC promulgated the Decision on Strengthening Network Information Protection, or the Network Information Protection Decision, to enhance the legal protection of information security and privacy on the internet. The Network Information Protection Decision also requires internet operators to take measures to ensure confidentiality of information of users. In July 2013, the MIIT promulgated the Provisions on Protection of Personal Information of Telecommunication and Internet Users to regulate the collection and use of users' personal information in the provision of telecommunication service and internet information service in China. In August 2015, the Standing Committee of the NPC promulgated the Ninth Amendment to the Criminal Law, which became effective in November 2015 and amended the standards of crime of infringing citizens' personal information and reinforced the criminal culpability of unlawful collection, transaction, and provision of personal information. It further provides that any ICP provider that fails to fulfill the obligations related to internet information security administration as required by applicable laws and refuses to rectify upon orders will be subject to criminal liability. In November 2016, the Standing Committee of the NPC promulgated the PRC Cyber Security Law, which requires, among others, that network operators take security measures to protect the network from unauthorized interference, damage and unauthorized access and prevent data from being divulged, stolen or tampered with. Network operators are also required to collect and use personal information in compliance with the principles of legitimacy, properness and necessity, and strictly within the scope of authorization by the subject of personal information unless otherwise prescribed by laws or regulations. The Civil Code promulgated in 2020 also provides specific provisions regarding the protection of personal information.

On July 30, 2021, the State Council Promulgated the Provisions on Protection of Critical Information Infrastructure, or the CII Regulation, which became effective on September 1, 2021. According to the CII regulation, a critical information infrastructure, or CII, refers to an important network facility or information system in important industries and fields such as public communication and information services, energy, transportation, water conservancy, finance, public services, e-government, and national defense technology industry, among others. CII also refers to other important network facilities and information systems that may seriously endanger national security, national economy, people's livelihood, and public interests in the event of damage, loss of function, or data leakage. The competent departments and supervision and management departments of the aforementioned important industries and fields are the departments responsible for the CII security protection work. They will be responsible for organizing the identification of CIIs in their respective industries or fields in accordance with the identification rules, promptly notifying the CII operators of the identification results, and notifying the public security department of the State Council.

The Standing Committee of the National People's Congress promulgated the Personal Information Protection Law of the People's Republic of China, or the Personal Information Protection Law, on August 20, 2021, which entered into force on November 1, 2021. According to the Personal Information Protection Law, personal information refers to all kinds of information, recorded by electronic or other means, that is related to identified or identifiable natural persons, but excludes anonymized information. Personal information handling should follow the principles of legality, rightness, necessity, and integrity. Moreover, the Personal Information Protection Law specifies the rules for handling sensitive personal information, which refers to personal information that, once leaked or illegally used, may easily cause harm to the dignity of natural persons or cause grave harm to personal or property security, including biometric characteristics, financial accounts, individual location tracking, and personal information of minors under the age of 14, among others. Personal information handlers shall bear the responsibility for their personal information handling activities, and adopt necessary measures to safeguard the personal information they handle. Otherwise, the personal information handlers will be ordered to correct their behaviors, or suspend or terminate the provision of services, and may be subject to confiscation of illegal income, fines or other penalties.

As an internet information services provider, our VIE, Hexun Huagu, is subject to these laws and regulations relating to protection of personal information. Hexun Huagu has adopted a series of measures in order to comply with relevant laws and regulations relating to the protection of personal information. It enters into a service agreement with each app developer that uses our developer services in their mobile apps and displays privacy policies on its official website. The service agreement as well as the privacy policies require each app developer to obtain consent from the end users of its apps in connection with data collection and use pursuant to the PRC Cyber Security Law and related laws and regulations. We periodically check the app developers' own agreements with their end users on a sampling basis, and we remind the app developers to rectify the situation where we find instances of non-compliance with the service agreements with Hexun Huagu. Moreover, once the original mobile behavioral data is collected through developer services, our data processing platform immediately stores, cleanses, structures and encrypts the data, and we then utilize AI and machine learning technologies to conduct modeling exercises and data mining and develop SAAS Businesses and targeted marketing that offer industry-specific, actionable insights for customers, in aggregated and anonymized form. In addition, we have adopted rigorous data security measures to prevent our data from unauthorized access or use or being retrieved to establish any connection with the device owners' identities. While we take all these measures to comply with all applicable data privacy and protection laws and regulations, we cannot guarantee the effectiveness of the measures undertaken by us, app developers and business partners. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicabl

### Regulations on Privacy Protection

The PRC Constitution states that PRC law protects the freedom and privacy of communications of citizens and prohibits infringement of these rights. In recent years, PRC government authorities have enacted laws and regulations on internet use to protect personal information from any unauthorized disclosure and use.

Pursuant to the Several Provisions on Regulating the Market Order of Internet Information Service issued by the MIIT in December 2011 and took effect on March 15, 2012, an internet information service operator cannot collect any user personal information or provide any such information to third parties without the consent of such user. An internet information service operator must expressly inform each user of the method, content and purpose of the collection and processing of such user's personal information and may only collect such information necessary for the provision of its services. An internet information service operator is also required to properly maintain the user personal information, and in case of any leak or potential leak of the user personal information, the internet information service operator must take immediate remedial measures and, in severe circumstances, make an immediate report to the telecommunication regulatory authority.

Pursuant to the Decision on Strengthening the Protection of Online Information issued by the Standing Committee of the PRC National People's Congress on December 28, 2012 and the Order for the Protection of Telecommunication and Internet User Personal Information issued by the MIIT on July 16, 2013, any collection and use of user personal information must be subject to the consent of the user, abide by the principles of legality, rationality and necessity and be within the specified purposes, methods and scopes. "Personal information" is defined in these regulations as information that identifies a citizen, the time or location for his use of telecommunication and internet services, or involves privacy of any citizen such as his name, birth date, ID card number, address, telephone number, accounts and passwords. An internet services provider must also keep information collected strictly confidential, and is further prohibited from divulging, tampering or destroying of any such information, or selling or providing such information to other parties. Any violation of the above decision or order may subject the internet service provider to warnings, fines, confiscation of illegal gains, revocation of licenses, cancellation of filings, closedown of websites or even criminal liabilities.

Pursuant to the Ninth Amendment to the PRC Criminal Law issued by the Standing Committee of the PRC National People's Congress in August 2015, which became effective in November 2015, any internet service provider that fails to fulfill the obligations related to internet information security administration as required by applicable laws and refuses to rectify upon orders, shall be subject to criminal penalty for the result of (i) any dissemination of illegal information in large scale; (ii) any severe effect due to the leakage of the client's information; (iii) any serious loss of criminal evidence; or (iv) other severe situation, and any individual or entity that (i) sells or provides personal information to others in a way violating the applicable law, or (ii) steals or illegally obtains any personal information, shall be subject to criminal penalty in severe situation.

To further regulate cyber security and privacy protection, the PRC Cyber Security Law, which entered into force on June 1, 2017 provides that: (i) to collect and use personal information, network operators shall follow the principles of legitimacy, rightfulness and necessity, disclose their rules of data collection and use, clearly express the purposes, means and scope of collecting and using the information, and obtain the consent of the persons whose data is gathered; (ii) network operators shall neither gather personal information unrelated to the services they provide, nor gather or use personal information in violation of the provisions of laws and administrative regulations or the scopes of consent given by the persons whose data is gathered; and shall dispose of personal information they have saved in accordance with the provisions of laws and administrative regulations and agreements reached with users; (iii) network operators shall not divulge, tamper with or damage the personal information they have collected, and shall not provide the personal information to others without the consent of the persons whose data is collected. However, if the information has been processed and cannot be recovered and thus it is impossible to match such information with specific persons, such circumstance is an exception.

According to the PRC Cyber Security Law, personal information refers to all kinds of information recorded by electronic or otherwise that can be used to independently identify or be combined with other information to identify natural persons' personal information including but not limited to: natural persons' names, dates of birth, ID numbers, biologically identified personal information, addresses and telephone numbers, etc. Any internet information services provider that violates these privacy protection requirements under the PRC Cyber Security Law and related laws and regulations may be ordered to turn in illegal gains generated from unlawful operations and pay a fine of no less than one but no mor

On January 23, 2019, the Office of the Central Cyberspace Affairs Commission and three other governmental authorities jointly issued the Circular on the Special Campaign of Correcting Unlawful Collection and Usage of Personal Information via Apps. Pursuant to this circular, (i) app operators are prohibited from collecting any personal information irrelevant to the services provided by such operator; (ii) information collection and usage policy should be presented in a simple and clear way, and such policy should be consented by the users voluntarily; and (iii) authorization from users should not be obtained by coercing users with default or bundling clauses or making consent a condition of a service. App operators violating such rules may be ordered by authorities to correct their incompliance within a specified period of time, be reported to the general public, or even be ordered to cease their operation or have their business license or operational permits revoked. In addition, the Provisions on the Cyber Protection of Children's Personal Information issued by the Office of the Central Cyberspace Affairs Commission came into effect on October 1, 2019, which requires, among others, that network operators who collect, store, use, transfer and disclose personal information of children under the age of 14 establish special rules and user agreements for the protection of children's personal information, inform the children's guardians in a noticeable and clear manner, and shall obtain the consent of the children's guardians. Furthermore, the authorities issuing the circular has pledged to initiate a campaign to correct unlawful collection and usage of personal information via apps from January 2019 through December 2019.

On November 28, 2019, the Secretary Bureau of the Cyberspace Administration of China together with other three agencies jointly promulgated the Identification Methods of Illegal Collection and Use of Personal Information through Apps, or the Identification Methods, which provides guidance for regulators to identify the illegal collection and use of personal information through mobile apps, and for app operators to operate self-assessment and correction of incompliance. The Identification Methods outline specific practices that may be identified as six circumstances. including but not limited to collecting or using personal information without the consent of end users, and providing others with personal information without the consent of end users. According to the Identification Methods, nine types of practices may be identified as collecting or using personal information without the consent of end users, including (i) commencing the collection of personal information or opening the authority to collect personal information before obtaining the consent of users, (ii) collecting personal information or opening the authority to collect personal information after receiving the user's disagreement or asking for the user's consent frequently while interfering with the normal use of a user, (iii) collecting personal information or opening the authority for collectable personal information beyond the scope of users' authorization, (iv) obtaining the users' consent by non-express means, (v) changing the authority status for collection of personal information set by a user without the user's consent, (vi) utilizing users' personal information and algorithms to push information from targeted sources, but failing to provide options for non-targeted push information, (vii) misleading users into agreeing to collect personal information or open the authority to collect personal information by fraud, deception or other improper means, (viii) failing to provide users with channels and methods for withdrawing consent to collect personal information, and (ix) collecting and using personal information in violation of its stated collection and use rules; three types of practices may be identified as providing others with personal information without the consent of a user, including: (i) an app directly providing personal information for a third party without the consent of a user and without anonymization, (ii) an app providing a third party with the personal information it has collected after the data is transmitted to the background server of the app without the consent of a user and without anonymization, and (iii) an app that is linked with a third-party application providing personal information to the third-party application without the consent of users.

On May 28, 2020, the PRC National People's Congress approved the Civil Code of the PRC or the Civil Code, which came into effect on January 1, 2021 and repealed the General Rules of the Civil Law. Pursuant to the Civil Code, the personal information of a natural person shall be protected by the laws. Any organization or individual that needs to obtain personal information of others shall obtain such information legally 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. Furthermore, information processors shall not divulge or tamper with personal information collected or stored by them; without the consent of a natural person, information processors shall not illegally provide personal information of such person to others, except for information that has been processed so that specific persons cannot be identified and that cannot be restored. In addition, an information processor shall take technical measures and other necessary measures to ensure the security of the personal information that is collected and stored and to prevent the information from being divulged, tampered with or lost; where personal information has been or may be divulged, tampered with or lost, the information processor shall take remedial measures in a timely manner, inform the natural person concerned in accordance with the provisions and report the case to the relevant competent department.

On March 12, 2021, the CAC and three other authorities jointly issued the Rules on the Scope of Necessary Personal Information for Common Types of Mobile Internet Applications, which became effective on May 1, 2021. The Rules specifies the scope of necessary personal information to be collected each for a variety of common mobile internet applications, such as maps and navigation apps, online ride-hailing apps, instant messaging apps, online community apps. Operators of such apps shall not refuse to provide basic services to users on the ground of users' refusal to provide their personal non-essential information. On April 26, 2021, the MIIT issued the Interim Administrative Provisions on Personal Information Protection in Internet Mobile Applications (Draft for Comment). The draft of the Interim Administrative Provisions on Personal Information Protection in Internet Mobile Applications sets forth two principles of collection and utilization of personal information, namely "explicit consent" and "minimum necessity."

And the legislation construction of personal information protection has sped up, on August 20, 2021, the Standing Committee of the National People's Congress adopted the Personal Information Protection Law which took effect on November 1, 2021. The Personal Information Protection Law requires, among others, that (i) the processing of personal information should have a clear and reasonable purpose which should be directly related to the processing purpose, in a method that has the least impact on personal rights and interests, and (ii) the collection of personal information should be limited to the minimum scope necessary to achieve the processing purpose to avoid the excessive collection of personal information. Different types of personal information and personal information processing will be subject to various rules on consent, transfer, and security. Entities handling personal information shall bear responsibilities for their personal information handling activities, and adopt necessary measures to safeguard the security of the personal information they handle. The entities failing to comply could be ordered to correct, or suspend or terminate the provision of services, and face confiscation of illegal income, fines or other penalties.

As an internet information services provider, our VIE Hexun Huagu is subject to these laws and regulations relating to protection of personal information. Although Hexun Huagu only gains access to anonymous device-level mobile behavioral data that is necessary for, and relevant to, the services provided, and the data we obtain and use may include information that is deemed as "personal information" under the PRC Cyber Security Law and related data privacy and protection laws and regulations. Hexun Huagu has adopted a series of measures in order to comply with relevant laws and regulations relating to the protection of personal information. It enters into a service agreement with each app developer that uses our developer services in their mobile apps and displays privacy policies on its official website. The service agreement as well as the privacy policies require each app developer to obtain consent from the end users of its apps in connection with data collection and use pursuant to the PRC Cyber Security Law and related laws and regulations. We periodically check the app developers' own agreements with their end users on a sampling basis, and we remind the app developers to rectify the situation where we find instances of non-compliance with the service agreements with Hexun Huagu. Moreover, once the original mobile behavioral data is collected through developer services, our data processing platform immediately stores, cleanses, structures and encrypts the data, and we then utilize AI and machine learning technologies to conduct modeling exercises and data mining and develop SAAS Businesses and targeted marketing that offer industry-specific, actionable insights for customers, in aggregated and anonymized form. In addition, we have adopted rigorous data security measures to prevent our data from unauthorized access or use or being retrieved to establish any connection with the device owners' identities. While we take all these measures to comply with all applicable data privacy and protection laws and regulations, we cannot guarantee the effectiveness of the measures undertaken by us, app developers and business partners. See "Item 3. Key Information—D. Risk Factors— Risks Related to Our Business and Industry—Our and our VIE's business generates and processes a large amount of data, and we are required to comply with PRC and other applicable laws relating to privacy and cybersecurity. The improper use or disclosure of data could have a material and adverse effect on our business and prospects."

### Regulations on Foreign-related Investigation

On October 13, 2004, the National Bureau of Statistics promulgated the Measures on the Administration of Foreign-related Investigations, to regulate and administrate the foreign-related investigations. According to the Measures on the Administration of Foreign-related Investigations, no individual and no organization without a foreign-related investigation license may conduct any foreign-related investigation in any form, and foreign-related investigations include: (i) market and social investigations conducted under the entrustment or financial aid of any foreign organization, individual or the agency in the PRC of any foreign organization; (ii) market and social investigations lawfully conducted by the agency in the PRC of any foreign organization; and (iv) market and social investigations of which the materials and results are to be provided to any foreign organization, individual or the agency in the PRC of any foreign organization.

Our VIE Hexun Huagu provides mobile app data analysis product to both domestic and foreign financial industry clients. Except for the general descriptions of market and social investigation defined in the relevant PRC laws or regulations, there is no further clarification or specific guidance on the characteristics and scope of "foreign-related investigations." Due to the lack of further interpretation of the relevant rules, it is uncertain whether Hexun Huagu is required to obtain a license for our business. To be prudent, our VIE obtained a foreign-related investigation license in March 2019.

### Regulations on Anti-Monopoly

The Anti-Monopoly Law took effect on 1 August 2008. Before the 2018 Institutional Reform Plan, the National Development and Reform Commission, the State Administration for Industry and Commerce, or the SAIC, and the Ministry of Commerce were the three PRC anti-monopoly enforcement authorities and the NDRC and the SAIC, had in recent years strengthened enforcement actions, including levying significant fines, with respect to cartel activity as well as abusive behavior of companies having market dominance. According to the 2018 Institutional Reform Plan, the anti-monopoly functions performed by the NDRC, the SAIC, and the Ministry of Commerce were consolidated into the SAMR, which may place a profound impact on the PRC anti-monopoly law enforcement practice. In November, 2021, the National Anti-monopoly Bureau was inaugurated by the State Council, which aims to further implement the fair competition policies, and strengthen anti-monopoly supervision in the PRC, especially to strengthen oversight and law enforcement in areas involving platform economy, innovation, science and technology, information security and people's livelihood.

In addition, on February 3, 2011, the General Office of the State Council promulgated a Notice on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or Circular 6, which officially established a security review system for mergers and acquisitions of domestic enterprises by foreign investors. Further, on August 25, 2011, Ministry of Commerce promulgated the Regulations on Implementation of Security Review System for the Merger and Acquisition of Domestic Enterprises by Foreign Investors, or the Security Review Regulations, which became effective on September 1, 2011, to implement Circular 6. Under Circular 6, a 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 Security Review Regulations, 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 Ministry of Commerce decides that a specific merger or acquisition is subject to security review, it will submit it to the Inter-Ministerial Panel, an authority established under the Circular 6 led by the NDRC, and Ministry of Commerce under the leadership of the State Council, to carry out the security review. The regulations prohibit foreign investors from bypassing the security review by structuring transactions through trusts, indirect investments, leases, loans, control through contractual arrangements or offshore transactions.

The Anti-Monopoly Law also provides a private right of action for competitors or users to bring anti-monopoly claims against companies. In recent years, an increased number of companies have been exercising their right to seek relief under the Anti-Monopoly Law. As public awareness of the rights under the Anti-Monopoly Law increases, more companies, including our competitors, business partners and customers, may resort to the remedies under the law to improve their competitive position, regardless of the merits of their claims. On 2 January 2020, the Draft Amendment to the Anti-Monopoly Law (Draft for Comment), or the Draft Amendment was issued by SAMR to seek public comments. Among others, the Draft Amendment provides that when determining an operator's dominant market position in the field of Internet, network effect, economies of scale, lock-in effect and the ability of mastering and processing relevant data would be expressly taken into consideration, and further substantially raises maximum fines in gun-jumping cases to 10% of the sales revenue of the previous year. On 23 October 2021, the SCNP Congress issued a new Draft Amendment to the Anti-Monopoly Law (Revised Draft for Comment), or the Revised Draft Amendment to seek public comments. Among others, the Revised Draft Amendment provides that the State Council anti-monopoly enforcement agency may order the operators to stop the implementation of the concentration, to dispose of shares, assets, and the business within a period of time, or take other necessary measures to restore the state before the concentration, if operators have implemented the concentration and have or may have the effect of excluding or limiting competition. And a fine up to RMB 5,000,000 may be imposed on operators if the concentration does not have the effect of excluding or limiting competition.

On February 7, 2021, the Anti-Monopoly Committee of the State Council promulgated the Anti-monopoly Guidelines for the Platform Economy Sector, or the Anti-monopoly Guideline, aiming to improve anti-monopoly administration on online platforms. The Anti-monopoly Guideline, operating as the compliance guidance under the existing PRC anti-monopoly regulatory regime for platform economy operators, specifically prohibits certain acts of the platform economy operators that may have the effect of eliminating or limiting market competition, such as concentration of undertakings.

### Regulations on Credit Reporting

In accordance with the Administrative Regulations on Credit Reporting Industry issued by the State Council on January 21, 2013 and entered into force on March 15, 2013, a credit reporting company that engages in individual credit reporting business shall obtain the individual credit reporting business license. Individual credit reporting business refers to activities in which credit information on individuals are collected, sorted, stored, processed and provided to users, and shall be supervised and regulated by the People's Bank of China and its local resident offices. The Administrative Regulations on Credit Reporting Industry does not contain any explanation to "personal credit information", but the People's Bank of China holds in the Provisional Rules on Management of the Individual Credit Information Database that "individual credit information" covers basic individual information, individual information on loans and transactions and any other information that may reflect the individual credit situation. "Basic individual information" refers to such information as the identity information of a natural person, career and habitation address. "Individual information on loans and transactions" refers to the transactional records as provided by commercial banks, which are formed in the credit activities of natural persons such as loans, credit cards, semi credit cards and guaranty. "Any other information that may reflect the individual credit standing" refers to the relevant information that reflects the individual credit information, apart from the information on loans and transactions.

Our VIE Hexun Huagu provides financial risk management solutions to its customers. Due to the lack of further interpretations of the current regulations governing personal credit reporting businesses, the exact definition and scope of "information related to credit standing" and "personal credit reporting business" under the current regulations are unclear, it is uncertain whether financial risk management solutions Hexun Huagu provides would be deemed to engage in personal credit reporting business. Hexun Huagu confirms that it has never provided credit information related to the mobile terminal user, such as credit transaction information, default frequency information, asset information, liability information, etc. to the customer, and as of the date of this annual report, has not been subject to any fines or other penalties under any PRC laws or regulations related to personal credit reporting business. However, given the evolving regulatory environment of the personal credit reporting industry, we cannot assure you that Hexun Huagu will not be required in the future by the relevant governmental authorities to obtain approval or license for personal credit reporting business in order to continue offering its financial risk management solutions.

# Regulations on Intellectual Property Rights

Software Registration

The State Council and National Copyright Administration, or the NCA, have promulgated various rules and regulations and rules relating to protection of software in China, including the Regulations on Protection of Computer Software promulgated by State Council on January 30, 2013 and effective since March 1, 2013, and the Measures for Registration of Copyright of Computer Software promulgated by NCA on February 20, 2002 and effective since the same date. According to these rules and regulations, software owners, licensees and transferees may register their rights in software with the NCA or its local branches and obtain software copyright registration certificates. Although such registration is not mandatory under PRC law, software owners, licensees and transferees are encouraged to go through the registration process and registered software rights may be entitled to better protections. As of December 31, 2021, we have registered copyrights to 92 software programs in China.

### Artwork Copyrights

The Copyright Law of the PRC, adopted in 1990 and revised in 2001, 2010 and 2020 respectively, or the Copyright Law, and its implementing regulations adopted in 2002 and amended in 2011 and 2013, also provide that Chinese citizens, legal persons, or other organizations will, whether published or not, enjoy copyright in their works, which include music works. Copyright will generally be conferred upon the authors, or in case of works made for hire, upon the employer of the author. Copyright holders enjoy personal and economic rights. The personal rights of a copyright holder include rights to publish works, right to be named as the author of works, right to amend the works and right to keep the works intact; while economic rights of a copyright holder include, but not limited to, reproduction right, distribution right, performance right, information network dissemination right, etc. In accordance with the Provisional Measures on Voluntary Registration of Works which came into effect on January 1, 1995, a piece of work may be voluntarily registered with the provincial counterpart of the National Copyright Administration. The registration certificate issued by the authority will serve as a preliminary evidence of ownership when copyrights disputes arise from the underlying works. As of December 31, 2021, we have registered four artwork copyrights.

### Domain Name

In September 2002, China Internet Network Information Center, or the CNNIC issued the Implementing Rules for Domain Name Registration setting forth detailed rules for registration of domain names, which were amended on May 29, 2012. On November 5, 2004, the MIIT promulgated the Measures for Administration of Domain Names for the Chinese Internet, or the Domain Name Measures. The Domain Name Measures regulate the registration of domain names, such as the top level domain name ".cn." On August 24, 2017, MIIT promulgated Administrative Measures for Internet Domain Names, which became effective as of November 1, 2017 and replaced the Measures on Administration of Domain Names for the Chinese Internet issued by the MIIT on November 5, 2004, which adopt "first to file" rule to allocate domain names to applicants, and provide that the MIIT shall supervise the domain names services nationwide and publicize PRC's domain name system. The efforts to undertake internet domain name services as well as the operation, maintenance, supervision and administration thereof and other relevant activities within the territory of the PRC shall thereafter be made in compliance with Administrative Measures for Internet Domain Names. On May 28, 2012, the CNNIC issued a circular, which was amended on June 18, 2019, to authorize a domain name dispute resolution institution acknowledged by the CNNIC to decide relevant disputes. On January 1, 2018, the Circular of the Ministry of Industry and Information Technology on Regulating the Use of Domain Names in Providing Internet-based Information Services issued by the MIIT became effective, which stipulated that an internet access service provider shall, pursuant to requirements stated in the Anti-Terrorism Law of the PRC and the PRC Cybersecurity Law, verify the identities of internet-based information service providers, and the internet access service providers shall not provide access services for those who fail to provide their real identity information. As of December 31, 2021, we have reg

#### Trademark

The PRC Trademark Law, adopted in 1982 and latest amended in 2019, with its implementation rules adopted in 2002 and amended in 2014, protects registered trademarks. The Trademark Office of the National Intellectual Property Administration handles trademark registrations and grants a protection term of ten years to registered trademarks. Trademark license agreements must be filed with the Trademark Office for record. As of December 31, 2021, we have registered 55 trademarks and had filed 37 trademark applications in China.

#### Patent

The Standing Committee of the National People's Congress adopted the PRC Patent Law in 1984 and amended it in 1992, 2000, 2008 and 2020, respectively. In addition, the State Council promulgated the Implementing Rules of the Patent Law in 2001, as amended in 2002 and 2010 respectively, pursuant to which a patentable invention, utility model or design 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 and a ten-year term for a utility model or design, starting from the application date. 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. As of December 31, 2021, we have registered 20 patents and are in process of applying for 59 patents in China.

### Regulations on Internet Infringement

Pursuant to the Civil Code, an internet user or an internet service provider that infringes upon the civil rights or interests of others through using the internet assumes tort liability. If an internet user infringes upon the civil rights or interests of another through using the internet, the person being infringed upon has the right to notify and request the internet service provider whose internet services are facilitating the infringement to take necessary measures including the deletion, blocking or disconnection of an internet link. The notice shall include the preliminary evidence for the infringement and the true identity information of the right holder. Where an internet service provider knows or should have known that an internet user is infringing upon another person's civil rights and interests through its internet service but fails to take necessary action, it shall assume joint and several liability with the internet user. According to the Civil Code, civil rights and interests include the personal rights of property, such as the right to life, right to health, right to name, right to reputation, right to honor, right of portraiture, right of privacy, right of marital autonomy, right of guardianship, right to ownership, right to usufruct, right to security interests, copyright, patent right, exclusive right to use trademarks, right to discovery, right to equity interests and right of heritage, among others.

### Regulations on Foreign Currency Exchange

Foreign Currency Exchange

Pursuant to the Foreign Currency Administration Rules, as amended, and various regulations issued by SAFE and other relevant PRC government authorities, Renminbi is freely convertible to the extent of current account items, such as trade related receipts and payments, interest and dividends. Capital account items, such as direct equity investments, loans and repatriation of investment, unless expressly exempted by laws and regulations, still require prior approval from SAFE or its provincial branch for conversion of Renminbi into a foreign currency, such as U.S. dollars, and remittance of the foreign currency outside of the PRC. After a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, became effective on June 1, 2015, instead of applying for approvals regarding foreign exchange registrations of foreign direct investment and overseas direct investment from SAFE, entities and individuals will be required to apply for such foreign exchange registrations from qualified banks. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration.

Payments for transactions that take place within the PRC must be made in Renminbi. Foreign currency revenues received by PRC companies may be repatriated into China or retained outside of China in accordance with requirements and terms specified by SAFE.

Foreign Exchange Registration of Offshore Investment by PRC Residents

Pursuant to SAFE's Notice on Relevant Issues Concerning Foreign Exchange Administration for PRC Residents to Engage in Financing and Inbound Investment via Overseas Special Purpose Vehicles, or SAFE Circular 75, which became effective on November 1, 2005, PRC residents, including PRC resident natural persons or PRC companies, must register with local branches of SAFE in connection with their direct or indirect offshore investment in an overseas special purpose vehicle, or SPV, for the purposes of overseas equity financing activities, and to update such registration in the event of any significant changes with respect to that offshore company. SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular 37, on July 4, 2014, which replaced SAFE Circular 75. SAFE Circular 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, 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, referred to in SAFE Circular 37 as a "special purpose vehicle." The term "control" under SAFE Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as an increase or decrease of capital contributed by PRC individuals, a share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with the SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. We have notified holders of common shares of our company whom we know are PRC residents to register with the local SAFE branch and update their registrations as required under the SAFE regulations described above. After SAFE Notice 13 became effective on June 1, 2015, 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. The qualified banks, under the supervision of SAFE, directly examine the applications and conduct the registration. We are aware that Mr. Weidong Luo, Mr. Xiaodao Wang and Mr. Jiawen Fang, our shareholders who are PRC residents, have registered with the relevant local SAFE branch. We, however, cannot provide any assurances that all of our shareholders who are PRC residents will file all applicable registrations or update previously filed registrations as required by these SAFE regulations. The failure or inability of our PRC resident shareholders to comply with the registration procedures may subject the PRC resident shareholders to fines and legal sanctions, restrict our cross-border investment activities, or limit our PRC subsidiaries' ability to distribute dividends to or obtain foreign exchange-dominated loans from our company.

# Stock Option Rules

The Administration Measures on Individual Foreign Exchange Control were promulgated by the People's Bank of China on December 25, 2006, and their Implementation Rules, issued by the SAFE on January 5, 2007, became effective on February 1, 2007. Under these regulations, all foreign exchange matters involved in employee stock ownership plans and stock option plans participated in by onshore individuals, among others, require approval from the SAFE or its authorized branch. Furthermore, the Notices on Issues concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plans of Overseas Publicly-Listed Companies, or the Stock Option Rules, were promulgated by SAFE on February 15, 2012, that replaced the Application Procedures of Foreign Exchange Administration for Domestic Individuals Participating in Employee Stock Ownership Plans or Stock Option Plans of Overseas Publicly-Listed Companies issued by SAFE on March 28, 2007. Pursuant to the Stock Option Rules, PRC residents who are granted shares or stock options by companies listed on overseas stock exchanges based on the stock incentive plans are required to register with SAFE or its local branches, and PRC residents participating in the stock incentive plans of overseas listed companies shall retain a qualified PRC agent, which could be a PRC subsidiary of such overseas publicly-listed company or another qualified institution selected by such PRC subsidiary, to conduct the SAFE registration and other procedures with respect to the stock incentive plans on behalf of these participants. Such participants must also retain an overseas entrusted institution to handle matters in connection with their exercise of stock options, purchase and sale of corresponding stocks or interests, and fund transfer. In addition, the PRC agents are 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 agents or the overseas entrusted institution or other material changes. The PRC agents shall, 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 the PRC opened by the PRC agents before distribution to such PRC residents. In addition, the PRC agents shall file each quarter the form for record-filing of information of the Domestic Individuals Participating in the Stock Incentive Plans of Overseas Listed Companies with SAFE or its local branches.

We and our PRC citizen employees who have been granted share options, or PRC optionees, are subject to the Stock Option Rules as our company has become an overseas listed company. If we or our PRC optionees fail to comply with the Individual Foreign Exchange Rule and the Stock Option Rules, we and/or our PRC optionees may be subject to fines and other legal sanctions. In addition, the State Administration for Taxation has issued circulars concerning employee share options, under which our employees working in the PRC who exercise share options will be subject to PRC individual income tax. Our PRC subsidiary and VIE have obligations to file documents related to employee share options 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 if we fail to withhold their income taxes as required by relevant laws and regulations, we may face sanctions imposed by the PRC tax authorities or other PRC government authorities.

# Regulations on Tax

PRC Enterprise Income Tax

The PRC enterprise income tax is calculated based on the taxable income determined under the PRC Enterprise Income Tax Law, and its implementation rules. On March 16, 2007, the National People's Congress of China enacted the PRC Enterprise Income Tax Law, or the EIT Law, which became effective on January 1, 2008 and was amended in 2017 and 2018. On December 6, 2007, the State Council promulgated the implementation rules to the EIT Law, which also became effective on January 1, 2008 and was amended in 2019. The EIT Law imposes a uniform enterprise income tax rate of 25% on all resident enterprises in China, including foreign-invested enterprises and domestic enterprises, unless they qualify for certain exceptions, and terminates most of the tax exemptions, reductions and preferential treatment available under the previous tax laws and regulations. According to the EIT Law and relevant regulations, subject to the approval of competent tax authorities, the income tax of an enterprise that has been determined to be a high and new technology enterprise shall be reduced to a preferential rate of 15%. According to the Administrative Measures for the Recognition of High and New Technology Enterprises, effective on January 1, 2008 and amended on January 29, 2016, for each entity accredited as high and new technology enterprise, or the HNTE, its HNTE status is valid for three years if it meets the qualifications for HNTE on a continuing basis during such period.

Moreover, under the EIT Law, enterprises organized under the laws of jurisdictions outside China with their "de facto management bodies" located within China may be considered PRC resident enterprises and are therefore subject to PRC enterprise income tax at the rate of 25% on their worldwide income. Though the implementation rules of the EIT Law define "de facto management bodies" as "establishments that carry out substantial and overall management and control over the manufacturing and business operations, personnel, accounting, properties, etc. of an enterprise," the only detailed guidance currently available for the definition of "de facto management body" as well as the determination of offshore incorporated PRC tax resident status and its administration are set forth in the Circular Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprise on the Basis of De Facto Management Bodies, or Circular 82, and the Administrative Measures for Enterprise Income Tax of Chinese-Controlled Offshore Incorporated Resident Enterprises (Trial), or SAT Bulletin 45, both issued by the SAT, which provide guidance on the administration as well as determination of the tax residency status of a Chinese-controlled offshore-incorporated enterprise, defined as an enterprise that is incorporated under the law of a foreign country or territory and that has a PRC company or PRC corporate group as its primary controlling shareholder.

According to Circular 82, a Chinese-controlled offshore-incorporated enterprise will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China and will be subject to PRC enterprise income tax on its global income only if all of the following conditions set forth in Circular 82 are met:

- the primary location of the day-to-day operational management and the places where they perform their duties are in the PRC;
- decisions relating to the enterprise's financial and human resource matters are made or are subject to approval of organizations or personnel in the PRC;
- the enterprise's primary assets, accounting books and records, company seals and board and shareholder resolutions are located or maintained in the PRC; and
- 50% or more of voting board members or senior executives habitually reside in the PRC.

In addition, SAT Bulletin 45 provides clarification on the resident status determination, post-determination administration, and competent tax authorities. It also specifies that when provided with a copy of a PRC resident determination certificate from a resident Chinese-controlled offshore-incorporated enterprise, the payer should not withhold 10% income tax when paying certain PRC-sourced income such as dividends, interest and royalties to the Chinese-controlled offshore-incorporated enterprise.

In the event that we are considered a PRC resident enterprise, we would be subject to the PRC enterprise income tax at the rate of 25% on our worldwide income.

In addition, although the EIT Law provides that dividend income between "qualified resident enterprises" is exempted income, and the implementation rules refer to "qualified resident enterprises" as enterprises with "direct equity interest," it is unclear whether dividends we receive from our PRC subsidiary are eligible for exemption.

On February 3, 2015, the SAT issued the Announcement of the State Administration of Taxation on Several Issues Concerning the Enterprise Income Tax on Indirect Property Transfer by Non-Resident Enterprises, or SAT Bulletin 7. SAT Bulletin 7 extends the PRC's tax jurisdiction to transactions involving the transfer of taxable assets through offshore transfer of a foreign intermediate holding company. In addition, SAT Bulletin 7 has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Bulletin 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of taxable assets as they have to make self-assessment on whether the transaction should be subject to PRC tax and to file or withhold the PRC tax accordingly.

On October 17, 2017, the SAT issued the Announcement of the State Administration of Taxation on Matters Concerning Withholding of Income Tax of Non-resident Enterprises at Source, or SAT Bulletin 37, which came into effect on December 1, 2017. According to SAT Bulletin 37, the income from property transfer obtained by a non-resident enterprise, as stipulated in the second item under Article 19 of the EIT Law, shall include the income derived from transferring equity investment assets as stock equity. The withholding agent shall, within seven days of the day on which the withholding obligation occurs, declare and remit the withholding tax to the competent tax authority at its locality.

Where non-resident investors were involved in our private equity financing, if such transactions were determined by the tax authorities to lack reasonable commercial purpose, we and our non-resident investors may become at risk of being required to file a return and taxed under SAT Bulletin 37 and/or SAT Bulletin 7 and we may be required to expend valuable resources to comply with SAT Bulletin 37 and/or SAT Bulletin 7 or to establish that we should not be held liable for any obligations under SAT Bulletin 37 and/or SAT Bulletin 7. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We face uncertainty with respect to indirect transfer of equity interests in PRC resident enterprises by their non-PRC holding companies."

VAT

Pursuant to the Provisional Regulations on Value-added Tax, which was promulgated by the State Council on December 13, 1993, as amended and the Implementing Rules of the Provisional Regulations on Value-added Tax, which was promulgated by the Ministry of Finance on December 15, 2008, as amended, all individuals and entities selling goods, providing labor services of processing or repairing, selling services, intangible assets or real property within, or importing goods into, the PRC must pay value-added tax.

On January 1, 2012, the Ministry of Finance and SAT implemented a pilot VAT reform program, or Pilot Program, applicable to businesses in selected industries. Businesses in the Pilot Program would pay VAT instead of business tax. The Pilot Industries in Shanghai included industries involving the leasing of tangible movable property, transportation services, research and development and technical services, information technology services, cultural and creative services, logistics and ancillary services and certification and consulting services. Revenues generated by advertising services, a type of "cultural and creative services," are subject to the VAT tax rate of 6%. According to official announcements made by competent authorities in Guangdong province, Guangdong province launched the same Pilot Program on November 1, 2012. On May 24, 2013, the Ministry of Finance and the State Administration of Taxation, or SAT, issued the Circular on Tax Policies in the Nationwide Pilot Collection of Value Added Tax in lieu of Business Tax in the Transportation Industry and Certain Modern Services Industries, or the Pilot Collection Circular. On August 1, 2013, the Pilot Program was implemented throughout China. On December 12, 2013, the Ministry of Finance and the SAT issued the Circular on the Inclusion of the Railway Transport Industry and Postal Service Industry in the Pilot Collection of Value-Added Tax in Lieu of Business Tax, or the 2013 VAT Circular. Among other things, the 2013 VAT Circular abolished the Pilot Collection Circular, and refined the policies for the Pilot Program. On April 29, 2014, the Ministry of Finance and the SAT issued the Circular on the Inclusion of Telecommunications Industry in the Pilot Collection of Value-Added Tax in Lieu of Business Tax, or the 2014 VAT Circular. On March 23, 2016, the Ministry of Finance and the SAT issued the Circular on Comprehensively Promoting the Pilot Program of the Collection of Value-Added Tax in Lieu of Business Tax, pursuant to which the 2013 VAT Circular and the 2014 VAT Circular shall be repealed accordingly unless otherwise specified. Effective from May 1, 2016, the PRC tax authorities collect VAT in lieu of business tax on a trial basis, and in industries such as construction industries, real estate industries, financial industries, and living service industries.

On November 19, 2017, the State Council promulgated the Decision of the State Council on Abolishing the Interim Regulations of the PRC on Business Tax and Amending the Interim Value-Added Tax Regulations of the PRC, deciding to abolish the Interim Regulations of the People's Republic of China on Business Tax. Since then, business tax has been comprehensively cancelled. We currently pay the VAT instead of business taxes for our revenue derived from the provision of some modern services.

### Dividends Withholding Tax

Pursuant to the EIT Law and its implementation rules, dividends from income generated from the business of a PRC subsidiary after January 1, 2008 and distributed to its foreign investor are subject to withholding tax at a rate of 10% if the PRC tax authorities determine that the foreign investor is a non-resident enterprise, unless there is a tax treaty with China that provides for a preferential withholding tax rate. Pursuant to the Arrangement between Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion on Income, the withholding tax rate in respect to the payment of dividends by a PRC enterprise to a Hong Kong enterprise may be reduced to 5% from a standard rate of 10% if the Hong Kong enterprise directly holds at least 25% of the PRC enterprise. Pursuant to the Notice on the Issues concerning the Application of the Dividend Clauses of Tax Agreements issued by the SAT on February 20, 2009, or SAT Circular 81, a Hong Kong resident enterprise must meet the following conditions, among others, in order to apply the reduced withholding tax rate: (i) it must be a company; (ii) it must directly own the required percentage of equity interests and voting rights in the PRC resident enterprise; and (iii) it must have directly owned such required percentage in the PRC resident enterprise throughout the 12 months prior to receiving the dividends. However, according to SAT Circular 81, if the relevant tax authorities consider the transactions or arrangements we have are for the primary purpose of enjoying a favourable tax treatment, the relevant tax authorities may adjust the favourable withholding tax in the future.

As uncertainties remain regarding the interpretation and implementation of the EIT Law and its implementation rules, we cannot assure you that, if we are deemed a PRC resident enterprise, any dividends to be distributed by us to our non-PRC shareholders and ADS holders would not be subject to any PRC withholding tax. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders."

### Regulations on Dividend Distribution

Companies in the PRC may pay dividends only out of their accumulated profits, if any, as determined in accordance with PRC accounting standards and regulations. Additionally, companies may not pay dividends unless they set aside at least 10% of their respective accumulated profits after tax each year, if any, to fund certain reserve funds, until such time as the accumulative amount of such fund reaches 50% of the enterprise's registered capital. In addition, these companies also may allocate a portion of their after-tax profits based on PRC accounting standards to employee welfare and bonus funds at their discretion. These reserves are not distributable as cash dividends.

### Labor Laws and Social Insurance

The principle laws that govern employment include:

- PRC Labor Law, promulgated by the Standing Committee of the National People's Congress on July 5, 1994, effective since January 1, 1995 and most recently amended on December 29, 2018;
- PRC Labor Contract Law, promulgated by the Standing Committee of the National People's Congress on June 29, 2007 and effective since January 1, 2008 and amended on December 28, 2012;
- Implementation Rules of the PRC Labor Contract Law, promulgated by the State Council on September 18, 2008 and effective since September 18, 2008;
- Work-related Injury Insurance Regulations, promulgated by the State Council on April 27, 2003 and effective since January 1, 2004 and amended on December 20, 2010;
- Interim Regulations on the Collection and Payment of Social Insurance Fees, promulgated by the State Council on January 22, 1999 and effective since January 22, 1999 and amended on March 24, 2019;
- PRC Social Insurance Law promulgated by the National People's Congress on October 28, 2010, effective since July 1, 2011 and subsequently amended on December 29, 2018; and
- Regulation on the Administration of Housing Fund promulgated by the State Council on April 3, 1999 and amended in 2002 and 2019 respectively.

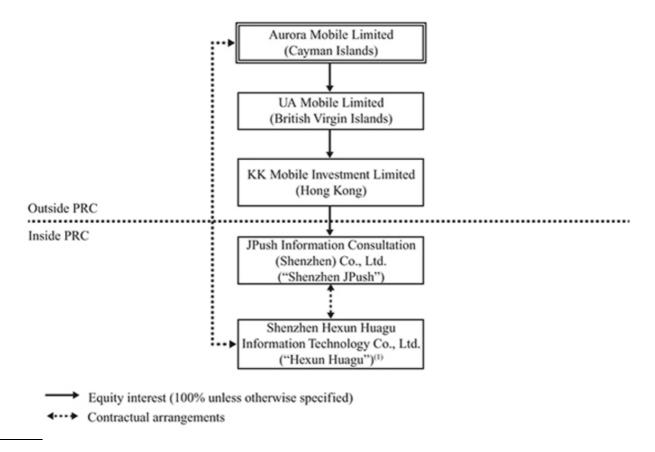
According to the PRC Labor Law and PRC Labor Contract Law, employers must execute written labor contracts with full-time employees. All employers must compensate their employees with wages equal to at least the local minimum wage standards. All employers are required to establish a system for labor safety and workplace sanitation, strictly comply with state rules and standards and provide employees with workplace safety training. Violations of the PRC Labor Contract Law and the PRC Labor Law may result in the imposition of fines and other administrative penalties. For serious violations, criminal liability may arise.

In addition, pursuant to the PRC Social Insurance Law, employers in China are required to provide employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds. According to the Regulation on the Administration of Housing Fund, employers are required to register at the designated administrative centers, open bank accounts for depositing employees' housing fund and make housing fund contributions for employees in the PRC.

Our WFOE and VIE have not fully contributed to the social insurance plan and the housing fund plan as required by applicable PRC regulations. We have recorded accruals for estimated underpaid amounts in our consolidated financial statements.

### C. Organizational Structure

The following chart illustrates our corporate structure, including our significant subsidiaries and consolidated variable interest entity as of the date of this annual report on Form 20-F:



Notes:

(1) Mr. Weidong Luo, our founder, chairman of our board of directors, chief executive officer and a principal beneficial owner of the shares of our company, holds 80% equity interests in our VIE. Messrs. Xiaodao Wang and Jiawen Fang are both beneficial owners of the shares of our company and they each hold 10% equity interests in our VIE.

The following is a summary of the currently effective contractual arrangements relating to Hexun Huagu, our VIE.

# Agreements that provide us with effective control over our VIE

*Powers of Attorney.* Pursuant to the powers of attorney, dated August 5, 2014, each of the shareholders of our VIE irrevocably authorizes our WFOE to act as his attorney-in-fact to exercise all of his rights as a shareholder of our VIE, including, but not limited to, the right to convene and attend shareholders' meetings, vote on any resolution that requires a shareholder vote, such as the appointment and removal of directors, supervisors and officers, as well as the sale, transfer and disposal of all or part of the equity interests owned by such shareholder in our VIE.

Equity Interest Pledge Agreements. Pursuant to the equity interest pledge agreements, dated April 20, 2018, among our WFOE, our VIE and the shareholders of our VIE, the shareholders of our VIE have pledged 100% equity interests in our VIE to our WFOE to guarantee performance by the shareholders of their obligations under the exclusive option agreements, the shareholder voting proxy agreement and the financial support agreement, as well as the performance by our VIE of its obligations under the exclusive business cooperation agreement and the exclusive option agreements. In the event of a breach by our VIE or any of its shareholder of contractual obligations under the equity interest pledge agreements, our WFOE, as pledgee, will have the right to dispose of the pledged equity interests in our VIE and will have priority in receiving the proceeds from such disposal. The shareholders of our VIE also undertake that, without the prior written consent of our WFOE, they will not dispose of, create or allow any encumbrance on the pledged equity interests. our VIE undertakes that, without the prior written consent of our WFOE, they will not assist or allow any encumbrance to be created on the pledged equity interests.

### Agreement that allows us to receive economic benefits from our VIE

Exclusive Business Cooperation Agreement. Under the exclusive business cooperation agreement between our WFOE and our VIE, dated August 5, 2014, our WFOE has the exclusive right to provide to our VIE comprehensive business support, technical services, consulting services and other services. Without our WFOE's prior written consent, our VIE may not accept any services subject to this agreement from any third party. Our WFOE has the exclusive ownership of intellectual property rights created as a result of the performance of this agreement. Our VIE agrees to pay our WFOE an annual service fee at an amount equivalent to a certain percentage of our VIE's audited total operating income for the relevant year. This agreement will remain effective for an indefinite term, unless terminated in accordance with the provisions of this agreement or terminated in writing by our WFOE.

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

Exclusive Option Agreements. Pursuant to the exclusive option agreement, dated April 20, 2018, among our WFOE, our VIE and each shareholder of our VIE, each shareholder of our VIE has irrevocably granted our WFOE an exclusive option to purchase all or part of his equity interests in our VIE, and our VIE has irrevocably granted our WFOE an exclusive option to purchase all or part of its assets. Our WFOE or its designated person may exercise such options for the higher of RMB10 or the lowest price permitted under applicable PRC law. Each shareholder of our VIE undertakes that, without our WFOE's prior written consent, he will not, among other things, (i) create any pledge or encumbrance on their equity interests in our VIE, (iii) change our VIE's registered capital, (iv) amend our VIE's articles of association, (v) dispose of our VIE's material assets (except in the ordinary course of business), or (vi) merge our VIE with any other entity. In addition, our VIE undertakes that, without our WFOE's prior written consent, it will not, among other things, create any pledge or encumbrance on any of its assets, or transfer or otherwise dispose of its material assets (except in the ordinary course of business). The exclusive option agreements will remain effective until the entire equity interests in and all the assets of our VIE have been transferred to our WFOE or its designated person.

In March 2018, we entered into the following agreements:

Financial Support Agreement. Pursuant to the financial support agreement, dated March 28, 2018, by and among our company, our WFOE and the shareholders of our VIE, we undertake to provide unlimited financial support to our VIE to the extent permissible under the applicable PRC laws and regulations, whether or not any operational loss is actually incurred by our VIE. We will not request repayment of the loans or borrowings if our VIE or its shareholders do not have sufficient funds or are unable to repay the loans.

Shareholder Voting Proxy Agreement. Pursuant to the shareholder voting proxy agreement, dated March 28, 2018, by and among our company, our WFOE and each of the shareholders of our VIE, the powers of attorney described above were terminated and each of the shareholders of our VIE irrevocably authorizes our company to act as his attorney-in-fact to exercise all of his rights as a shareholder of our VIE that are substantially the same as those described above. The shareholder voting proxy agreement will remain effective until the shareholders no longer hold any equity interests in our VIE, unless terminated in accordance with the provisions of the agreement or terminated in writing by our company.

In the opinion of Han Kun Law Offices, our PRC legal counsel:

- the ownership structures of our VIE in China and our WFOE are not in violation of applicable PRC laws and regulations currently in effect: and
- the contractual arrangements between our company, our WFOE, our VIE and its shareholders governed by PRC laws and regulations are valid, binding and enforceable, and will not result in any violation of applicable PRC laws and regulations.

However, our PRC legal counsel has also advised us that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules. Accordingly, the PRC regulatory authorities may take a view that is contrary to the opinion of our PRC legal counsel. 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 our VIE are found to be in violation of any existing or future PRC laws or regulations, or fail to obtain or maintain any of the required permits 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 Related to Our Corporate Structure—If the PRC government finds that the agreements that establish the structure for operating some of our business operations in China do not comply with PRC regulations relating to 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 interest in those operations" and "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Uncertainties with respect to the PRC legal system and changes in laws and regulations in China could adversely affect us."

### D. Property, Plant and Equipment

Our headquarters is located in Shenzhen, China where we lease and occupy our office space with an aggregate floor area of approximately 3,997.2 square meters. A substantial majority of our employees are based at our headquarters in Shenzhen. We also lease and occupy office buildings in Beijing, Shanghai, Guangzhou and Chengdu with an aggregate floor area of approximately 1,468.00, 648.24, 168.40 and 44 square meters, respectively. These leases vary in duration from one to five years.

Our servers are hosted in different cities of China, including Guangzhou, Beijing, Wuxi, Xiamen and Shenzhen. These data centers are owned and maintained by third-party data center operators. We believe that our existing facilities are sufficient for our current needs, and we will obtain additional facilities, principally through leasing, to accommodate our future expansion plans as needed.

### Item 4A. UNRESOLVED STAFF COMMENTS

None

### 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 on Form 20-F.

### A. Operating Results

We are a leading developer ecosystem service provider in China. We provide a comprehensive suite of developer services to mobile app developers in China, through which we gain access to, aggregate, cleanse, structure and encrypt vast amounts of real-time anonymous device-level mobile behavioral data. We utilize AI and machine learning to derive actionable insights from this data, enabling our customers to make better business decisions. We have developed a variety of SAAS Businesses and targeted marketing that offer industry-specific, actionable insights for customers. Our SAAS Businesses include developer service and vertical applications, which comprised of market intelligence, financial risk management and location-based intelligence. We currently generate revenue primarily from our SAAS Businesses, while we adopt a freemium model for most of our developer services.

We have strategically winded down our targeted marketing business to focus on SAAS Businesses that have a higher profit margin in 2020, and have been only operating our SAAS Businesses since the beginning of 2021.

### **Key Factors Affecting Our Results of Operations**

Our business and operating results are influenced by general factors affecting China's mobile internet industry and app developer services market, as well as the application of big data technology in China. The general factors include China's overall economic growth and level of per capita disposable income, mobile internet usage and penetration, development of the app developer services market, growth of application of SAAS Businesses and targeted marketing in areas such as mobile marketing, financial risk management services, market intelligence and location-based intelligence services, the competitive environment and governmental policies and initiatives affecting the Chinese mobile internet industry and data technology. Unfavorable changes in any of these general industry conditions could negatively affect demand for our services and solutions and materially and adversely affect our results of operations.

While our business is influenced by general factors affecting our industry, our results of operations are more directly affected by company specific factors, including the following major factors:

- our ability to increase the number of customers and average spending per customer;
- our ability to develop new SAAS Businesses and targeted marketing that meet market demands;
- · our ability to broaden and deepen our data pool and enhance our AI and machine learning technology; and
- our ability to further improve our margins.

### Our ability to increase the number of customers and average spending per customer

Growth in our number of customers and average spending per customer are key drivers of our revenue growth. Our total revenues increased substantially from 2019 to 2020 and further to 2021. Our number of customers increased from 3,456 in 2019 to 3,521 in 2020 and decreased to 3,516 in 2021. We define our customers in a given period as those that purchase at least one of our paid-for SAAS Businesses including developer service and vertical applications or targeted marketing during the same period. The average spending per customer decreased from RMB262,285 in 2019 to RMB133,943 in 2020 and further decreased to RMB101,627 (US\$15,948) in 2021. Over the same time periods, our revenues from SAAS Businesses increased, driven by an increase in our number of customers of SAAS Businesses from 2,676 in 2019 to 3,323 in 2020 and further increased to 3,516 in 2021 due to our strategic business focus shift to SAAS Businesses, as well as a decrease in the average spending per customer for SAAS Businesses from RMB78,575 in 2019 to RMB77,626 in 2020 and increased to RMB101,627 (US\$15,948) in 2021. Our ability to expand our customer base by retaining existing customers and attracting new customers, and increase the average spending per customer depends on, among other things, our ability to continuously broaden and deepen our data pool, enhance our AI and machine learning capabilities, expand our existing SAAS Businesses and targeted marketing, develop and productize new services and solutions, and effectively market and sell our services and solutions.

### Our ability to develop new SAAS Businesses and other business initiatives that meet market demands

Our future success is significantly dependent on our ability to continually develop new SAAS Businesses and other business initiatives that meet evolving market demands. We have dedicated and will continue to dedicate significant resources and efforts to developing new SAAS Businesses and targeted marketing. We have a team of product developers within our research and development team who identify the potential market demand and lead the development of new services and solutions and the enhancement of existing ones. We seek to develop more innovative developer services, in line with the development of mobile internet and Internet of Things (IoT) to meet the evolving demand of app developers and customers. Furthermore, we have expanded from our original focus on targeted marketing to SAAS Businesses, such as market intelligence, financial risk management and location-based intelligence. We will continue to enrich and expand our existing solutions to better serve existing customers and attract new customers, and also seek to expand our SAAS Businesses and other business initiatives to exploit mobile big data opportunities in new industry verticals and sub-verticals.

### Our ability to broaden and deepen our data pool and enhance our AI and machine learning technology

We generated revenue primarily from our SAAS Businesses and targeted marketing and we have shifted our focus to SAAS Businesses since 2021. Our ability to expand and improve our existing and develop new ones depends on the size and depth of our data pool as well as the technology we use to process the data and derive actionable insights from it. It is thus critical for us to both enrich our data pool and enhance our AI and machine learning capabilities to extract deeper insights from the data. We intend to achieve the former by continuing to offer best-in-class developer services and attract more app developers to use our services in their apps, and the latter by refining our algorithms and improving our predictive capabilities. To that end, we will continue to invest in our technology and infrastructure to deliver highly reliable and scalable developer services and provide a broader range of developer services. We will also continue to invest in talent by recruiting, retaining and training AI specialists and data scientists to widen our technology advantage. The enhancement of our research and development capabilities enables us to develop new SAAS Businesses and optimize our solution offerings, there, thereby allowing us to obtain more favorable pricing terms for our SAAS Businesses.

# Our ability to further improve our margins

Our results of operations are directly affected by our ability to improve our margins. Our business has grown substantially while at the same time improving our cost efficiency. Our gross margin was mainly affected by the mix of our SAAS Businesses and targeted marketing, where SAAS Businesses have a relatively higher profit margin and targeted marketing has a lower one. We have strategically winded down our targeted marketing business to focus on SAAS Businesses that have a higher profit margin in 2020, and have been only operating our SAAS Businesses since the beginning of 2021. Our ability to increase our gross margin depends on our ability to improve the margin of SAAS Businesses and expand our vertical applications and other business initiatives. Moreover, our ability to achieve profitability is dependent on our ability to further improve our operational efficiency and reduce the total operating expenses as a percentage of our revenues.

Our developer services are strategically modularized to maximize efficiency and cohesiveness of operations, and our centralized data processing platform has been designed and built to power our growth as we scale to meet demands from our expanding customer base and allow for quick and cost-effective product development. As our business grows, we expect to continue to leverage the scalability of our business model, improve the efficiency and utilization of our personnel, and thus enjoy higher operating leverage. In addition, our ability to lower our operating expenses as a percentage of revenues also depends on our ability to improve sales efficiency. We have sold our targeted marketing solutions and currently sell our SAAS Businesses through our direct sales force, which focuses on expanding our customer base and increasing the spending by existing customers, seeking to capture follow-on and cross-selling opportunities. We will also utilize the insights we gain from data analytics and mining to guide our own sales and marketing efforts as well as our product development activities to improve our margins.

### **Key Line Items and Specific Factors Affecting Our Results of Operations**

#### Revenues

We generate revenue from our SAAS Businesses and targeted marketing. The following table breaks down our total revenues by categories, by amounts and as percentages of total revenues for the years presented:

	For the Year Ended December 31,								
	2019		2020		2021				
	RMB	%	RMB	%	RMB	US\$	%		
		(in thousands, except for percentage data)							
Targeted Marketing	696,190	76.5	213,662	45.3	_	_	_		
SaaS Products	210,268	23.5	257,952	54.7	357,322	56,072	100.0		
Total	906,458	100.0	471,614	100.0	357,322	56,072	100.0		

Targeted Marketing. We generate targeted marketing revenue by providing targeted marketing in the form of integrated marketing campaigns to advertisers through our XiaoGuoTong marketing platform, which is built upon our multi-dimensional device-level mobile behavioral data. The ads are displayed on a wide spectrum of reputable publishers, through bidding for ad slots using rates directly negotiated with the various publishers.

We have contractual arrangements with customers that stipulate the types of advertising to be delivered and the pricing. Advertising customers pay for our targeted marketing primarily based on a cost-per-click (CPC) or cost-per-action (CPA) basis. Revenue is recognized at a point in time once agreed actions are performed. We act as the principal in the targeted marketing arrangements under which we have control over the fulfilment of the service and discretion in establishing price. Accordingly, we recognize revenue on a gross basis.

SAAS Businesses. We generate SAAS Businesses revenues primarily by providing developer services and vertical applications which include market intelligence, financial risk management and location-based intelligence. For developer service, there are three types of contracts, subscription-based contracts, project-based contracts and consumption-based contracts. We primarily enter into subscription-based contracts with our customers to provide push notification or instant messaging (collectively "notification services"), which we provide our customers with access to its notification services platform. This enables customers to send notifications and messages to users. We generally recognize revenue ratably over time under the subscription-based contracts, because the customer simultaneously receives and consumes the benefits as we provide subscription services throughout a fixed contract term.

We primarily enter into consumption-based contracts with our customers to provide short message services, or SMS, one-click verification services and value-added services. For SMS, we enable customers to send short messages to users for developer-user communication and authentication. For one-click verification services, we enable users to verify the cellphone number of users without verification code after integrating the one-click verification SDK. Customers pay for SMS and one-click verification services based on the pre-agreed the rate per message and the number of messages delivered. We act as the principal in the SMS and one-click verification services in which the Company has control over the fulfillment of services. We recognize revenue on a gross basis and at the point in time when messages delivered. For value-added services, we built an APP Alliance which connects advertisers and APP developers, who are the suppliers of avenue where the ads will be displayed. We enter into contractual arrangements with advertisers that stipulate the types of advertising to be delivered and priced. Advertising customers pay for the value-added service primarily based on cost-per-action ("CPA") basis or cost-per-click ("CPC") basis. All of the contractual arrangements' duration is less than one year. For certain arrangements, customers are required to pay before the service are delivered. For other arrangements, we provided our customers with a credit term less than six months. We act as the principal in the value-added services under which we have control over the fulfillment of the service and have discretion in establishing price. Accordingly, we recognize revenue on a gross basis and at a point in time once agreed actions are performed.

We primarily enter into project-based contracts with our customers to provide private cloud-based developer services, which are designed to provide customizable services to customers who want a more controlled software environment and more comprehensive technology and customer support. We provide our customers one combined performance obligation including customized APP push notification system or instant messaging system and related system training services as both performance obligations are incapable of being distinct because the customer cannot drive economic benefit from the related system training services on its own. Meanwhile, we also provide post contract assurance-type maintenance services, which usually have a duration of one year. Under ASC 606, we recognize revenue at the point in time when the system is implemented, and the training service is provided, which is represented by the customer acceptance received by us.

For vertical applications, we enter into agreements with our customers to provide data analytic solutions and there are three types contracts, subscription-based contracts, project-based contracts and consumption-based contracts. We primarily enter into subscription-based contracts with our customers to provide customizable service package for a fixed contract term, which allows the customers to subscribe a fixed number of apps to obtain unlimited volume of queries to our analytic results. We generally recognize revenue ratably over time under the subscription-based contracts, because the customer simultaneously receives and consumes the benefits as we provide subscription services throughout a fixed contract term.

We primarily enter into project-based contracts with its customers to provide in-depth analytics services and generate customized reports based on the customers' specific requirements. We recognize revenue at the point in time when the customized reports are provided.

We primarily enter into consumption-based contracts with our customers to process the queries or provide features based on the customers' requirements. We recognize revenue at a point in time when the queries are processed or the features the customers utilized.

We expect our total revenues will continue to increase in the foreseeable future with SAAS Businesses as the key driver and indicator for our business growth as we further expand our business and optimize our product mix.

# Cost of revenues

Our cost of revenues currently consists primarily of the cost of purchasing ad inventory associated with our targeted marketing, channel cost associated with JG Alliance, purchase of short message, bandwidth and cloud cost, staff costs and depreciation of servers used for revenue generating services and solutions.

In relation to our targeted marketing, upon receiving orders from our customers, we first utilize our data and AI-powered data analytics capabilities to determine the ad inventory that is most suitable for the customers' ads, and then purchase the ad inventory from selected suppliers, primarily online media networks on a real-time basis. The ad inventory purchased from Tencent decreased from 2.5% in 2019 to 1.7% in 2020, and our cost of revenue attributable to Tencent decreased from 2.4% in 2019 to 2.0% in 2020. This percentage decrease was primarily because that we strategically winded down our targeted marketing business in 2020. The ad inventory purchased from Tencent further decreased to nil in 2021, and our cost of revenue attributable to Tencent further decreased to nil in 2021, mainly because we have exited the targeted marketing business by the end of 2020

In relation to our bandwidth and cloud cost, staff cost and depreciation of servers, we allocate such cost based on revenue generating activities.

We expect that our cost of revenues will increase in absolute amounts in the foreseeable future as we continue to optimize our product mix and expand our business.

### Gross margin

The following table shows our gross profit and gross margin for each of the periods presented:

	For the Year Ended December 31,									
	2019	2020		2021						
		(in thousands, except for percentage data)								
Gross profit	RMB256,862	RMB206,178	RMB264,929	US\$41,574						
Gross margin	28.3%	43.7%	74.1%	74.1%						

Our gross margin is mainly affected by the mix of our revenues, particularly between SAAS Businesses and targeted marketing, as targeted marketing incurred cost of revenues for purchasing ad inventory, while SAAS Businesses do not incur such cost of revenues. The increase is gross margin was mainly due to we have completely exited from the targeted marketing business and transited to pure SAAS business model by the end of 2020.

# Operating expenses

Our operating expenses consist of research and development expenses, sales and marketing expenses, and general and administrative expenses. The following table breaks down our total operating expenses by these categories, by amounts and as percentages of total operating expenses for each of the periods presented:

	For the Year Ended December 31,							
	2019		2020		2021			
	RMB	%	RMB	%	RMB	US\$	%	
	(in thousands, except for percentage data)							
Research and development expenses	176,248	43.6	174,597	44.1	206,722	32,439	51.3	
Sales and marketing expenses	118,548	29.3	102,319	25.8	116,415	18,268	28.9	
General and administrative expenses	109,291	27.1	119,087	30.1	79,922	12,542	19.8	
Total	404,087	100.0	396,003	100.0	403,059	63,249	100.0	

Our research and development expenses mainly consist of payroll and related expenses for personnel engaged in research and development activities, technical service fees paid to third-party service providers for maintaining servers as part of our technology infrastructure, and depreciation of such servers. We incurred research and development expenses primarily for the development of new services and solutions and the general improvement of our technology infrastructure to support our business operations. We expect that our research and development expenses will continue to increase in absolute amounts, as we continue to improve technology and infrastructure and expand our service and solution offerings.

Our sales and marketing expenses mainly consist of payroll and related expenses for personnel engaged in sales and marketing activities and advertising and other marketing expenses associated with brand and product promotion. We expect that our sales and marketing expenses will continue to increase in absolute amounts in the foreseeable future, as we plan to expand the sales and marketing team and engage in more sales and marketing activities to attract new customers and additional purchases from existing customers.

Our general and administrative expenses mainly consist of payroll and related costs for employees involved in general corporate functions, including accounting, finance, tax, legal and human resources, costs associated with the use of facilities and equipment by these functions, including rental and office expenses, professional fees, and bad debt provision. We expect that our general and administrative expenses will increase in absolute amounts as we hire additional personnel and incur additional expenses related to the anticipated growth of our business and our operation as a public company.

### **Taxation**

### Cayman Islands

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 after execution, brought within the jurisdiction of the Cayman Islands. In addition, the Cayman Islands does not impose withholding tax on dividend payments.

### British Virgin Islands

UA Mobile Limited, our wholly-owned subsidiary in the British Virgin Islands, and all dividends, interest, rents, royalties, compensation and other amounts paid by UA Mobile Limited to persons who are not resident in the British Virgin Islands and any capital gains realized with respect to any shares, debt obligations, or other securities of UA Mobile Limited by persons who are not resident in the British Virgin Islands are exempt from all provisions of the Income Tax Ordinance in the British Virgin Islands.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not resident in the British Virgin Islands with respect to any shares, debt obligation or other securities of UA Mobile Limited.

All instruments relating to transfers of property to or by UA Mobile Limited and all instruments relating to transactions in respect of the shares, debt obligations or other securities of the Company and all instruments relating to other transactions relating to the business of the Company are exempt from payment of stamp duty in the British Virgin Islands. This assumes that UA Mobile Limited does not hold an interest in real estate in the British Virgin Islands.

There are currently no withholding taxes or exchange control regulations in the British Virgin Islands applicable to UA Mobile Limited.

### Hong Kong

Our subsidiary incorporated in Hong Kong, KK Mobile Investment Limited, was subject to 16.5% Hong Kong profit tax on its taxable income generated from operations in Hong Kong for the years of assessment 2016/2017 and 2017/2018. Commencing from the year of assessment 2018/2019, the first HK\$2 million of profits earned by our subsidiary incorporated in Hong Kong is taxed at the rate of 8.25% while the remaining profits continue to be taxed at the rate of 16.5%. Under the Hong Kong tax law, KK Mobile Investment Limited is exempted from the Hong Kong income tax on its foreign-derived income. In addition, payments of dividends from our Hong Kong subsidiary to UA Mobile Limited are not subject to any withholding tax in Hong Kong.

### **PRC**

Generally, our WFOE and VIE in China are subject to enterprise income tax on their taxable income in China at a statutory rate of 25%. The enterprise income tax is calculated based on the entity's global income as determined under PRC tax laws and accounting standards. The certificate of high and new technology enterprise of our VIE was obtained in November 2016 and expired in November 2019. Our VIE obtained the certificate of high and new technology enterprise in December 2019 with a validity period of three years starting December 2019 onwards.

We are subject to value added tax, or VAT, at a rate of 6% on the services and solutions we provide to customers, less any deductible VAT we have already paid or borne. We are also subject to surcharges on VAT payments in accordance with PRC law.

Dividends paid by our WFOE in China to our intermediary holding company in Hong Kong will be subject to a withholding tax rate of 10%, unless the relevant Hong Kong entity satisfies all the requirements under the Arrangement between Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion On Income and receives approval from the relevant tax authority. If our Hong Kong subsidiary satisfies all the requirements under the tax arrangement and receives approval from the relevant tax authority, then the dividends paid to the Hong Kong subsidiary would be subject to withholding tax at the standard rate of 5%. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We may rely on dividends and other distributions on equity paid by our PRC subsidiary to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC subsidiary to make payments to us could have a material and adverse effect on our ability to conduct our business."

If our holding company in the Cayman Islands or any of our subsidiaries outside of China were deemed to be a "resident enterprise" under the PRC Enterprise Income Tax Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—If we are classified as a PRC resident enterprise for PRC income tax purposes, such classification could result in unfavorable tax consequences to us and our non-PRC shareholders or ADS holders."

### **Results of Operations**

The following table sets forth a summary of our consolidated results of operations for the years presented, both in absolute amount and as a percentage of our total revenues for the years presented. Our business has grown rapidly in recent years. Year-to-year comparisons of historical results of operations should not be relied upon as indicative of future performance.

	For the Year Ended December 31,								
	2019		2020		2021				
	RMB	<u>%</u>	RMB	<u>%</u>	RMB	US\$	<u>%</u>		
	(in thousands, except for percentages)								
Revenues	906,458	100.0	471,614	100.0	357,322	56,072	100.0		
Cost of revenues <sup>(1)</sup>	(649,596)	(71.7)	(265,436)	(56.3)	(92,393)	(14,498)	(25.9)		
Gross profit	256,862	28.3	206,178	43.7	264,929	41,574	74.1		
Operating expenses:(1)									
Research and development expenses	(176,248)	(19.4)	(174,597)	(37.0)	(206,722)	(32,439)	(57.9)		
Sales and marketing expenses	(118,548)	(13.1)	(102,319)	(21.7)	(116,415)	(18,268)	(32.6)		
General and administrative expenses	(109,291)	(12.1)	(119,087)	(25.3)	(79,922)	(12,542)	(22.4)		
Total operating expenses	(404,087)	(44.6)	(396,003)	(84.0)	(403,059)	(63,249)	(112.8)		
Loss from operations	(147,225)	(16.2)	(189,825)	(40.3)	(138,130)	(21,675)	(38.7)		
Foreign exchange (loss)/gain, net	435	0.0	10	0.0	(3,376)	(530)	(0.9)		
Interest income	6,300	0.7	6,131	1.3	6,597	1,035	1.8		
Interest expense	(11,118)	(1.2)	(11,724)	(2.5)	(8,815)	(1,383)	(2.5)		
Other income	38,812	4.3	(30,814)	(6.5)	(2,908)	(456)	(0.8)		
Change in fair value of structured notes	3,117	0.3	1,233	0.3	20	3	0.0		
Change in fair value of foreign currency swap contract					6,060	951	1.7		
Loss before income taxes	(109,679)	(12.1)	(224,989)	(47.7)	(140,552)	(22,055)	(39.3)		
Income tax benefit/(expense)	(162)	(0.0)	(86)	0.0	(32)	(5)	(0.0)		
Net loss	(109,841)	(12.1)	(225,075)	(47.7)	(140,584)	(22,060)	(39.3)		

Note:

(1) Share-based compensation expenses are allocated in cost of revenues and operating expenses items as follows:

	For the Year Ended December 31,					
	2019	2020	202	1		
	RMB	RMB	RMB	US\$		
Cost of revenue	73	4	41	6		
Research and development expenses	12,819	7,176	13,801	2,166		
Sales and marketing expenses	6,040	3,965	2,609	409		
General and administrative expenses	28,352	17,713	13,761	2,160		
Total	47,284	28,858	30,212	4,741		

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

### Revenues

Our revenues decreased by 24% from RM471.6 million in 2020 to RMB357.3 million (US\$56.1 million) in 2021, primarily due to a 100% decrease in revenues from the legacy Targeted Marketing business as we have exited this business by the end of 2020, where the impact was partially offset by the increase in the Developer Services revenue by 46% and in Vertical Applications revenue by 24%. Our revenues from targeted marketing decreased by 100% from RMB213.7 million in 2020 to nil in 2021, which was primarily because we have exited this business by the end of 2020.

Our revenues from SAAS Businesses increased by 39% from RMB258.0 million in 2020 to RMB357.3 million (US\$56.1 million) in 2021, which was mainly due to the increase in the Developer Services revenue by 46% and in Vertical Applications revenue by 24%.

### Cost of revenues

Our cost of revenues decreased by 65% from RMB265.4 million in 2020 to RMB92.4 million (US\$14.5 million). The decrease was mainly due to the decrease in media cost of RMB165.9 million as the Company has completely exited from the legacy Targeted Marketing business by the end of 2020.

### Gross profit

Our gross profit increased by 28% from RMB206.2 million in 2020 to RMB264.9 million (US\$41.6 million) in 2021, mainly due to our strategic shift in focus from a low margin legacy Targeted Marketing model to a high margin pure SAAS business model.

### Research and development expenses

Our research and development expenses increased by 18% from RMB174.6 million in 2020 to RMB206.7 million (US\$32.4 million) in 2021. The increase was primarily due to the increase in personnel costs by RMB16.4 million and the increase in cloud cost by RMB18.6 million, partially offset by the decrease in depreciation expense by RMB3.9 million.

### Sales and marketing expenses

Our sales and marketing expenses increased by 14% from RMB102.3 million in 2020 to RMB116.4 million (US\$18.3 million) in 2021. The increase was primarily due to the increase in personnel costs by RMB9.0 million, the increase in marketing expense by RMB2.5 million, and the increase in travel and entertainment expense by RMB2.9 million.

### General and administrative expenses

Our general and administrative expenses decreased by 33% from RMB119.1 million in 2020 to RMB79.9 million (US\$12.5 million) in 2021. The decrease was primarily due to the decrease in bad debt provision of RMB25.9 million, and the decrease in long-lived assets impairment charge by RMB11.0 million.

### Net loss

As a result of the foregoing, we recorded a net loss of RMB140.6 million (US\$22.1 million) for the year ended December 31, 2021, compared to a net loss of RMB225.1 million for the year ended December 31, 2020.

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

### Revenues

Our revenues decreased by 48% from RMB906.5 million in 2019 to RM471.6 million in 2020, primarily because we made an orderly exit from the legacy targeted marketing business throughout 2020, where the impact was partially offset by the increase in the developer service revenue by 80%.

Starting from 2020, we have changed the classification of revenue by reclassifying revenue from developer services and vertical applications, formerly named as other SAAS products, to revenues under SAAS Businesses. In particular, we further breakdown the developer services to subscription service and value-added service in terms of revenue. We generate revenues primarily through SAAS Businesses and targeted marketing.

Our revenues from targeted marketing decreased by 69% from RMB693.2 million in 2019 to RMB213.7 million in 2020, which was primarily due to our strategic winding down of the targeted marketing and business focus shift to SAAS Businesses in 2020.

Our revenues from SAAS Business increased by 21% from RMB213.2 million in 2019 to RMB258.0 million in 2020, which was mainly due to the revenue generated form value-added-service within Developer Service, which increased by 1472% compared to the same period of last year.

### Cost of revenues

Our cost of revenues decreased by 59% from RMB649.6 million in 2019 to RMB265.4 million in 2020. The decrease was mainly due to the decreases in media cost by RMB381.2 million, as we exited from the targeted marketing business, and bandwidth cost by RMB6.2 million.

### Gross profit

Our gross profit decreased by 20% from RMB256.9 million in 2019 to RMB206.2 million in 2020, mainly due to the decrease of targeted marketing revenue by 69% on a year-over-year comparison.

### Research and development expenses

Our research and development expenses decreased by 1% from RMB176.2 million in 2019 to RMB174.6 million in 2020. The decrease was primarily attributable to decrease in personnel costs by RMB18.9 million, and the impact was partially offset by the increase in technical service fee of RMB10.3 million and depreciation of RMB5.8 million.

### Sales and marketing expenses

Our sales and marketing expenses decreased by 14% from RMB118.5 million in 2019 to RMB102.3 million in 2020. The decrease was primarily attributable to the decrease in marketing expense by RMB8.5 million, staff cost by RMB5.3 million and travel & entertainment expense by RMB3.6 million.

# General and administrative expenses

Our general and administrative expenses increased by 9% from RMB109.3 million in 2019 to RMB119.1 million in 2020. The increase was primarily due to increase from long-lived assets impairment, as a result of the "Going-Cloud" project undertaken, of RMB11.0 million. Our "Going-Cloud" project is a transition to use cloud-based servers for a portion of our infrastructure, we completely operated and maintained self-owned servers previously.

# Net loss

As a result of the foregoing, we recorded a net loss of RMB225.1 million for the year ended December 31, 2020, compared to a net loss of RMB109.8 million for the year ended December 31, 2019.

### **Critical Accounting Policies**

### Revenue recognition

Under ASC 606, revenues are recognized when control of the promised goods or services is transferred to customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services. Revenues are presented net of value-added tax collected on behalf of the government.

Starting from 2020, we have changed the classification of revenue in the consolidated statements of comprehensive loss by reclassifying revenue from developer services and vertical applications, formerly named as other SAAS products, to revenues under SAAS Businesses. Revenue for the year ended December 31, 2019 were not retrospectively adjusted and continued to be presented under the prior reclassification. We generate revenues primarily through SAAS Businesses, formerly named as "SaaS products" and targeted marketing.

### Targeted marketing

We generate targeted marketing revenue by providing targeted marketing solution in the form of integrated marketing campaign to advertiser through the XiaoGuoTong marketing platform and built upon its multi-dimensional device-level mobile behavioral data or other third-party marketing platforms such as Guangdiantong of Tencent, which is identified as one performance obligation. The ads are displayed on a wide spectrum of reputable publishers, through bidding for ad slots using rates directly negotiated with the various publishers.

We enter into contractual arrangements with advertisers that stipulate the types of advertising to be delivered and the pricing. Advertising customers pay for the targeted marketing solutions primarily based on a cost-per-click (CPC) or cost-per-action (CPA) basis. Majority of the contract duration is less than one year. For certain arrangements, customers are required to pay us before the services are delivered. For other arrangements, we provided customers with a credit term less than one year. We act as the principal in the targeted marketing arrangements under which we have control over the fulfillment of the service and has discretion in establishing price. Accordingly, we recognize revenue on a gross basis and at a point in time once agreed actions are performed. Revenues are presented net of value-added tax collected on behalf of the government.

Starting from January 1, 2021, we have fully exited the Target Marketing business and financial results since then only reflect SAAS Businesses.

### SAAS Businesses

We generate SAAS Business revenue primarily from developer services and vertical applications. For developer services, there are three types contracts, subscription-based contracts and project-based contracts and consumption-based contracts. We primarily enter into subscription-based contracts with our customers to provide push notification or instant messaging (collectively "notification services"), which we provide our customers with access to our notification services platform. This enables customers to send notifications and messages to users. We generally recognize revenue ratably over time under the subscription-based contracts, because the customer simultaneously receives and consumes the benefits as we provide subscription services throughout a fixed contract term. We use an output method of progress based on fixed contract term as it best depicts the transfer of control to the customer.

We primarily enter into consumption-based contracts with its customers to provide short message services ("SMS"), one-click verification services and value-added services. For SMS, we enable customers to send short messages to users for developer-user communication and authentication. For one-click verification services, we enable users to verify the cellphone number of users without verification code after integrating the one-click verification SDK. Customers pay for SMS and one-click verification services based on the pre-agreed the rate per message and the number of messages delivered. We act as the principal in the SMS and one-click verification services in which we have control over the fulfillment of services. We recognize revenue on a gross basis and at the point in time when messages delivered. For value-added services, we built an APP Alliance which connects advertisers and APP developers, who are the suppliers of avenue where the ads will be displayed. We enter into contractual arrangements with advertisers that stipulate the types of advertising to be delivered and priced. Advertising customers pay for the value-added service primarily based on cost-per-action ("CPA") basis or cost-per-click ("CPC") basis. All of the contractual arrangements duration is less than one year. For certain arrangements, customers are required to pay us before the services are delivered. For other arrangements, we provide customers with a credit term less than six months. We act as the principal in the value-added services in which we have control over the fulfillment of the service and has discretion in establishing price. Accordingly, we recognize revenue on a gross basis and at a point in time once agreed actions are performed.

We primarily enter into project-based contracts with our customers to provide private cloud-based developer services, which are designed to provide customizable services to customers who want a more controlled software environment and more comprehensive technology and customer support. We provide our customers one combined performance obligation including customized APP push notification system or instant messaging system and related system training services as both performance obligations are incapable of being distinct because the customer cannot drive economic benefit from the related system training services on its own. Meanwhile, we also provide post contract assurance-type maintenance services, which usually have a duration of one year.

Under ASC 606, we recognize revenue at the point in time when the system is implemented, and the training service is provided, which is represented by the customer acceptance received by us. Meanwhile, the estimated cost of assurance-type maintenance services is accrued as "Costs of revenues", which is not material.

For vertical applications, we enter into agreements with our customers to provide data analytic solutions and there are three types contracts, subscription-based contracts, project-based contracts and consumption-based contracts. We primarily enter into subscription-based contracts with our customers to provide customizable service package for a fixed contract term, which allows the customers to subscribe a fixed number of apps to obtain unlimited volume of queries to our analytic results. We generally recognize revenue ratably over time under the subscription-based contracts, because the customer simultaneously receives and consumes the benefits as we provide subscription services throughout a fixed contract term.

We primarily enter into project-based contracts with our customers to provide in-depth analytics services and generate customized reports based on the customers' specific requirements. We recognize revenue at the point in time when the customized reports are provided.

We primarily enter into consumption-based contracts with our customers to process the queries or provide features based on the customers' requirements. We recognize revenue at a point in time when the queries are processed or the features are utilized by the customers.

For certain arrangements, customers are required to pay before the services are delivered. For other arrangements, we provided customers with a credit term under six months.

Following the exit of targeted marketing business, all of our revenues will be contributed by SAAS Businesses beginning 2021.

#### Long-term investments

Our long-term investments consist of equity investments without readily determinable fair value.

We account for investments in an investee over which we do not have significant influence and which do not have readily determinable fair value using the measurement alternative, which is defined as cost, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. We make a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, we have to estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, we have to recognize an impairment loss in consolidated statements of comprehensive loss equal to the difference between the carrying value and fair value. We recognized nil, RMB38.7 million and RMB25.4 million (US\$4.0 million) impairment in other income/(expense) in the consolidated statement of comprehensive loss for the years ended December 31, 2019, 2020 and 2021.

#### Income taxes

We account for income taxes using the liability approach and recognize deferred tax assets and liabilities for the expected future consequences of events that have been recognized in the consolidated financial statements or in our tax returns. Deferred tax assets and liabilities are recognized on the basis of the temporary differences that exist between the tax basis of assets and liabilities and our reported amounts in the consolidated financial statements using enacted tax rates in effect for the year end period in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in earnings. Deferred tax assets are reduced by a valuation allowance through a charge to income tax expense when, in the opinion of management, it is more-likely-than-not that a portion of or all of the deferred tax assets will not be realized. We evaluate the potential for recovery of deferred tax assets by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies. The components of the deferred tax assets and liabilities are classified as non-current.

We account for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of the benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained (defined as a likelihood of more than fifty percent of being sustained upon an audit, based on the technical merits of the tax position), the tax position is then assessed to determine the amount of benefits to recognize in the consolidated financial statements. The amount of the benefits that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. Interest and penalties on income taxes will be classified as a component of the provisions for income taxes.

We evaluated its income tax uncertainty under ASC 740. ASC 740 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. We elect to classify interest and penalties related to an uncertain tax position, if and when required, as part of income tax expense in the consolidated statements of comprehensive loss.

We did not recognize any income tax due to uncertain tax positions or incur any interest and penalties related to potential underpaid income tax expenses during the years presented.

### Share-based compensation

Share-based payment transactions with employees are measured based on the grant date fair value of the equity instrument. We recognize the compensation costs net of occurred forfeitures using the accelerated recognition method, over the applicable vesting period for each separately vesting portion of the award.

#### Restricted Share Unit Grants

The following table sets forth information regarding the restricted share units granted under our stock incentive plans in 2019, 2020 and 2021:

Grant Date	Number of Restricted Share Units Granted	Weighted-Average Grant-date Fair Value per Restricted Share Unit US\$
Various dates in 2019	33,643	6.48
Various dates in 2020	95,095	3.13
Various dates in 2021	119.568	2.18

The fair value of restricted share units is determined based on the fair value of our common shares. The market price of our publicly traded ADSs is used as an indicator of fair value for our common shares. Total fair values of restricted share units recognized as expenses as of December 31, 2019, 2020 and 2021 were RMB1,938 thousand, RMB835 thousand and RMB1,600 thousand (US\$251 thousand), respectively.

#### **Option Grants**

The following table sets forth information regarding the share options granted under our stock incentive plans in 2019, 2020 and 2021.

<u>Grant Date</u>	Number of Options Granted	Weighted- Average Per Option Exercise Price US\$	Weighted- Average Grant- date Fair Value per Option US\$
Various dates in 2019	333,077	1.29	7.21
Various dates in 2020	1,578,809	0.04	2.91
Various dates in 2021	1,367,791	1.14	3.86

All share-based payments to employees are measured based on their grant-date fair values. Compensation expense is recognized based on the vesting schedule over the requisite service period. Total fair values of options vested and recognized as expenses as of December 31, 2019, 2020 and 2021 were RMB45.4 million, RMB28.0 million and RMB28.6 million (US\$4.5 million), respectively.

### Fair Value of Options

In determining the fair value of our stock options, the binomial option pricing model was applied. The key assumptions used to determine the fair value of the options at the relevant grant dates in 2019, 2020 and 2021 were as follows. Changes in these assumptions could significantly affect the fair value of stock options and hence the amount of compensation expenses we recognize in our consolidated financial statements.

	2019	2020	2021
Risk-free interest rate <sup>(1)</sup>	1.65% ~ 2.54%	0.63% ~ 1.88%	0.94% - 1.70%
Expected dividend yield <sup>(2)</sup>	_	_	_
Expected volatility range <sup>(3)</sup>	$44.23\% \sim 44.71\%$	$44.37\% \sim 47.83\%$	47.45% - 56.62%
Weighted average expected volatility	44.53%	46.37%	50.26%
Expected exercise multiple <sup>(4)</sup>	2.5	$2.5 \sim 2.8$	$2.2 \sim 2.8$

#### Notes:

- (1) The risk-free interest rate of periods within the contractual life of the share options was estimated based on the U.S. Treasury yield in effect as of the valuation dates.
- (2) The expected dividend yield is zero as we have never declared or paid any cash dividends on our shares, and we do not anticipate any dividend payments in the foreseeable future.
- (3) The expected volatility was estimated based on the average of historical volatilities of the common shares of comparable publicly-traded companies in the same industry as of the valuation dates.
- (4) Expected exercise multiple is estimated based on changes in intrinsic value of the option and likelihood of early exercises by employees.

## Convertible Notes

On April 17, 2018, we issued zero coupon convertible notes due 2021 in an aggregate principal amount of US\$35.0 million to two investors. Holders of the convertible notes may, at their option during a period starting from the issue date until seven days prior to the maturity of the notes, subject to certain exceptions, convert the notes into Class A common shares of our company at the then applicable conversion price.

At the commitment date, the fees and expenses associated with the issuance of the convertible notes are recorded as a discount to the debt liability in accordance with ASU 2015-03 which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. The convertible notes, which is the proceeds net of fees and expenses payable to the creditor and the fair value of the bifurcated derivative, will be accreted to the redemption value on the maturity date using the effective interest method over the estimated life of the debt instrument. ASU 2017-11 no longer requires us to consider down round features when determining whether its embedded Conversion Option is indexed to its own stock.

In April 2021, US\$35 million of convertible notes due in April 2021 were fully repaid. As of December 31, 2021, the balance of convertible notes was nil.

## **Recent Accounting Pronouncements**

We discuss recently adopted and issued accounting standards in Note 2, "Summary of Significant Accounting Policies—Recently issued accounting pronouncements" of the notes to our consolidated financial statements.

## B. Liquidity and Capital Resources

The following table sets forth the movements of our cash flows for the years presented:

	Fo	For the Year Ended December 31,		
	2019	2020	202	1
	RMB	RMB	RMB	US\$
Selected Consolidated Cash Flow Data:		(in thous	sands)	
Net cash (used in)/provided by operating activities	(25,758)	75,810	(76,650)	(12,027)
Net cash (used in)/provided by investing activities	(88,966)	(144,415)	26,442	4,150
Net cash (used in)/provided by financing activities	(33,883)	315	(54,520)	(8,556)
Effect of exchange rate on cash and cash equivalents and restricted cash	3,504	(7,054)	3,080	483
Net decrease in cash and cash equivalents and restricted cash	(145,103)	(75,344)	(101,648)	(15,950)
Cash and cash equivalents and restricted cash at the beginning of year or period	576,677	431,574	356,230	55,900
Cash and cash equivalents and restricted cash at the end of the year or period	431,574	356,230	254,582	39,950

We had net cash used in operating activities of RMB25.8 million for the year ended December 31, 2019 and net cash generated by operating activities of RMB75.8 million for the year ended December 31, 2020, and net cash used in operating activities of RMB76.7 million (US\$12.0 million) for the year ended December 31, 2021. The decrease in net cash generated from operating activities was primarily due to a decrease in accrued liabilities and other current liabilities. Strategic transformation has led to the changes in the customers settlement methods. Net income, adjusted by the reconciliation of certain non-cash items including depreciation and amortization, share-based compensation expenses, impairment of long-term investments, as well as change in fair value of derivative assets. Our operating cash flow is also affected by the changes in our accounts receivable, accounts payable, deferred revenue and customer deposits, prepayments and other current assets, and accrued liabilities and other current liabilities.

Our accounts and notes receivable represent primarily accounts and notes receivable from the customers that purchased our SAAS Businesses and targeted marketing. As of December 31, 2019, 2020 and 2021, our accounts and notes receivable, net of allowance for doubtful accounts, were RMB135.4 million, RMB44.9 million and RMB43.9 million (US\$6.9 million), respectively. Starting from 2019, we have been selective and disciplined in our approach to grant credit terms to customers which results in a lower accounts and notes receivable balance as of December 31, 2021 as compare to that as of December 31, 2020.

Our accounts and notes receivable turnover days increased from 55 days in 2019 to 69 days in 2020 and decreased to 45 days in 2021, which was due to the large decrease in revenue of target marketing which matches our strategic transformation to a pure SAAS Businesses model. We have totally ceased and exited from the Targeted Marketing business by the end of 2020. Accounts and notes receivable turnover days for a given period are equal to average balances of accounts and notes receivable, net of allowance for doubtful accounts, at the beginning and the end of the period divided by total revenues during the period and multiplied by the number of days during the period.

Our accounts payable represent primarily accounts payable to suppliers associated with developer service and targeted marketing. As of December 31, 2019, 2020 and 2021, our accounts payable were RMB20.0 million, RMB16.6 million and RMB18.3 million (US\$2.9 million), respectively. The increase was mainly due to increase purchase in bandwidth and cloud services. Our accounts payable turnover days increased from 11 days in 2019 and to 25 days in 2020 and further increased to 73 days in 2021, because we were able to negotiate better terms with suppliers. Accounts payable turnover days for a given period are equal to average accounts payable balances at the beginning and the end of the period divided by total cost of revenues (excluding depreciation, amortization and personnel cost) during the period and multiplied by the number of days during the period.

Our deferred revenue represents the cash payments made by our customers in advance of our provision of the SAAS Businesses and targeted marketing they purchased from us, and our customer deposits represent the refundable cash deposits paid by our customers to us primarily in connection with our developer service and vertical applications. Due to the growth of our SAAS Businesses, our deferred revenue and customer deposits increased substantially from RMB77.6 million as of December 31, 2019 and to RMB109.2 million as of December 31, 2020 and further increased to RMB120.0 million (US\$18.8 million) as of December 31, 2021.

Our prepayments and other current assets represent primarily prepaid media cost, prepaid service fee and others. The decrease in prepayments and other current assets from RMB86.1 million as of December 31, 2019 to RMB49.0 million as of December 31, 2020 and further decreased to RMB46.7 million (US\$7.3 million) as of December 31, 2021 was primarily because we have completely exited from targeted marketing service by the end of 2020. Our accrued liabilities and other current liabilities represent primarily accrued payroll and welfare payables, professional fees and others. The increase in accrued liabilities and other current liabilities from RMB96.3 million as of December 31, 2019 and to RMB109.1 million as of December 31, 2020 and decreased to RMB85.3 million (US\$13.4 million) as of December 31, 2021 was primarily due to the employee payroll.

Our primary sources of liquidity have been proceeds from equity and equity linked financing and bank borrowing. As of December 31, 2021, we had RMB284.6 million (US\$44.7 million) in cash and cash equivalents, restricted cash and short-term investments, of which approximately 4% were held in U.S. dollars and the remainder was held in Renminbi and H.K. dollars.

Our major financings include:

- On April 17, 2018, we issued zero coupon convertible notes due 2021 in an aggregate principal amount of US\$35.0 million to two investors. The convertible notes are non-interest bearing, subject to certain exceptions, including when an event of default occurs, such as failure to make any payment due on the due date, and the majority noteholders have, in their sole discretion, accelerated their convertible notes by giving notice to us that their outstanding notes are due and repayable. In such event, we will be required to pay interest at a simple interest rate of 15% per annum on the aggregate outstanding principal amount of the convertible notes. Holders of the convertible notes may, at their option during a period starting from the issue date until seven days prior to the maturity of the notes, subject to certain exceptions, convert the notes into Class A common shares of our company at the then applicable conversion price. In April 2021, we fully redeemed such US\$35.0 million of convertible notes.
- In July and August 2018, we raised from our initial public offering approximately US\$68.0 million in net proceeds after deducting underwriting commissions and discounts and the offering expenses payable by us.
- On April 16, 2021, we entered into a term loan agreement with Shanghai Pudong Development Bank, or SPD Bank. Under the loan agreement, SPD Bank agreed to provide us with a one-year RMB150 million term loan facility. The facility is priced at 50 basis points over one-year RMB Loan Prime Rate. The use of proceeds of the facility is for general corporate purpose. As of December 31, 2021, the outstanding balance of this loan was RMB150.0 million (US\$23.5 million) and the total deposits in restricted cash pledged for the loan was RMB157.9 million (US\$24.8 million).

We believe our cash and cash equivalents on hand will be sufficient to meet our current and anticipated needs for general corporate purposes for at least the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we find and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions. If we determine that our cash requirements exceed the amount of cash and cash equivalents we have on hand, we may seek to issue equity or equity linked securities or obtain debt financing. The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased 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.

Although we consolidate the results of our VIE, we only have access to the assets or earnings of our VIE through our contractual arrangements with our VIE and its shareholders. See "Item 4. Information on the Company—C. Organizational Structure." For restrictions and limitations on liquidity and capital resources as a result of our corporate structure, see "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Holding Company Structure."

Substantially all of our revenues have been, and we expect they are likely to continue to be, in the form of 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 subsidiary is allowed to pay dividends in foreign currencies to us without prior SAFE approval by following certain routine procedural requirements. However, current PRC regulations permit our PRC subsidiary to pay dividends to us only out of its accumulated profits, if any, determined in accordance with Chinese accounting standards and regulations. Our PRC subsidiary is required to set aside at least 10% of its after-tax profits after making up previous years' accumulated losses each year, if any, to fund certain reserve funds until the total amount set aside reaches 50% of its registered capital. These reserves are not distributable as cash dividends. Historically, our PRC subsidiary has not paid dividends to us, and it will not be able to pay dividends until it generates accumulated profits. Furthermore, capital account transactions, which include foreign direct investment and loans, must be approved by and/or registered with SAFE, its local branches and certain local banks.

## **Operating activities**

Net cash used in operating activities in 2021 was RMB76.7 million (US\$12.0 million). The principal items accounting for the difference between our net cash used in operating activities and our net loss of RMB140.6 million (US\$22.1 million) were (i) non-cash items including depreciation of property and equipment of RMB27.3 million (US\$4.3 million), amortization of intangible assets of RMB4.5 million (US\$0.7 million), impairment of long-term investments of RMB25.4 million (US\$4.0 million), fair value gain of foreign currency swap contract of RMB6.1 million (US\$1.0 million) and share-based compensation expenses of RMB30.2 million (US\$4.7 million) and (ii) change in working capital including an increase in prepayments and other current assets of RMB13.6 million (US\$2.1 million), an increase in deferred revenue and customer deposits of RMB8.6 million (US\$1.3 million), repayment of accrued interest related to convertible note of RMB21.0 million (US\$3.3 million) and a decrease in accrued liabilities and other current liabilities of RMB25.6 million (US\$4.0 million).

Net cash provided by operating activities in 2020 was RMB75.8 million. The principal items accounting for the difference between our net cash provided by operating activities and our net loss of RMB225.1 million were a RMB71.8 million decrease in trade receivables, a RMB29.5 million increase in deferred revenue, and a RMB43.3 million decrease in prepayments and other current assets, partially offset by a RMB3.4 million increase in accounts payable. The change in accounts and notes receivable, prepayments and other current assets, and deferred revenue were due to strategic transformation where we have shifted our focus to a pure SAAS based model and ceased targeted marketing service by the end of 2020.

Net cash used in operating activities in 2019 was RMB25.8 million. The principal items accounting for the difference between our net cash used in operating activities and our net loss of RMB109.8 million were a RMB19.0 million increase in deferred revenue and customer deposits, a RMB13.2 million increase in accounts payable, partially offset by a RMB25.4 million increase in accounts and notes receivable and a RMB1.1 million increase in prepayments and other current assets. The increases in accounts and notes receivable, prepayments and other current assets, accounts payable, and deferred revenue and customer deposits were due to the growth of our business, especially the increase in revenues generated from mix-shift type of revenue. The increase in accrued liabilities and other current liabilities was mainly due to the payroll and termination benefits accruals associated with the employees.

#### **Investing activities**

Net cash provided by investing activities in 2021 was RMB26.4 million (US\$4.2 million), consisting primarily of proceeds from maturities of short-term investments, and which is partially offset by purchase of property and equipment.

Net cash used in investing activities in 2020 was RMB144.4 million, primarily of purchase of short-term and long-term investment, and which is partially offset by proceeds from maturities of short term investment.

Net cash used in investing activities in 2019 was RMB89.0 million, consisting primarily of purchase of property and equipment, mainly servers, purchase of intangible assets, and purchase of long-term investments, partially offset by proceeds from an equity investment sold.

#### Financing activities

Net cash used in financing activities in 2021 was RMB54.5 million (US\$8.6 million), consisting primarily of repayment of convertible note and proceeds from short-term loan.

Net cash provided by financing activities in 2020 was RMB0.3 million, primarily of proceeds from exercise of share option.

Net cash used in financing activities in 2019 was RMB33.9 million, consisting primarily of repurchasing of shares.

## Capital expenditures

We made capital expenditures of RMB39.5 million, RMB21.5 million and RMB18.9 million (US\$2.9 million) in 2019, 2020 and 2021, respectively. Our capital expenditures mainly included our payment for purchases of property and equipment, and intangible assets. We will continue to make such capital expenditures to support the expected growth of our business. We expect to meet these requirements primarily through our current cash holdings and cash flow from operations.

### **Material Cash requirements**

As of December 31, 2021, we had a total of RMB284.6 million (US\$44.7 million) of cash, restricted cash and short-term investments, and we believe our working capital is sufficient to meet our requirements for the next twelve months. We may, however, require additional cash due to changing business conditions or other future developments, including any investments or acquisitions we may decide to pursue.

In the long-term, we intend to rely primarily on cash flow from operations and additional borrowings from banks to meet our anticipated cash needs. If our anticipated cash flow and borrowing capacity is insufficient to meet our requirements, we may also seek to sell additional equity, debt or equity-linked securities. We cannot assure you that any financing will be available in the amounts we need or on terms acceptable to us, if at all.

For fiscal year 2022, our material cash requirements mainly include the repayment of short-term bank loan, operating lease obligation and consideration to acquire SendCloud, which is approximately RMB193.8 million. Our operating lease obligations relate to our leases of office premises and office equipment. In April 2021, we borrowed a secured RMB denominated loan of RMB150.0 million with a fixed interest rate of 4.35% for a one-year term from the Shanghai Pudong Development Bank. The short-term loan is collateralized by restricted cash balances totaling RMB157.9 million of our VIE. We acquired a majority equity interest of SendCloud in March 2022 for a total cash consideration of RMB34.5 million.

For fiscal year 2023 and 2024, our material cash requirements mainly include operating lease obligation, which is approximately RMB12.0 million. There are no lease payments in 2025 and after.

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any unconsolidated third parties. In addition, we have not entered into any derivative contracts that are indexed to our shares and classified as shareholders' equity or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. Moreover, we do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or product development services with us.

#### **Holding Company Structure**

Aurora Mobile Limited is a holding company with no material operations of its own. We conduct our operations primarily through our WFOE and our VIE. As a result, Aurora Mobile Limited's ability to pay dividends depends upon dividends paid by our WFOE. If our WFOE or any newly formed PRC subsidiaries 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 WFOE is permitted to pay dividends to us only out of its retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Under PRC law, each of our WFOE and our VIE is required to set aside at least 10% of its after-tax profits each year, if any, to fund certain statutory reserve funds until such reserve funds reach 50% of its registered capital. In addition, our WFOE 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 their 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 SAFE. Our WFOE has not paid dividends and will not be able to pay dividends until it generates accumulated profits and meets the requirements for statutory reserve funds.

## C. Research and Development, Patents and Licenses, Etc.

See "Item 4. Information On the Company—B. Business Overview—Research and Development" 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 since January 1, 2021 that are reasonably likely to have a material adverse effect on our net revenues, income, 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, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures of contingent liabilities in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Changes in the economic environment, financial markets, and any other parameters used in determining such estimates could cause actual results to differ. Our critical accounting estimates are described below. The critical accounting estimates should be read in conjunction with our risk factors as disclosed in "Item 3. Key Information—D. Risk Factors." See Note 2 to our consolidated financial statements for the year ended December 31, 2021 for more information on our critical accounting policies.

## Valuation of Equity Investments

For equity investments without readily determinable fair value for which we have elected to use the measurement alternative, we make a qualitative assessment of whether the investment is impaired at each reporting date, applying significant judgement in considering various factors and events including (i) adverse performance and cash flow forecasts of investees; (ii) adverse industry developments affecting investees; and (iii) adverse regulatory, social, economic or other developments affecting investees. If a qualitative assessment indicates that the investment is impaired, we estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, we recognize an impairment loss in net income equal to the difference between the carrying value and fair value. These judgements include valuation methods and key valuation assumptions and estimates used in estimating impairment amounts, which comprised the investees' cash flow forecasts. Changes in these estimates and assumptions could materially affect the fair value of equity investments without readily determinable fair value. See Note 7 of the Notes to our consolidated financial statements for information regarding investment related impairment accounted for under measurement alternative.

#### Allowance for accounts receivables

We maintain an allowance for doubtful accounts which reflects our best estimate of amounts that potentially will not be collected. We determine the allowance for doubtful accounts based on factors including the age of the balance, the customer's payment history and credit quality of the customers, current economic trends and other factors that may affect the Company's ability to collect from customers. We also provide specific provisions for allowance when facts and circumstances indicate that the receivable is unlikely to be collected. Impairment losses are recorded as general and administrative expenses on the consolidated statements of comprehensive income. Changes in these estimates and assumptions could materially affect our financial condition and results of operations.

#### Valuation allowance for deferred tax assets

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. Significant judgment is required in determining the valuation allowance. In assessing the need for a valuation allowance, we consider all sources of taxable income, including projected future taxable income, reversing taxable temporary differences and ongoing tax planning strategies. If it is determined that we are able to realize deferred tax assets in excess of the net carrying value or to the extent we are unable to realize a deferred tax asset, we would adjust the valuation allowance in the period in which such a determination is made, with a corresponding increase or decrease to earnings.

#### 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
Weidong Luo	41	Chairman of the Board of Directors and Chief Executive Officer
Qing Zhang	44	Deputy Chief Technology Officer
Shan-Nen Bong	49	Chief Financial Officer
Guoxiao Ben	46	Chief Human Resource Officer
Kwok Hin Tang	42	Director
Hon Sang Lee	63	Independent Director
John Tiong Lu Koh	66	Independent Director
Peter Si Ngai Yeung	66	Independent Director

*Mr. Weidong Luo* is our co-founder and has served as our chairman of the board of directors and chief executive office since May 2012. Mr. Luo has over 12 years of experience building successful technology companies. Mr. Luo was a general manager of Shenzhen Zhiwo Information Technology Company Limited from September 2007 to September 2010 responsible for its general business operations. Mr. Luo received a master of philosophy degree in computing from Hong Kong Polytechnic University and a bachelor's degree in management information systems from Renmin University of China.

Mr. Qing Zhang has served as our deputy chief technology officer since January 2022. Mr. Zhang has extensive experience and expertise in technology, product development and management in the Internet industry. Mr. Zhang served as vice president of technology at the Company's R&D department since he joined Aurora Mobile in May 2020. Before joining Aurora Mobile, Mr. Zhang worked at Tencent for about 18 years with prior roles including technical expert, technical leader for Tencent Music and other key technical positions. At Tencent, Mr. Zhang was involved in the development of various products including QQ, Real Time eXchange, Tencent Video, QQ Music and WeSing. Prior to Tencent, Mr. Zhang worked for Sino Stride Technology as a software development engineer. Mr. Zhang received his bachelor's degree in electrical engineering from Zhejiang University in 1999.

Mr. Shan-Nen Bong has served as our chief financial officer since November 2017. Mr. Bong has over 20 years of experience in financial accounting and auditing. Prior to joining us, Mr. Bong served as the chief financial officer of Nam Tai Property Inc., an NYSE-listed property development and management company, from May 2015 to May 2016. Prior to that, Mr. Bong worked in Ernst & Young, for 17 years in Singapore, New Zealand, San Jose (USA) and Beijing, and was an audit partner at Ernst & Young before joining Nam Tai Property. Mr. Bong is a member of Institute of Chartered Accountants in England and Wales, Hong Kong Institute of Certified Public Accountants and Chartered Accountants Australia and New Zealand. Mr. Bong received his bachelor's degrees in accounting, finance and computer science from Lincoln University.

*Mr. Guoxiao Ben* has served as our chief human resource officer since January 2020. Mr. Ben has rich experience in human resources management and deep insights of the organization in the internet industry. Prior to joining us, Mr. Ben served as the assistant chief executive officer of Lexing Technology Co., Ltd. from December 2018 to December 2019. Prior to that, Mr. Ben served as the chief human resource officer of Kuaishou Technology Co., Ltd., a leading short video social platform in China, from April 2017 to October 2017. From August 2015 to March 2017, Mr. Ben served as the chief procurement officer assistant as well as human resource head of new business at Alibaba Group. Prior to that, he worked as a general manager of Shenzhen Hardware Center at Qihoo 360 Technology Co., Ltd. Mr. Ben received his bachelor's degree in powder metallurgy from Central South University.

Mr. Kwok Hin Tang has served as our director since November 2014. Mr. Tang is a venture capitalist with 16 years of experience in director investment, corporate finance and venture capital in China and the U.S. He has been responsible for managing a portfolio of private and public company investments in the life science, technology and Internet space from incubation to growth stage with successful track records in following-on financing and strategic operation activities. Mr. Tang joined Mandra Capital in 2008 and is responsible for managing a portfolio of private company investments in the life science, technology and internet space. In addition to his responsibilities at Mandra Capital. Mr. Tang is also a member of the Intellectual Property Assessment Committee at the Hong Kong Polytechnic University. Prior to joining Mandra Capital, Mr. Tang was an investment analyst at KGR Capital (now LGT Capital Partners) from 2005 to 2008. Mr. Tang received a master's degree in engineering from Stanford University in 2004.

Mr. Hon Sang Lee has served as our director since May 2020. Mr. Lee is a seasoned technology entrepreneur and active angel investor with unique leadership experience with leading multinational and local technology companies in China. He currently serves as the chairman and executive partner of ShangGu Capital, which is an equity venture investment fund targeting early and growth stage innovative companies. He is also a director of Shenzhen Dynanonic Co., Ltd. (SZSE: 300769) and independent director of Tarena International, Inc. (Nasdaq: TEDU). Mr. Lee is a business pioneer in China starting in 1987 when he joined HP China and stayed with HP for 12 years until 1999. While at HP, Mr. Lee established and headed the HP Personal Computer and Peripheral Business in China, growing it from a small operation to a market leader when he left in 1999. Mr. Lee then joined Founder Holdings Ltd., a Hong Kong-listed company, as chief executive officer to run its software and systems integration business. Mr. Lee was chairman and chief executive officer of Hinge Software, a software company he co-founded in 2003. Mr. Lee founded Sinova SJ Capital in 2010. Mr. Lee received his bachelor's degree in computer science from the University of Hong Kong.

Mr. John Tiong Lu Koh has served as our director since July 2018. Mr. Koh has over 25 years of experience in investment banking and law. Mr. Koh was a managing director and a senior advisor of the Goldman Sachs Group until 2006. Prior to joining Goldman Sachs in 1999, Mr. Koh spent 18 years as a lawyer at various firms, including J. Koh & Co., a Singapore firm founded by Mr. Koh, as well as serving in the Singapore Attorney-General's Chambers. Mr. Koh sits on various boards of directors, including NSL Ltd. and KrisEnergy Limited, and serves as the chairman of the audit committee of both companies. Mr. Koh is also a director of the National Museum of Singapore. Mr. Koh received a bachelor of arts degree and a master of arts degree from the University of Cambridge and a graduate degree from Harvard Law School.

Mr. Peter Si Ngai Yeung has served as our director since July 2018. Mr. Yeung has over 40 years of experience in the information technology industry. He was initially trained as a professional sales person in managing large enterprise customers and later as a sales manager and general manager. Mr. Yeung recently retired as a vice president of Asia markets at Promethean Limited, a global leader in interactive education technologies, in June 2018. Prior to joining Promethean, Mr. Yeung served as vice president of business development at NetDragon Websoft from April to October 2015, and a vice president of operations at Harrow International from April 2013 to February 2015. Prior to that, Mr. Yeung was the general manager of Microsoft Hong Kong & Macau Limited from August 2009 to November 2012. Mr. Yeung also served as managing director at several other global IT corporations, including Jardine OneSolution, Hewlett-Packard and Compaq Computer, from July 1998 to June 2009. Mr. Yeung received his bachelor's degree in social science from the University of Hong Kong.

#### B. Compensation of Directors and Executive Officers

For the fiscal year ended December 31, 2021, we paid cash compensation in an aggregate amount of approximately RMB6.2 million (US\$1.0 million) to our executive officers, and approximately RMB934.2 thousand (US\$146.6 thousand) to our non-executive directors. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our directors and executive officers. Our PRC subsidiary and VIE 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 clients or prospective clients, 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.

# 2014 Stock Incentive Plan

In July 2014, our shareholders and board of directors adopted the 2014 Stock Incentive Plan, which we refer to as the 2014 Plan in this annual report, to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and promote the success of our business. The maximum aggregate number of Class A common shares that may be issued pursuant to all awards under the 2014 Plan is 5,500,000 Class A common shares. As of February 28, 2022, options to purchase 3,125,096 Class A common shares had been granted and were outstanding under the 2014 Plan, excluding awards that were exercised, forfeited or canceled after the relevant grant dates. The following paragraphs summarize the terms of the 2014 Plan.

Types of Awards. The plan permits the awards of options, restricted shares and restricted share units or other right or benefit under the plan.

**Plan Administration.** The board of directors or a committee designated by the board of directors acts as the plan administrator. The plan administrator will determine the participants who are to receive awards, the type or types of awards to be granted, the number of awards to be granted, and the terms and conditions of each award grant. The plan administrator can amend outstanding awards and interpret the terms of the 2014 Plan and any award agreement.

**Award Agreement.** Awards granted under the 2014 Plan are evidenced by an award agreement that sets forth the terms and conditions for each grant.

*Exercise Price.* The exercise price of an award will be determined by the plan administrator. In certain circumstances, such as a recapitalization, a spin-off, reorganization, merger, separation and split-up, the plan administrator may adjust the exercise price of outstanding options and share appreciation rights.

*Eligibility.* We may grant awards to our employees, consultants, and all members of the board of directors.

Term of the Awards. The term of each share award granted under the 2014 Plan may not exceed ten years after the date of grant.

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

*Transfer Restrictions.* Awards may not be transferred in any manner by the recipient other than by will or the laws of descent and distribution, except as otherwise provided by the plan administrator.

**Termination.** The plan shall terminate in July 2024, provided that our board of directors may terminate the plan at any time and for any reason.

#### 2017 Stock Incentive Plan

In March 2017, our shareholders and board of directors adopted the 2017 Stock Incentive Plan, which we refer to as the 2017 Plan in this annual report, to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and promote the success of our business. The maximum aggregate number of Class A common shares that may be issued pursuant to all awards under the 2017 Plan, as amended, is 6,015,137 Class A common shares. As of February 28, 2022, options to purchase 3,949,313 Class A common shares and 119,568 restricted share units had been granted and were outstanding under the 2017 Plan, excluding awards that were exercised, forfeited or canceled after the relevant grant dates.

The following paragraphs summarize the terms of the 2017 Plan.

*Types of Awards.* The plan permits the awards of options, restricted shares and restricted share units or other right or benefit under the plan.

**Plan Administration.** The board of directors or a committee designated by the board of directors acts as the plan administrator. The plan administrator will determine the participants who are to receive awards, the type or types of awards to be granted, the number of awards to be granted, and the terms and conditions of each award grant. The plan administrator can amend outstanding awards and interpret the terms of the 2017 Plan and any award agreement.

**Award Agreement.** Awards granted under the 2017 Plan are evidenced by an award agreement that sets forth the terms and conditions for each grant.

*Exercise Price.* The exercise price of an award will be determined by the plan administrator. In certain circumstances, such as a recapitalization, a spin-off, reorganization, merger, separation and split-up, the plan administrator may adjust the exercise price of outstanding options and share appreciation rights.

Eligibility. We may grant awards to our employees, consultants, and all members of the board of directors.

Term of the Awards. The term of each share award granted under the 2017 Plan may not exceed ten years after the date of grant.

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

*Transfer Restrictions.* Awards may not be transferred in any manner by the recipient other than by will or the laws of descent and distribution, except as otherwise provided by the plan administrator.

**Termination.** The plan shall terminate in March 2027, provided that our board of directors may terminate the plan at any time and for any reason.

#### 2021 Share Incentive Plan

In December 2021, our board of directors adopted the 2021 Share Incentive Plan, which we refer to as the 2021 Plan in this annual report, to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and promote the success of our business. The maximum aggregate number of Class A common shares that may be issued pursuant to all awards under the 2021 Plan is 4,000,000 Class A common shares. As of February 28, 2022, we have not granted any awards under the 2021 Plan.

Types of Awards. The plan permits the awards of options, restricted shares and restricted share units or other right or benefit under the plan.

**Plan Administration.** The board of directors or a committee designated by the board of directors acts as the plan administrator. The plan administrator will determine the participants who are to receive awards, the type or types of awards to be granted, the number of awards to be granted, and the terms and conditions of each award grant. The plan administrator can establish, adopt, or revise any rules and regulations as it may deem necessary or advisable to administer the plan and interpret the terms of the 2021 Plan and any award agreement.

**Award Agreement.** Awards granted under the 2021 Plan are evidenced by an award agreement that sets forth the terms and conditions for each grant.

**Exercise Price.** The exercise price of an award will be determined by the plan administrator and set forth in the award agreement which may be a fixed price or a variable price related to the fair market value of the shares. The exercise price per share subject to an option may be amended or adjusted in the absolute discretion of the plan administrator, the determination of which shall be final, binding and conclusive.

Eligibility. We may grant awards to our employees, consultants, and board of directors, as determined by the plan administrator.

Term of the Awards. The term of each share award granted under the 2021 Plan may not exceed ten years after the date of grant.

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

*Transfer Restrictions.* Awards may not be transferred in any manner by the recipient other than transfer to the Company or by will or the laws of descent and distribution, except as otherwise provided by the plan administrator.

*Termination.* The plan shall terminate in December 2031, provided that our board of directors may terminate the plan at any time and for any reason.

The following table summarizes, as of February 28, 2022, the awards granted under the 2014 Plan, the 2017 Plan and the 2021 Plan to our directors and executive officers, excluding awards that were exercised, forfeited or canceled after the relevant grant dates.

Name	Common Shares Underlying Options and Restricted Share Units	Exercise Price (US\$/Share)	Date of Grant	Date of Expiration
Qing Zhang	*		June 2, 2020	June 2, 2030
Shan-Nen Bong			November 13, 2017	November 13, 2027
	*	0.00 to 2.876	and April 1, 2019	and April 1, 2029
Guoxiao Ben	*	_	January 8, 2020	January 8, 2030
Kwok Hin Tang			Between April 1, 2019	Between April 1, 2029
	*(1)	_	and April 1, 2021	and April 1, 2031
John Tiong Lu Koh			Between September 4,	Between September 4,
			2018 and December 28,	2028 and
	*(1)	_	2021	December 28, 2031
Peter Si Ngai Yeung			Between September 4,	Between September 4,
			2018 and December 28,	2028 and
	*(1)	_	2021	December 28, 2031
Hon Sang Lee			Between May 7,	Between May 7, 2030
	*(1)	_	2020 and May 7, 2021	and May 7, 2031
All directors and executive officers as a group	790,633			

Notes:

(1) Represents restricted share units.

As of February 28, 2022, other employees as a group held outstanding options to purchase 6,403,344 Class A common shares of our company, at a weighted average exercise price of US\$1.02 per share.

### C. Board Practices

Our board of directors consists of five directors. A director is not required to hold any shares in our company by way of qualification. A director who is in any way, whether directly or indirectly, interested in a contract or transaction or proposed contract or transaction with our company is required to declare the nature of his interest at a meeting of our directors. A director may vote in respect of any contract or transaction or proposed contract or transaction notwithstanding that he may be interested therein, and if he does so his vote shall be counted and he shall be counted in the quorum at any meeting of our directors at which any such contract or transaction or proposed contract or transaction is considered. The directors may exercise all the powers of the company to raise or borrow money and to mortgage or charge its undertaking, property and assets (present and future) and uncalled capital or any part thereof, to issue debentures, debenture stock, bonds and other securities, whether outright or as collateral security for any debt, liability or obligation of our company or of any third party. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

As of the date of this annual report, three out of five of our directors meet the "independence" definition under the Nasdaq Stock Market Rules. See "Item 16G. Corporate Governance."

## **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.

<sup>\*</sup> Aggregate number of shares represented by all grants of options and restricted share units to the person accounts for less than 1% of our total outstanding common shares as of the date of February 28, 2022.

Audit Committee. Our audit committee consists of Mr. John Tiong Lu Koh. Mr. Peter Si Ngai Yeung and Mr. Hon Sang Lee. Mr. Koh is the chairman of our audit committee. We have determined that Mr. Koh, Mr. Yeung and Mr. Lee satisfy the "independence" requirements of Rule 5605(c)(2) of the Nasdaq Stock Market Rules and Rule 10A-3 under the Exchange Act. We have determined that Mr. Koh 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 Mr. John Tiong Lu Koh, Mr. Peter Si Ngai Yeung and Mr. Hon Sang Lee. Mr. Koh is the chairman of our compensation committee. We have determined that Mr. Koh, Mr. Yeung and Mr. Lee satisfy the "independence" requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Rules. 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 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 Mr. Peter Si Ngai Yeung, Mr. John Tiong Lu Koh and Mr. Hon Sang Lee. Mr. Yeung is the chairman of our nominating and corporate governance committee. We have determined that Mr. Yeung, Mr. Koh and Mr. Lee satisfy the "independence" requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Rules. 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.

#### **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 owe to our company a duty to exercise skills they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. 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 towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. 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. Our company has the right to seek damages if a duty owed by our directors is breached. In certain limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our 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 and extraordinary 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 officers are appointed by and serve at the discretion of the board of directors. Our directors are not subject to a term of office, unless expressly specified in a written agreement between the director and our company, and hold office until such time as they are removed from office by ordinary resolution of the shareholders or by the board. The office of a director shall be vacated if, the director (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 to our company; (iv) without special leave of absence from our board of directors, is absent from meetings of our board of directors for three consecutive meetings and the board of directors resolves that his office be vacated; or (v) is removed from office pursuant to our memorandum and articles of association.

## **Board Diversity Matrix**

Board Diversity Matrix (As of February 28, 2022)	
Country of Principal Executive Offices	PRC
Foreign Private Issuer	Yes
Disclosure Prohibited Under Home Country Law	No
Total Number of Directors	5

	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity	<u> </u>			
Directors	0	5	0	0
Part II: Demographic Background				
Underrepresented Individual in Home Country				
Jurisdiction			0	
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

#### D. Employees

We had a total of 593, 568 and 541 employees as of December 31, 2019, 2020 and 2021, respectively. The following table gives a breakdown of our employees as of December 31, 2021, by function:

Function:	Number
Research and Development	242
Sales and Marketing	206
General and Administrative	78
Cost of Revenue	15
Total	541

As of December 31, 2021, we had 392 employees based in our headquarters in Shenzhen and a total of 149 employees in Beijing, Shanghai, Guangzhou, Chengdu and Hong Kong.

Our employees, who are energetic and aged below 30 on average, drive the rapid growth of our business. We devote management and organizational focus and resources to ensure that our culture and brand remain highly attractive to potential and existing employees. We have established comprehensive training programs that cover topics such as our corporate culture, employee rights and responsibilities, team-building, professional behavior and job performance.

Under PRC regulations, we are required to participate in and make contributions to housing funds and various employee social security plans that are organized by applicable local municipal and provincial governments, including pension, medical, work-related injury and unemployment benefit plans. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Failure to make adequate contributions to various employee benefit plans as required by PRC regulations may subject us to penalties." Bonuses are generally discretionary and based in part on employee performance and in part on the overall performance of our business. We have granted, and plan to continue to grant, share-based incentive awards to our employees in the future to incentivize their contributions to our growth and development.

We enter into standard labor contracts with our employees. We also enter into standard confidentiality agreements with our senior managements that contain non-compete restrictions.

We believe that we maintain a good working relationship with our employees, and we have not experienced any major labor disputes.

## E. Share Ownership

Except as specifically noted, the following table sets forth information with respect to the beneficial ownership of our common shares as of February 28, 2022 by:

- · each of our directors and executive officers; and
- each person known to us to own beneficially more than 5% of our total outstanding shares.

The calculations in the table below are based on 79,051,708 common shares outstanding on an as-converted basis, consisting of 62,051,519 Class A common shares (excluding treasury shares) and 17,000,189 Class B common shares, as of February 28, 2022, excluding 7,193,977 Class A common shares issuable upon the exercise of outstanding share options and restricted share units granted under our 2014 Stock Incentive Plan, 2017 Stock Incentive Plan and 2021 Share Incentive Plan. Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

		Common Shares Beneficially Owned			
	Class A common shares	Class B common shares	Total common shares	Percentage of total common shares	Percentage of aggregate voting power <sup>†</sup>
Directors and Executive Officers:**			·		
Weidong Luo <sup>(1)</sup>	7,171,333	17,000,189	24,171,522	30.6%	76.4%
Qing Zhang <sup>(2)</sup>	*	_	*	*	*
Shan-Nen Bong <sup>(3)</sup>	*		*	*	*
Guoxiao Ben <sup>(4)</sup>	*	_	*	*	*
Kwok Hin Tang <sup>(5)</sup>	*		*	*	*
Hon Sang Lee	_	_	_	_	_
John Tiong Lu Koh <sup>(6)</sup>	*		*	*	*
Peter Si Ngai Yeung <sup>(7)</sup>	*	_	*	*	*
All Directors and Executive Officers as a Group	7,696,780	17,000,189	24,696,969	31.2%	76.6%
Principal Shareholders:					
KK Mobile Limited <sup>(8)</sup>	7,100,000	17,000,189	24,100,189	30.5%	76.3%
Mandra iBase Limited <sup>(9)</sup>	14,109,001	_	14,109,001	17.9%	6.1%
Fei Chen <sup>(10)</sup>	5,002,056		5,002,056	6.3%	2.2%
Entities affiliated with IDG-Accel <sup>(11)</sup>	4,672,006	_	4,672,006	5.9%	2.0%
Fosun International Limited <sup>(12)</sup>	6,020,218	_	6,020,218	7.6%	2.6%
FIL Limited and its affiliated entities <sup>(13)</sup>	4,394,283	_	4,394,283	5.6%	1.9%

### Notes:

- † For each person or group included in this column, percentage of total voting power represents voting power based on both Class A and Class B common shares held by such person or group with respect to all outstanding shares of our Class A and Class B common shares as a single class. Each holder of our Class A common shares is entitled to one vote per share. Each holder of our Class B common shares is entitled to ten votes per share. Our Class B common shares are convertible at any time by the holder into Class A common shares on a one-for-one basis.
- \* Aggregate number of shares accounts for less than 1% of our total outstanding common shares and aggregate voting power.
- \*\* The business address of Messrs. Weidong Luo, Qing Zhang, Shan-Nen Bong, Guoxiao Ben and Hon Sang Lee is 14/F, China Certification and Inspection Building, No. 8 Keji South 12th Road, Nanshan District, Shenzhen, Guangdong 518057, People's Republic of China. Mr. Kwok Hin Tang's business address is 10/F, Fung House, 19-20 Connaught Road Central, Hong Kong. Mr. John Tiong Lu Koh's business address is 279 River Valley Road, #05-01, Singapore 238320. Mr. Peter Si Ngai Yeung's business address is 5A Block 3, The Morning Glory, 1 Lok Ha Square, Shatin, Hong Kong.
- (1) Represents (i) 7,100,000 Class A common shares and 17,000,189 Class B common shares held by KK Mobile Limited, a British Virgin Islands company, and (ii) 107,000 ADSs, representing 71,333 Class A common shares, owned by Mr. Weidong Luo. KK Mobile Limited is wholly owned by Mr. Weidong Luo. The registered address of KK Mobile Limited is Unit 8, 3/F., Qwomar Trading Complex, Blacburne Road, Port Purcell, Road Town, Tortola, British Virgin Islands.
- (2) Represents the Class A common shares Mr. Qing Zhang has the right to acquire upon exercise of share options within 60 days after February 28, 2022
- (3) Represents the Class A common shares Mr. Shan-Nen Bong has the right to acquire upon exercise of share options within 60 days after February 28, 2022.

- (4) Represents the Class A common shares Mr. Guoxiao Ben has the right to acquire upon exercise of share options within 60 days after February 28,
- (5) Represents the Class A common shares held by and the Class A common shares Mr. Kwok Hin Tang has the right to acquire upon exercise of share options within 60 days after February 28, 2022.
- (6) Represents the Class A common shares held by Mr. John Tiong Lu Koh.
- (7) Represents the Class A common shares held by Mr. Peter Si Ngai Yeung.
- (8) Represents 7,100,000 Class A common shares and 17,000,189 Class B common shares held by KK Mobile Limited.
- (9) Represents 13,825,461 Class A common shares and 425,310 ADSs, representing 283,540 Class A common shares, directly held by Mandra iBase Limited, a British Virgin Islands company, as reported on the Schedule 13G filed by Mandra iBase Limited and affiliated parties on February 11, 2022. The registered address of Mandra iBase Limited is 3rd Floor J&C Building, PO Box 933, Road Town, Tortola, British Virgin Islands, VG1110. Mandra iBase Limited is wholly owned by Beansprouts Ltd., a British Virgin Islands company. The shareholders of Beansprouts Ltd. are Bing How Mui and Song Yi Zhang, each holding 50% of the issued and outstanding share capital of Beansprouts Ltd.
- (10) Represents 3,816,026 Class A common shares held by Elite Bright International Limited, a British Virgin Islands company, and 1,186,030 Class A common shares that Mr. Fei Chen has the right to acquire upon exercise of share options within 60 days after February 28, 2022, as reported on the Schedule 13G filed by Fei Chen on January 25, 2019. Elite Bright International Limited is wholly owned by Mr. Fei Chen. The registered address of Elite Bright International Limited is Akara Bldg, 24 De Castro Street, Wickhams Cay 1, Road Town, Tortola, British Virgin Islands.
- (11) Represents (i) 4,362,710 Class A common shares held by IDG-Accel China Growth Fund III L.P., a Cayman Islands limited partnership, and (ii) 309,296 Class A common shares held by IDG-Accel China III Investors L.P., a Cayman Islands limited partnership, as reported on the Schedule 13G filed by IDG-Accel China Growth Fund III L.P. and affiliated parties on February 25, 2022. The general partner of IDG-Accel China Growth Fund III Associates L.P., and the general partner of IDG-Accel China Growth Fund III Associates L.P. is IDG-Accel China Growth Fund GP III Associates Ltd. The general partner of IDG-Accel China III Investors L.P. is IDG-Accel China Growth Fund GP III Associates Ltd. is 50% owned by Mr. Chi Sing Ho, its largest shareholder, and the current members of its board of directors are Mr. Quan Zhou and Mr. Chi Sing Ho. The address of the principal business office for IDG-Accel China Growth Fund III L.P. and IDG-Accel China III Investors L.P. is Unit 5505, The Center, 99 Queen's Road Central, Hong Kong.
- (12) Represents 6,019,288 Class A common shares held by Greatest Investments Limited, a British Virgin Islands company, and 1,395 ADSs, representing 930 Class A common shares, held by Fidelidade—Companhia de Seguros, S.A., as reported on the Schedule 13G filed by Greatest Investments Limited, Fidelidade—Companhia de Seguros, S.A. and Fosun International Limited on January 21, 2022. The address of the principal business office for Greatest Investments is Maples Corporate Services (BVI) Limited of Kingston Chambers, PO Box 173, Road Town, Tortola, British Virgin Islands. The address of the principal business office for Fidelidade is Largo do Calhariz, 30, Lisbon, Portugal. The address of the principal business office for Fosun International is Room 808, ICBC Tower, 3 Garden Road, Central, Hong Kong.
- (13) Represents 4,394,283 Class A common shares beneficially owned by FIL Limited, as reported on the Schedule 13G filed by FIL Limited and affiliated parties on February 9, 2022. The address of FIL Limited is Pembroke Hall, 42 Crow Lane, Hamilton, Bermuda, HM19.

To our knowledge, as of February 28, 2022, 32,461,713 of our Class A common shares were held by one record holder in the United States, which was The Bank of New York Mellon, the depositary of the ADS program. The number of beneficial owners of the ADSs in the United States is likely to be much larger than the number of record holders of our common shares in the United States.

## Item 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## A. Major Shareholders

Please refer to "Item 6. Directors, Senior Management and Employees—E. Share Ownership."

### **B.** Related Party Transactions

### Contractual Arrangements with our Variable Interest Entity and its Shareholders

See "Item 4. Information on the Company—C. Organizational Structure."

## **Shareholders Agreement and Registration Rights**

We entered into our shareholders agreement on May 10, 2017 with our shareholders, which consist of holders of common shares and preferred shares. The shareholders agreement provides for certain special rights, including right of first refusal, co-sale rights, preemptive rights and contains provisions governing the board of directors and other corporate governance matters. Those special rights, as well as the corporate governance provisions, have automatically terminated upon the completion of our initial public offering.

#### **Registration Rights Granted to Shareholders**

We have granted certain registration rights to our shareholders under the shareholders agreement. Set forth below is a description of the registration rights.

Demand Registration Rights. At any time after the earlier of (i) January 1, 2020 or (ii) one year following the closing of an initial public offering, holders of at least 50% of the preferred shares (or common shares issued on conversion of preferred shares) then outstanding or Mandra iBase Limited has the right to demand that we file a registration statement covering at least 20% (or any lesser percentage if the anticipated gross proceeds to us from such proposed offering would exceed US\$5.0 million) of the registrable securities. We have the right to defer filing of a registration statement for a period of not more than 90 days (except for a registration statement on Form F-3, which shall be 60 days) after the receipt of the request of the initiating holders if we furnish to the holders requesting registration a certificate signed by our chief executive officer stating that in the good faith judgment of our board of directors, it would be materially detrimental to us and our shareholders for such registration statement to be filed at such time. However, we cannot exercise the deferral right more than once in any 12-month period. We are obligated to effect no more than two demand registrations, other than demand registration to be effected pursuant to registration statement on Form F-3, for which an unlimited number of demand registrations shall be permitted.

Piggyback Registration Rights. If we propose to file a registration statement for a public offering of our securities, we must offer our shareholders an opportunity to include in the registration all or any part of the registrable securities held by such holders. If the managing underwriters of any underwritten offering determine in good faith that marketing factors require a limitation of the number of shares to be underwritten, the underwriters may (i) in the event the offering is the initial public offering, exclude from the underwritten offering all of the registrable securities (so long as the only securities included in such offering are those sold by us), or (ii) otherwise exclude up to 75% of the registrable securities requested to be registered but only after first excluding all other equity interests from the registration and underwritten offering and so long as the number of registrable securities to be included in the registration is allocated among all holders on a pro rata basis.

Form F-3 Registration Rights. Our shareholders may request us in writing to file an unlimited number of registration statements on Form F-3 so long as such registration offerings are in excess of US\$500,000. We shall effect the registration of the securities on Form F-3 as soon as practicable, except in certain circumstances.

Expenses of Registration. We will bear all registration expenses, other than underwriting discounts and selling commissions, and fees for special counsel of the holders participating in such registration, incurred in connection with any demand, piggyback or Form F-3 registration.

Termination of Registration Rights. Our shareholders' registration rights will terminate on the earlier of (i) the date that is five years after the closing of an initial public offering, and (ii) with respect to any shareholder, when the registrable securities proposed to be sold by such shareholder may then be sold without registration in any 90-day period pursuant to Rule 144 under the Securities Act.

#### **Issuance of Convertible Notes**

On April 17, 2018, we issued zero coupon non-guaranteed and unsecured convertible notes due 2021 in the principal amount of US\$35.0 million, of which US\$30.0 million is held by Mercer Investments (Singapore) Pte. Ltd., an indirectly wholly-owned subsidiary of The Goldman Sachs Group, Inc., and US\$5.0 million is held by Mandra iBase Limited, one of our existing shareholders. The convertible notes are non-interest bearing, except when, subject to certain exceptions, an event of default occurs, such as failure to make any payment due on the due date, and the majority noteholders have, in their sole discretion, accelerated their convertible notes by giving notice to us that their outstanding notes are due and repayable. In such event, we will be required to pay interest at a simple interest rate of 15% per annum on the aggregate outstanding principal amount of the convertible notes. Holders of the convertible notes may, at their discretion during a period starting from the issue date of the notes until seven days prior to the maturity of the notes, subject to certain exceptions, convert the notes into Class A common shares of our company at the then applicable conversion price, which is initially US\$11.7612 per common share, subject to certain anti-dilution adjustments. In April 2021, we fully redeemed such US\$35.0 million of convertible notes.

## **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 of Directors and Executive Officers—2014 Stock Incentive Plan," "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—2017 Stock Incentive Plan," and "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—2021 Share Incentive Plan."

#### Transactions with Our Chief Executive Officer and Related Entities

Amounts due to Our Chief Executive Officer. As of December 31, 2017, we had an amount of RMB5.6 million due to Mr. Weidong Luo, our chief executive officer and chairman of our board of directors, representing the capital he contributed to fund our operations at the early stage of our development. Such amounts are interest free. We fully repaid the outstanding balance to Mr. Luo in April 2018.

Transactions with Shenzhen Weixunyitong Information Technology Co., Ltd., Shenzhen Weixunyitong Information Technology Co., Ltd., or Shenzhen Weixunyitong, engages in mobile game business, and Mr. Weidong Luo, our chief executive officer and chairman of our board of directors, has significant influence over Shenzhen Weixunyitong.

In 2019, 2020 and 2021, we purchased ad inventory from and placed ads on the game apps of Shenzhen Weixunyitong in the amount of RMB1.6 million, nil and nil, respectively. In 2017 and 2018, we also sub-leased office space from Shenzhen Weixunyitong for amounts of RMB1.6 million and RMB0.5 million, respectively. We terminated the lease contract in 2018 and had nil lease expense from Shenzhen Weixunyitong in 2019. As of December 31, 2019, 2020 and 2021, we had aggregate amounts of RMB56 thousand, nil and nil, respectively, due to Shenzhen Weixunyitong.

Transactions with Guangzhou Tianlang Network Technology Co., Ltd. Guangzhou Tianlang Network Technology Co., Ltd., or Guangzhou Tianlang, engages in advertising business, and Mr. Weidong Luo, our chief executive officer and chairman of our board of directors, has significant influence over Guangzhou Tianlang.

In 2019, 2020 and 2021, we provided certain SAAS Businesses and targeted marketing to Guangzhou Tianlang in an amount of RMB0.3 million, nil and RMB0.1 million, respectively. As of December 31, 2019, 2020 and 2021, we had amount of nil, nil and RMB35 thousand, respectively, due from Guangzhou Tianlang. As of December 31, 2019, 2020 and 2021, we had amount of nil, nil and RMB54 thousand, respectively, due to Guangzhou Tianlang.

### **Amounts due from Our Shareholders and President**

Amount due from KK Mobile Limited. KK Mobile Limited is a principal shareholder of our company and wholly owned by Mr. Weidong Luo, our chief executive officer and chairman of our board of directors. As of December 31, 2017, we had amount of RMB40,000 due from KK Mobile Limited, representing unpaid capital contribution. We received payment of the outstanding balance from the shareholder in June 2018.

Amount due from Our President. As of December 31, 2018, we had amount of RMB1.7 million due from our president, representing advances for business–related travel expenses. We settled the outstanding balance in full with our president in March 2019.

## 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 business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial cost and diversion of our resources, including our management's time and attention. We are currently not a party to, and we are not aware of any threat of, any legal or administrative proceedings that, in the opinion of our management, are likely to have any material and adverse effect on our business, financial condition, cash flow or results of operations. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Allegations or lawsuits against us or our management may harm our reputation and business."

#### **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 common 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.

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 on Dividend Distribution."

If we pay any dividends on our Class A common shares, we will pay those dividends which are payable in respect of the Class A common shares underlying the ADSs to the depositary, as the registered holder of such Class A common shares, and the depositary then will pay such amounts to the ADS holders in proportion to Class A common 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 common shares, if any, will be paid in U.S. dollars.

## B. Significant Changes

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. Offering and Listing Details

See "-C. Markets."

### B. Plan of Distribution

Not applicable.

### C. Markets

The ADSs, every three of which represent two Class A common shares of ours, have been listed on Nasdaq since July 26, 2018 under the symbol "JG."

#### 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

The following are summaries of material provisions of our current amended and restated memorandum and articles of association and of the Companies Act (As Revised), insofar as they relate to the material terms of our common shares.

Objects of Our Company. Under our memorandum and articles of association, the objects of our company are unrestricted and we have the full power and authority to carry out any object not prohibited by the Cayman Islands law.

Common Shares. Our common shares are divided into Class A common shares and Class B common shares. Holders of our Class A common shares and Class B common shares will have the same rights except for voting and conversion rights. Our common 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.

Each Class B common share is convertible into an equal number of Class A common shares upon the occurrence of certain matters as set forth in our memorandum and articles of association, including upon any direct or indirect sale, transfer, assignment or disposition of Class B common shares by a holder thereof to any person other than holders of Class B common shares or their affiliates. Class A common shares are not convertible into Class B common shares under any circumstances.

Dividends. The holders of our common shares are entitled to such dividends as may be declared by our board of directors. In addition, our shareholders may declare dividends by ordinary resolution, but no dividend shall exceed the amount recommended by our directors. Our memorandum and articles of association provide that dividends may be declared and paid out of our profits, realized or unrealized, or from any reserve set aside from funds legally available for distribution. Under the laws of the Cayman Islands, our company may pay a dividend out of either profits or share premium account, provided 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.

Voting Rights. In respect of all matters subject to a shareholders' vote, on a poll, each holder of Class A common shares is entitled to one vote per share and each holder of Class B common shares is entitled to ten votes per share. Our Class A common shares and Class B common 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 shareholders' meeting is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any shareholder holding not less than 10% of the votes attaching to the total common shares present in person or by proxy at the meeting.

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 common 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 outstanding common 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. Holders of the common shares 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 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 shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' general meetings may be convened by our chairman or our directors (acting by a resolution of the board of directors). 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 at least one shareholder present or by proxy, holding shares which carry in aggregate not less than one-third of all votes attaching to all of our shares in issue and entitled to vote.

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 provide that upon the requisition of shareholders representing in aggregate not less than one-third of the votes attaching to the 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 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.

Conversion. Each Class B common share is convertible into one Class A common share at any time by the holder thereof. Class A common shares are not convertible into Class B common shares under any circumstances. Upon the occurrence of certain matters as set forth in our memorandum and articles of association, including upon any direct or indirect sale, transfer, assignment or disposition of Class B common shares by a holder thereof to any person or entity, such Class B common shares will be automatically and immediately converted into an equal number of Class A common shares.

Transfer of Common Shares. Subject to the restrictions set out in our memorandum and articles of association as set out below, any of our shareholders may transfer all or any of his or her common 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 common 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 common share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the common 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 common 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 common share is to be transferred does not exceed four; and
- a fee of such maximum sum as the Nasdaq Global Market 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 shall, 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, after compliance with any notice required of the Nasdaq Global Market, 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 shall not be suspended nor the register closed for more than 30 calendar days in any calendar year as our board may determine.

Liquidation. On the winding up of our company, if the assets available for distribution amongst our shareholders shall be more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus shall 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, the assets will be distributed so that 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 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 by our board of directors. 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.

Variations of Rights of Shares. If at any time, our share capital is divided into different classes of shares, the rights attached to any class of shares, subject to any rights or restrictions for the time being attached to any class, may be materially adversely varied with the consent in writing of all the holders of the issued shares of that class or series or with the sanction of a resolution passed by a simple majority of the votes cast at a separate meeting of the holders of the shares of the class or series. 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, inter alia, the creation or issue of further shares ranking pari passu with or subsequent to such existing class of shares. The rights of the shareholders shall not be deemed to be materially adversely varied by the creation or issued of shares with preferred or other rights, including, without limitation, the creation of shares with enhanced or weighted voting rights.

*Issuance of Additional Shares*. Our articles of association authorizes our board of directors to issue additional common shares from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our articles of association also authorizes 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 common shares.

Inspection of Books and Records. Holders of our common 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 our memorandum and articles of association, our register of mortgages and charges and special resolutions of our shareholders). However, we will provide our shareholders with annual audited financial statements.

Anti-Takeover Provisions. 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 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 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).

# C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company", "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions," in this "Item 10. Additional Information—C. Material Contracts" or elsewhere in this annual report on Form 20-F.

#### D. Exchange Controls

See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations Relating to Foreign Exchange."

#### E. Taxation

The following summary of the material Cayman Islands, PRC and U.S. federal income tax consequences of an investment in the ADSs or common shares is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This summary does not deal with all possible tax consequences relating to an investment in the ADSs or common shares, such as the tax consequences under U.S. state and local tax laws or under the tax laws of jurisdictions other than the Cayman Islands, the People's Republic of China and the United States

## **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, after execution, brought within the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payments of dividends and capital in respect of our common shares will not be subject to taxation in the Cayman Islands and no withholding will be required on the payment of a dividend or capital to any holder of our common shares, nor will gains derived from the disposal of our common shares or the ADSs be subject to Cayman Islands income or corporation tax.

## People's Republic of China Taxation

Under the PRC Enterprise Income Tax Law and its implementation rules, an enterprise established outside of the PRC with a "de facto management body" within the PRC is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its global income. The implementation rules define the term "de facto management body" as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In April 2009, the State Administration of Taxation issued a circular, known as Circular 82, which provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is located in China. Although this circular only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners, the criteria set forth in the circular may reflect the State Administration of Taxation's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises. According to Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China only if all of the following conditions are met: (i) the primary location of the day-to-day operational management and the places where they perform their duties are in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitually reside in the PRC.

We believe that Aurora Mobile Limited is not a PRC resident enterprise for PRC tax purposes. Aurora Mobile Limited is not controlled by a PRC enterprise or PRC enterprise group and we do not believe that Aurora Mobile Limited meets all of the conditions above. Aurora Mobile Limited is a company incorporated outside the PRC. As a holding company, its key assets are its ownership interests in its subsidiaries, and its key assets are located, and its records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside the PRC. For the same reasons, we believe our other entities outside of China are not PRC resident enterprises either. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body." There can be no assurance that the PRC government will ultimately take a view that is consistent with us.

If the PRC tax authorities determine that Aurora Mobile Limited is a PRC resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax from dividends we pay to our shareholders that are non-resident enterprises, including the holders of the ADSs. In addition, non-resident enterprise shareholders (including the ADS holders) may be subject to a 10% PRC tax on gains realized on the sale or other disposition of ADSs or common shares, if such income is treated as sourced from within the PRC, unless a reduced rate is available under an applicable tax treaty. It is unclear whether our non-PRC individual shareholders (including the ADS holders) would be subject to any PRC tax on dividends or gains obtained by such non-PRC individual shareholders in the event we are determined to be a PRC resident enterprise. If any PRC tax were to apply to such dividends or gains, it would generally apply at a rate of 20% unless a reduced rate is available under an applicable tax treaty. It is also unclear whether non-PRC shareholders of Aurora Mobile Limited would be able to claim the benefits of any tax treaties between their country of tax residence and the PRC in the event that Aurora Mobile Limited is treated as a PRC resident enterprise.

Provided that our Cayman Islands holding company, Aurora Mobile Limited, is not deemed to be a PRC resident enterprise, holders of the ADSs and common shares who are not PRC residents will not be subject to PRC income tax on dividends distributed by us or gains realized from the sale or other disposition of our common shares or the ADSs. However, under SAT Bulletin 7 and SAT Bulletin 37, where a non-resident enterprise conducts an "indirect transfer" by transferring taxable assets, including, in particular, equity interests in a PRC resident enterprise, indirectly by disposing of the equity interests of an overseas holding company, the non-resident enterprise, being the transferor, or the transferee or the PRC entity which directly owned such taxable assets may report to the relevant tax authority such indirect transfer. Using a "substance over form" principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of 10% for the transfer of equity interests in a PRC resident enterprise. We and our non-PRC resident investors may be at risk of being required to file a return and being taxed under SAT Bulletin 7 and SAT Bulletin 37, and we may be required to expend valuable resources to comply with SAT Bulletin 7 and SAT Bulletin 37, or to establish that we should not be taxed under these circulars. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies."

#### U.S. Federal Income Tax Considerations

The following is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of our ADSs or Class A common shares. Unless otherwise noted, this summary addresses only U.S. Holders (as defined below) that hold our ADSs or Class A common shares as "capital assets" (generally, property held for investment) for U.S. federal income tax purposes. This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the "Code"), U.S. Treasury regulations promulgated thereunder ("Regulations"), judicial decisions, administrative pronouncements, the income tax treaty between the United States and China (the "Treaty") and other relevant authorities, all as in effect as of the date hereof and all of which are subject to differing interpretations and change, possibly with retroactive effect.

This summary does not address U.S. federal estate, gift or other non-income tax considerations, the alternative minimum tax, 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 common shares, nor does it address all aspects of U.S. federal income taxation that may be relevant to a particular U.S. Holder in light of that U.S. Holder's particular circumstances or that may be relevant to certain types of U.S. Holders subject to special treatment under U.S. federal income tax law, such as:

- banks and other financial institutions;
- insurance companies;
- pension plans;

- cooperatives;
- regulated investment companies;
- real estate investment trusts;
- dealers in securities or currencies:
- 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);
- persons that acquire their ADSs or Class A common shares pursuant to any employee share option or otherwise as compensation;
- persons that will hold their ADSs or Class A common shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes;
- persons that have a functional currency other than the U.S. dollar; or
- persons that actually or constructively own 10% or more of our stock (by vote or value).

Prospective investors should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. income and other tax considerations relevant to the ownership and disposition of our ADSs or Class A common shares in light of their particular circumstances.

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of our ADSs or Class A common 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, or organized in or under the laws of the United States, 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 (i) that is subject to the primary supervision of a court within the United States and the control of one or more United States persons for all substantial decisions, or (ii) that has validly elected to be treated as a United States person under the applicable Regulations.

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) owns our ADSs or Class A common shares, the U.S. federal income 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 common shares and their partners should consult their tax advisors regarding an investment in our ADSs or Class A common shares.

The discussion below assumes that the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement have been and will be complied with in accordance with the terms. If a U.S. Holder holds ADSs, such holder should be treated as the holder of the underlying Class A common shares represented by those ADSs for U.S. federal income tax purposes.

#### Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be classified as a passive foreign investment company ("PFIC") for U.S. 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 or (ii) 50% or more of the value of its assets (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. Passive income generally includes dividends, interest, royalties, rents, annuities, net gains from the sale or exchange of property producing such income and net foreign currency gains. Passive assets are those which give rise to passive income and include assets held for investment, as well as cash, assets readily convertible into cash, and (subject to certain exceptions) working capital. Our company's goodwill and other unbooked intangibles are taken into account and may be classified as active or passive depending on the income such assets generate or are held to generate. 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, indirectly or constructively, 25% or more (by value) of its stock.

Although the law in this regard is not entirely clear, we treat our consolidated VIE as being owned by us for U.S. federal income tax purposes because we control its management decisions and are entitled to substantially all of the economic benefits associated with it, and, as a result, we consolidate its results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of the consolidated 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 for U.S. federal income tax purposes, and based upon an analysis of our income and assets and the market value of our ADSs, we do not believe that we were a PFIC for the taxable year ended December 31, 2021. There can be no assurance regarding our PFIC status for the current taxable year or foreseeable future taxable years, however, because our PFIC status is a factual determination made annually that will depend, in part, upon the composition of our income and assets. The value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined in part by reference to the market price of our ADSs or Class A common shares from time to time (which may be volatile). Because we will generally take into account our current market capitalization in estimating the value of our goodwill and other unbooked intangibles, our PFIC status for the current taxable year and foreseeable future taxable years may be affected by our market capitalization. Recent fluctuations in our market capitalization create a material risk that we may be classified as a PFIC for the current taxable year and foreseeable future taxable years. In addition, the composition of our income and our assets will be affected by how, and how quickly, we spend our liquid assets. Under circumstances where our revenue from activities that produce passive income significantly increases relative to our revenue from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming classified as a PFIC may substantially increase.

Because there are uncertainties in the application of the relevant rules, it is possible that the IRS may challenge our classification of certain income or assets as non-passive, or our valuation of our goodwill and other unbooked intangibles, each of which could cause us to become classified as a PFIC for the current or subsequent taxable years. If we are a PFIC for any taxable year during which U.S. Holders hold our ADSs or Class A common shares, we would generally continue to be treated as a PFIC with respect to such U.S. Holders unless we cease to be a PFIC and the U.S. Holder makes certain elections. The discussion below under "—Distributions" and "—Sale or Other Disposition" assumes that we are not and will not be classified as a PFIC for U.S. federal income tax purposes.

#### Distributions

The gross amount of any distributions received by a U.S. Holder on our ADSs or Class A common shares (including any amounts withheld in respect of PRC withholding taxes) will generally be subject to tax as dividends to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be includible in the gross income of a U.S. Holder on the day actually or constructively received. Such dividends will not be eligible for the dividends received deduction generally allowed to U.S. corporations under the Code. The following discussion assumes that any dividends will be paid in U.S. dollars. Distributions in excess of our current and accumulated earnings and profits will be treated as a non-taxable return of capital to the extent of the U.S. Holder's adjusted tax basis in our ADSs and Class A common shares and thereafter generally as capital gain. Because we do not intend to determine our earnings and profits in accordance with U.S. federal income tax principles, the full amount of any distribution we pay is generally expected to be treated as a dividend for U.S. federal income tax purposes.

An individual or other non-corporate U.S. Holder may be subject to tax on any such dividends at the lower capital gain tax rate applicable to "qualified dividend income," provided that certain conditions are satisfied, including that (1) the ADSs are readily tradable 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 Treaty, (2) we are neither a PFIC nor treated as such with respect to a U.S. Holder (as discussed below) for the taxable year in which the dividend is paid and the preceding taxable year, and (3) certain holding period requirements are met. Our ADSs, but not our Class A common shares, are listed on the Nasdaq Global Market so we anticipate that our ADSs should qualify as readily tradable on an established securities market in the United States, although there can be no assurances in this regard.

For U.S. foreign tax credit purposes, dividends received on our ADSs or Class A common shares will generally be treated as income from foreign sources and will generally constitute passive category income. If we are deemed to be a PRC resident enterprise under PRC tax law, a U.S. Holder may be subject to PRC withholding taxes on such dividends. Subject to certain conditions and limitations, a Treaty-eligible U.S. Holder may be eligible to claim a foreign tax credit in respect of any PRC income taxes paid or withheld with respect to dividends on our ADSs or Class A common shares to the extent such taxes are nonrefundable under the Treaty. Alternatively, a U.S. Holder may elect to deduct such taxes in computing its taxable income for U.S. federal income tax purposes. A U.S. Holder's election to deduct foreign taxes instead of claiming foreign tax credits applies to all creditable foreign income taxes paid or accrued in the relevant taxable year. The rules regarding foreign tax credits and the deductibility of foreign tax credits and the deductibility of foreign tax credits and the deductibility of foreign taxes in light of their particular circumstances.

#### Sale or Other Disposition of ADSs or Class A Common Shares

A U.S. Holder will generally recognize gain or loss on the sale or other disposition of our ADSs or Class A common shares in an amount equal to the difference between the amount realized on the disposition and the U.S. Holder's adjusted tax basis in such ADSs or Class A common shares. Any such gain or loss will generally be long-term capital gain or loss if the U.S. Holder's holding period in the ADSs or Class A common shares exceeds one year at the time of disposition. Long-term capital gains of individuals and certain other non-corporate U.S. Holders are generally eligible for a reduced rate of taxation. The deductibility of capital losses may be subject to limitations.

As described in "—People's Republic of China Taxation," if we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law, gains from the sale or other disposition of our ADSs or Class A common shares may be subject to PRC income tax and will generally be U.S. source gains, which may limit a U.S. Holder's ability to claim a foreign tax credit for any such PRC income tax imposed on such gain. U.S. Holders that are eligible for the benefits of the Treaty may apply the Treaty to treat such gain as PRC source, however. Notwithstanding this, pursuant to recently issued Regulations, it is possible that Treaty-eligible U.S. Holders that do not apply the Treaty and U.S. Holders that are not eligible for benefits under the Treaty may not be able to claim a foreign tax credit for any PRC tax imposed on a sale or other disposition of our ADSs or Class A common shares. The rules regarding foreign tax credits and the deductibility of foreign taxes are complex. U.S. Holders should consult their tax advisors regarding the availability of a foreign tax credit or a deduction in lieu thereof in light of their particular circumstances, as well as with respect to their eligibility for benefits under the Treaty and the potential impact of the recently issued Regulations.

## Passive Foreign Investment Company Rules

If we are a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A common shares, the U.S. Holder will be subject to special tax rules with respect to any "excess distribution" that the holder receives on our ADSs or Class A common shares and any gain the U.S. Holder recognizes from a sale or other disposition (including a pledge) of our ADSs or Class A common shares, unless the U.S. Holder makes a "mark-to-market" election as discussed below.

Distributions received by a U.S. Holder on our ADSs or Class A common shares in a taxable year that are greater than 125% of the average annual distributions the U.S. Holder received in the three preceding taxable years or, if shorter, such U.S. Holder's holding period for the ADSs or Class A common shares will be treated as excess distributions. Under these special tax rules:

- the excess distribution or gain will be allocated pro rata over the U.S. Holder's holding period for the ADSs or Class A common shares;
- amounts allocated to the taxable year of the excess distribution or of the sale or other disposition and to 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; and
- amounts allocated to each prior taxable year, other than the current taxable year or a pre-PFIC year, will be subject to tax at the highest tax rate in effect applicable to the U.S. Holder for that year, and such amounts will be increased by an additional tax equal to interest on the resulting tax deemed deferred with respect to such years.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A common shares and any of our non-U.S. affiliated entities are also PFICs, the U.S. Holder will be treated as owning a proportionate amount (by value) of the shares of each such non-U.S. affiliate classified as a PFIC for purposes of the application of these rules.

Alternatively, a U.S. Holder of "marketable stock" (as defined below) in a PFIC may elect out of the excess distribution regime by making a mark-to-market election for such stock. If a U.S. Holder makes a valid mark-to-market election for the ADSs, the U.S. Holder will include in income each year an amount equal to the excess, if any, of the fair market value of the ADSs as of the close of such U.S. Holder's taxable year over such U.S. Holder's adjusted basis in such ADSs. The U.S. Holder is allowed a deduction for the excess, if any, of such U.S. Holder's adjusted basis in the ADSs over their fair market value as of the close of the taxable year. Deductions are allowable, however, only to the extent of any net mark-to-market gains on the ADSs included in the U.S. Holder's income under a mark-to-market election, as well as gain on the actual sale or other disposition of the ADSs, will be treated as ordinary income. Ordinary loss treatment also applies to the deductible portion of any mark-to-market loss on the ADSs, as well as to any loss realized on the actual sale or disposition of the ADSs, to the extent that the amount of such loss does not exceed the net mark-to-market gains previously included in income with respect to such ADSs. The U.S. Holder's basis in the ADSs will be adjusted to reflect any such income or loss amounts. If a U.S. Holder makes a mark-to-market election, then, in any taxable year for which we are classified as a PFIC, tax rules that apply to distributions by corporations that are not PFICs would apply to distributions by us (except that the lower applicable capital gains rate for qualified dividend income would not apply). If a U.S. Holder makes a valid mark-to-market election, and we subsequently cease to be classified as a PFIC, the U.S. Holder will not be required to take into account the mark-to-market income or loss described above during any period that we are not classified as a PFIC.

The mark-to-market election is available only for "marketable stock," which is stock that is traded in other than de minimis quantities on at least 15 days during each calendar quarter ("regularly traded") on a qualified exchange or other market, as defined in applicable Regulations. The ADSs, but not our Class A common shares, are listed on the Nasdaq Global Market, which is a qualified exchange for these purposes, and consequently, assuming that the ADSs are regularly traded, it is expected that the mark-to-market election would be available to U.S. Holders of ADSs if we are or become a PFIC. However, a mark-to-market election may not be made with respect to our Class A common shares as they are not marketable stock. Accordingly, if we are a PFIC during any year in which a U.S. Holder holds Class A common shares, such holder will generally be subject to the special tax rules discussed above.

In addition, because, as a technical matter, 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 the information necessary for U.S. Holders to make qualified electing fund elections, which, if available, would result in tax treatment different from the general tax treatment for PFICs described above.

U.S. Holders that own our ADSs or Class A common shares during any taxable year that we are a PFIC will generally be required to file an annual report with the IRS regarding their ownership of such shares. U.S. Holders should consult their tax advisors concerning the U.S. federal income tax considerations relevant to holding and disposing of our ADSs or Class A common shares if we were, are, or become a PFIC, including the possibility of making a mark-to-market election and the annual PFIC filing requirements, if any.

THE PRECEDING SUMMARY OF U.S. FEDERAL INCOME TAX CONSIDERATIONS IS INTENDED FOR GENERAL INFORMATION ONLY AND DOES NOT CONSTITUTE TAX ADVICE. U.S. HOLDERS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE U.S. FEDERAL, STATE, LOCAL, AND NON-U.S. TAX CONSIDERATIONS GENERALLY APPLICABLE TO THE OWNERSHIP AND DISPOSITION OF OUR ADSS AND CLASS A COMMON SHARES IN LIGHT OF THEIR PARTICULAR CIRCUMSTANCES.

### F. Dividends and Paying Agents

Not applicable.

### G. Statement by Experts

Not applicable.

## H. Documents on Display

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F no later than four months after the close of each fiscal year. The SEC maintains a web site at <a href="https://www.sec.gov">www.sec.gov</a> that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. 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 The Bank of New York Mellon, the depositary of the 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 Nasdaq Stock Market Rule 5250(d), we will post this annual report on Form 20-F on our website at *ir.jiguang.cn*. 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

### Foreign Exchange Risk

Substantially all of our revenues and expenses are denominated in RMB. The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. 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. dollar in the future.

To the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the RMB amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amounts available to us.

As of December 31, 2021, we had Renminbi-denominated cash balance of approximately RMB74.4 million and U.S. dollar-denominated cash balance of US\$2.5 million. Assuming we had converted RMB74.4 million into U.S. dollars at the exchange rate of RMB6.3726 for US\$1.00 as of December 30, 2021, our U.S. dollar cash balance would have been US\$14.2 million. If the Renminbi had depreciated by 10% against the U.S. dollar, our U.S. dollar cash balance would have been US\$13.1 million instead. Assuming we had converted US\$2.5 million into Renminbi at the exchange rate of RMB6.3726 for US\$1.00 as of December 30, 2021, our Renminbi cash balance would have been RMB90.5 million. If the Renminbi had depreciated by 10% against the U.S. dollar, our Renminbi cash balance would have been RMB92.2 million instead.

### **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. We have not used derivative financial instruments in our investment portfolio. Interest earning instruments carry a degree of interest rate risk. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in market interest rates. However, our future interest income may fall short of expectations due to changes in market interest rates.

## 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 the ADS Holders May Have to Pay

The Bank of New York Mellon, as depositary, will register and deliver American Depositary Shares, also referred to as ADSs. Every three ADSs will represent two Class A common shares (or a right to receive two Class A common shares) deposited with The Hong Kong and Shanghai Banking Corporation Limited, as custodian for the depositary in Hong Kong. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The deposited Class A common shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs will be administered is located at 101 Barclay Street, New York, NY 10286. The Bank of New York Mellon's principal executive office is located at 225 Liberty Street, New York, NY 10286.

Persons depositing or withdrawing Class A common shares or ADS holders must pay:

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)

\$0.05 (or less) per ADS

A fee equivalent to the fee that would be payable if securities distributed to the ADS holders had been Class A common shares and the Class A common shares had been deposited for issuance of ADSs

\$0.05 (or less) per ADS per calendar year

Registration or transfer fees

Expenses of the depositary

Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or Class A common shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes

Any charges incurred by the depositary or its agents for servicing the deposited securities

For:

- Issuance of ADSs, including issuances resulting from a distribution of Class A common shares or rights or other property
- Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
- Any cash distribution to ADS holders
- Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
- Depositary services
- Transfer and registration of Class A common shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw Class A common shares
- Cable and facsimile transmissions (when expressly provided in the deposit agreement)
- Converting foreign currency to U.S. dollars
- · As necessary
- As necessary

### Fees and Other Payments Made by the Depositary to Us

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. As of December 31, 2021, we did not receive 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—B. Memorandum and Articles of Association—Common Shares" 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, as amended (File Number 333-225993) in relation to our initial public offering, which was declared effective by the SEC on July 25, 2018. Our initial public offering closed in July 2018. Goldman Sachs (Asia) L.L.C., Credit Suisse Securities (USA) LLC and Deutsche Bank Securities Inc. were the representatives of the underwriters for our initial public offering. Counting in the ADSs sold upon the exercise of the over-allotment option by our underwriters, we offered and sold an aggregate of 9,089,562 ADSs at an initial public offering price of US\$8.50 per ADS, and received approximately US\$68.0 million in net proceeds after deducting underwriting commissions and discounts and the offering expenses payable by us.

The total expenses incurred for our company's account in connection with our initial public offering was approximately US\$3.8 million. 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 July 25, 2018, the date that the F-1 Registration Statement was declared effective by the SEC, to December 31, 2021, US\$46 million of the net proceeds received from our initial public offering were used to invest in technology, infrastructure and research and development capabilities, and to fund potential investments and acquisitions of complementary businesses, assets and technologies. We also used US\$10 million of the net proceeds for general corporate purpose including expanding and strengthening our sales and marketing activities, and share repurchase program. We still intend to use the remainder of the proceeds from our initial public offering, as disclosed in our registration statements on Form F-1, to invest in technology, infrastructure and research and development capabilities, and for general corporate purposes, including expanding and strengthening our sales and marketing activities and funding potential investments and acquisitions of complementary businesses, assets and technologies.

#### Item 15. CONTROLS AND PROCEDURES

#### **Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, under the supervision and with the participation of our principal executive officer and our principal accounting officer, evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act, as of December 31, 2021. Based on that evaluation, our management, with the participation of our chief executive officer and chief financial officer have concluded that our disclosure controls and procedures are effective in ensuring that material information required to be disclosed in this annual report is recorded, processed, summarized and reported to them for assessment, and required disclosure is made within the time period specified in the rules and forms of the Commission.

#### Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined under Rule 13(a)-15(f) and 15(d)-15(f) of the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the Securities and Exchange Commission, our management, under the supervision and with the participation of our chief executive officer and chief financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 using the criteria set forth in the report "Internal Control-Integrated Framework (2013)" issued by the Committee on Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control-Integrated Framework (2013), our management concluded that, as of December 31, 2021, our internal control over financial reporting was effective.

Our independent registered public accounting firm, Ernst & Young Hua Ming LLP, was not required to perform an evaluation of our internal control over financial reporting as of December 31, 2021.

#### **Attestation Report of the Registered Public Accounting Firm**

As an "emerging growth company," as defined in the JOBS Act, we may take advantage of certain temporary exemptions from various reporting requirements, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act (and the SEC rules and regulations there under). When these exemptions cease to apply, we expect to incur additional expenses and devote increased management effort toward ensuring compliance with them.

#### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal controls 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 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that John Tiong Lu Koh, a member of our audit committee and an independent director (under the standards set forth in Rule 5605(c)(2) of the Nasdaq Stock Market Rules and Rule 10A-3 under the Securities Exchange Act of 1934), is an audit committee financial expert.

#### Item 16B. CODE OF ETHICS

Our board of directors has adopted a code of business conduct and ethics, as amended and restated, that applies to our directors, officers and employees in June 2018. We have posted a copy of our code of business conduct and ethics on our website at http://ir.jiguang.cn

#### 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 Ernst & Young Hua Ming LLP, our principal external auditors, for the periods indicated.

		ecember 31,
	2020	2021
	(in tho	usands of RMB)
Audit fees <sup>(1)</sup>	7,22	8,328
Tax fees <sup>(2)</sup>	37	1 260

Notes:

(1) "Audit fees" means the aggregate fees billed for professional services rendered by our principal auditors for the audit of our annual financial statements and the review of our comparative interim financial statements.

"Tax fee" means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for tax compliance, tax advice, and tax planning. In 2020 and 2021, the tax fees refer to fees paid to our principal auditors for reviewing the compliance of our tax documentation and providing tax advices. The policy of our audit committee is to pre-approve all audit and other service provided by Ernst & Young Hua Ming LLP 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

None.

#### Item 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

In June 2020, our board of directors approved our share repurchase program under which we may repurchase up to US\$10 million of the ADSs or our common shares over the next 12 months. The share repurchase program was publicly announced on June 11, 2020. In 2021, we did not repurchase any shares under our share repurchase program.

#### Item 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

#### Item 16G. CORPORATE GOVERNANCE

As a Cayman Islands exempted company listed on the Nasdaq Global Market, we are subject to the Nasdaq Stock Market Rules. However, the Nasdaq Stock Market 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 Nasdaq listing standards.

Nasdaq Stock Market Rules require each issuer to hold an annual meeting of shareholders no later than one year after the end of the issuer's fiscal year-end. Our Cayman Islands counsel, has provided a letter to the Nasdaq Stock Market dated October 25, 2019 certifying that under Cayman Islands law, we are not required to hold annual shareholder meetings every year. We follow home country practice with respect to annual meetings and did not hold an annual meeting of shareholders in 2021. We may, however, hold annual shareholder meetings in the future if there are significant issues that require shareholders' approvals. In January 2022, our board of directors approved the 2021 share incentive plan. We relied on home country practice exemption and did not convene a shareholder meeting to approve the 2021 share incentive plan. Our Cayman Islands counsel has provided a letter to the Nasdaq Stock Market certifying that under Cayman Islands law, we are not required to obtain shareholder approval in respect of the adoption of a stock option or other equity compensation arrangement, or an amendment to the stock option or other equity compensation plan.

See "Item 3. Key Information—D. Risk Factors—Risks Related to The ADSs—Certain judgments obtained against us by our shareholders may not be enforceable."

Other than the home country practices described above, we are not aware of any significant ways in which our corporate governance practices differ from those followed by U.S. domestic companies under the Nasdaq Stock Market Rules.

#### 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 Aurora Mobile Limited are included at the end of this annual report.

#### Item 19. EXHIBITS

Exhibit Number	Description of Document
1.1	Seventh Amended and Restated Memorandum and Articles of Association of the Registrant, effective July 30, 2018 (incorporated herein by reference to Exhibit 3.2 to the Form F-1 filed on June 29, 2018 (File No. 333-22593)).
2.1	Registrant's Specimen American Depositary Receipt (incorporated herein by reference to Exhibit 4.3 to the Form S-8 filed on December 17, 2018 (File No. 333-228839))
2.2	Registrant's Specimen Certificate for Class A Common Shares (incorporated herein by reference to Exhibit 4.2 to the Form F-1/A filed on July 13, 2018 (File No. 333-225993))
2.3	Deposit Agreement among the Registrant, the depositary and holder of the American Depositary Receipts, dated July 25, 2018 (incorporated herein by reference to Exhibit 4.3 to the Form S-8 filed on December 17, 2018 (File No. 333-228839))
2.4	Fourth Shareholders Agreement between the Registrant and other parties thereto dated May 10, 2017 (incorporated herein by reference to Exhibit 4.4 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))
2.5	<u>Description of Securities (incorporated herein by reference to Exhibit 2.5 to the annual report on Form 20-F filed on April 29, 2020 (File No. 001-38587))</u>
4.1	2014 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Form F-1 filed on June 29, 2018 (File No. 333-225993)).
4.2	2017 Stock Incentive Plan, as amended (incorporated herein by reference to Exhibit 10.2 to the Form F-1 filed on June 29, 2018 (File No. 333-225993)).
4.3	2021 Share Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Form S-8 filed on January 18, 2022 (File No. 333-262205)).
4.4	Form of Indemnification Agreement between the Registrant and its directors and executive officers (incorporated herein by reference to Exhibit 10.3 to the Form F-1/A filed on July 13, 2018 (File No. 333-225993))
4.5	Form of Employment Agreement between the Registrant and its executive officers (incorporated herein by reference to Exhibit 10.4 to the Form F-1 filed on July 13, 2018 (File No. 333-225993)).
4.6	Powers of Attorney among Shenzhen JPush and the shareholders of Hexun Huagu dated August 5, 2014 (incorporated herein by reference to Exhibit 10.5 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))
4.7	English Translation of the Shareholder Voting Proxy Agreement among the Registrant, Shenzhen JPush and the shareholders of Hexun Huagu dated March 28, 2018 (incorporated herein by reference to Exhibit 10.6 to the Form F-1 filed on June 29, 2018 (File No. 333-225993)).
4.8	Equity Interest Pledge Agreements among Shenzhen JPush, Hexun Huagu and the shareholders of Hexun Huagu dated April 20, 2018 (incorporated herein by reference to Exhibit 10.7 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))
4.9	Exclusive Option Agreements among Shenzhen JPush, Hexun Huagu and the shareholders of Hexun Huagu dated April 20, 2018 (incorporated herein by reference to Exhibit 10.8 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))
4.10	Exclusive Business Cooperation Agreement between Shenzhen JPush and Hexun Huagu dated August 5, 2014 (incorporated herein by reference to Exhibit 10.9 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))
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Exhibit <u>Number</u>	Description of Document
4.11	English Translation of the Financial Support Agreement among the Registrant, Hexun Huagu and the shareholders of Hexun Huagu dated March 28, 2018 (incorporated herein by reference to Exhibit 10.10 to the Form F-1 filed on June 29, 2018 (File No. 333-225993)).
4.12	English Translation of the Term Loan Agreement between the Registrant and Shanghai Pudong Development Bank dated April 16, 2021 (incorporated herein by reference to Exhibit 99.2 to the Form 6-K filed on November 10, 2021 (File No. 001-38587)).
8.1*	List of Subsidiaries and Consolidated Variable Interest Entity of the Registrant
11.1	Second Amended and Restated Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 11.1 to the 20-F filed on April 12, 2021 (File No. 001-38587))
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 Ernst & Young Hua Ming LLP, an independent registered public accounting firm
15.2*	Consent of Han Kun Law Offices
101.INS*	Inline XBRL Instance Document — this instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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)

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.

Aurora Mobile Limited

By: /s/ Weidong Luo

Name: Weidong Luo

Title: Chairman of the Board of Directors and Chief

**Executive Officer** 

Date: April 14, 2022

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Aurora Mobile Limited

#### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Aurora Mobile Limited (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of comprehensive loss, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and 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 at 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 U.S. generally accepted accounting principles.

#### **Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young Hua Ming LLP

We have served as the Company's auditor since 2018. Shenzhen, the People's Republic of China

April 14, 2022

### AURORA MOBILE LIMITED CONSOLIDATED BALANCE SHEETS

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of shares and per share data)

			of December 3	
	Note	2020	202	
ASSETS		RMB	RMB	US\$
Current assets:				
Cash and cash equivalents		356,115	90,552	14,210
Restricted cash		115	164,030	25,740
Derivative assets		100	5,989	940
Short-term investments	19	80,000	30,000	4,708
Accounts and notes receivable, net of allowances of RMB43,820 and RMB37,690 (US\$5,914) as of				
December 31, 2020 and 2021, respectively	3	44,886	43,860	6,883
Prepayments and other current assets	4	49,013	46,670	7,323
Amounts due from related parties	16	_	35	5
Total current assets		530,229	381,136	59,809
Non-current assets:				
Property and equipment, net	5	73,522	62,179	9,757
Intangible assets, net	6	9,519	5,398	847
Long-term investments	7	168,526	141,926	22,271
Other non-current assets		5,631	4,898	769
Total non-current assets		257,198	214,401	33,644
Total assets		787,427	595,537	93,453

### AURORA MOBILE LIMITED CONSOLIDATED BALANCE SHEETS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of shares and per share data)

		As of December 31,		
	Note	2020 RMB	RMB	US\$
LIABILITIES AND SHAREHOLDERS' EQUITY		KWID	KWID	03\$
Current liabilities:				
Short-term loan	8	_	150,000	23,538
Accounts payable (including accounts payable of the variable interest entity ("VIE") without recourse to the Company of RMB16,564 and RMB17,529 (US\$2,751) as of December 31, 2020 and 2021, respectively)		16,592	18,292	2,870
Deferred revenue and customer deposits (including deferred revenue and customer deposits of the VIE		,	,	,
without recourse to the Company of RMB104,681 and RMB115,900 (US\$18,187) as of December 31, 2020 and 2021, respectively)	9	109,182	119,991	18,829
Accrued liabilities and other current liabilities (including accrued liabilities and other current liabilities of the VIE without recourse to the Company of RMB66,772 and RMB64,527 (US\$10,126) as of		•	,	
December 31, 2020 and 2021, respectively)	10	109,136	85,305	13,388
Amounts due to related parties (including amount due to related parties of the VIE without recourse to the Company of nil and RMB54 (US\$8) as of December 31, 2020 and 2021, respectively)	16	_	54	8
Convertible notes	13	225,229	_	_
Total current liabilities		460,139	373,642	58,633
Non-current liabilities:				
Other non-current liabilities (including other non-current liabilities of the VIE without recourse to the Company of nil and RMB560 (US\$88) as of December 31, 2020 and 2021, respectively)		_	2,607	409
Deferred revenue (including non-current deferred revenue of the VIE without recourse to the Company of RMB561 and RMB569 (US\$89) as of December 31, 2020 and 2021, respectively)	9	6,049	3,845	603
Total non-current liabilities		6,049	6,452	1,012
Total liabilities		466,188	380,094	59,645
Commitments and contingencies	14			
Shareholders' equity				
Class A common shares (par value of US\$0.0001 per share as of December 31, 2020 and 2021; 4,920,000,000 shares authorized as of December 31, 2020 and 2021, 61,392,170 shares and 62,036,273				
shares issued and outstanding as of December 31, 2020 and 2021, respectively)	15	37	38	6
Class B common shares (par value of US\$0.0001 per share as of December 31, 2020 and 2021; 30,000,000 shares authorized as of December 31, 2020 and 2021, 17,000,189 shares and 17,000,189 shares issued				
and outstanding as of December 31, 2020 and 2021, respectively)	15	11	11	2
Additional paid-in capital		988,812	1,021,961	160,368
Accumulated deficit		(678,434)	(819,018)	(128,522)
Accumulated other comprehensive income		10,813	12,451	1,954
Total shareholders' equity		321,239	215,443	33,808
Total liabilities and shareholders' equity		787,427	595,537	93,453

### AURORA MOBILE LIMITED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of shares and per share data)

			Year ended December 31,			
	Note	2019 RMB	2020 RMB	RMB	US\$	
Revenues (including related party amounts of RMB266, nil and RMB100 (US\$16) for		KIVIB	KIVIB	KIVIB	08\$	
the years ended December 31, 2019, 2020 and 2021, respectively)	17	906,458	471,614	357,322	56,072	
Cost of revenues (including related party amounts of RMB11,600, nil and nil for the	1,	700,120	171,011	337,322	20,072	
years ended December 31, 2019, 2020 and 2021, respectively)		(649,596)	(265,436)	(92,393)	(14,498)	
Gross profit		256,862	206,178	264,929	41,574	
Operating expenses						
Research and development		(176,248)	(174,597)	(206,722)	(32,439)	
Sales and marketing		(118,548)	(102,319)	(116,415)	(18,268)	
General and administrative		(109,291)	(119,087)	(79,922)	(12,542)	
Total operating expenses		(404,087)	(396,003)	(403,059)	(63,249)	
Loss from operations		(147,225)	(189,825)	(138,130)	(21,675)	
Foreign exchange gain / (loss)		435	10	(3,376)	(530)	
Interest income		6,300	6,131	6,597	1,035	
Interest expense		(11,118)	(11,724)	(8,815)	(1,383)	
Other income / (expenses)	18	38,812	(30,814)	(2,908)	(456)	
Change in fair value of structured deposits		3,117	1,233	20	3	
Change in fair value of foreign currency swap contract				6,060	951	
Loss before income taxes		(109,679)	(224,989)	(140,552)	(22,055)	
Income tax expense	12	(162)	(86)	(32)	(5)	
Net loss		(109,841)	(225,075)	(140,584)	(22,060)	
Net loss attributable to Aurora Mobile Limited's shareholders		(109,841)	(225,075)	(140,584)	(22,060)	
Net loss attributable to common/ordinary shareholders		(109,841)	(225,075)	(140,584)	(22,060)	
Net loss per share for class A and class B common shares:	15					
Class A common shares - basic and diluted		(1.43)	(2.91)	(1.78)	(0.28)	
Class B common shares - basic and diluted		(1.43)	(2.91)	(1.78)	(0.28)	
Shares used in net loss per share computation:						
Class A common shares - basic and diluted		59,721,341	60,415,978	61,809,501	61,809,501	
Class B common shares - basic and diluted		17,000,189	17,000,189	17,000,189	17,000,189	
Other comprehensive (loss)/income						
Foreign currency translation adjustments		(2,037)	4,450	1,638	257	
Total other comprehensive (loss)/income, net of tax		(2,037)	4,450	1,638	257	
Total comprehensive loss		(111,878)	(220,625)	(138,946)	(21,803)	
Comprehensive loss attributable to Aurora Mobile Limited		(111,878)	(220,625)	(138,946)	(21,803)	

# AURORA MOBILE LIMITED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of shares)

	Common sl	nares		Additional	Accumulated other		Total
	Number of shares	Amount RMB	Treasury shares RMB	paid-in capital RMB	comprehensive income (loss) RMB	Accumulated deficit RMB	shareholders' equity RMB
Balance as of January 1, 2019	76,548,012	48	(3,165)	944,500	8,400	(348,123)	601,660
Net loss	_	_	_	_	_	(109,841)	(109,841)
Cumulative effect of adoption of ASC 606	_	_	_	_	_	4,605	4,605
Translation adjustments	_	_		_	(2,037)		(2,037)
Exercise and vesting of share-based awards	1,125,648	_	38,725	(35,049)	_	_	3,676
Repurchased shares	(567,434)	_	(37,559)	_	_	_	(37,559)
Share-based compensation (Note 11)	_	_	_	47,284	_	_	47,284
Balance as of December 31, 2019	77,106,226	48	(1,999)	956,735	6,363	(453,359)	507,788

	Common sl	hares		Additional	Accumulated other		Total	
	Number of shares	Amount RMB	Treasury shares RMB	paid-in capital RMB	comprehensive income RMB	Accumulated deficit RMB	shareholders' equity RMB	
Balance as of January 1, 2020	77,106,226	48	(1,999)	956,735	6,363	(453,359)	507,788	
Net loss	_	_	_	_		(225,075)	(225,075)	
Translation adjustments	_	_	_	_	4,450	_	4,450	
Exercise and vesting of share-based awards	1,286,133	_	1,999	3,219		_	5,218	
Share-based compensation (Note 11)	_	_	_	28,858	_	_	28,858	
Balance as of December 31, 2020	78,392,359	48		988,812	10,813	(678,434)	321,239	

	Common s	hares	Additional	Accumulated other		Total
	Number of shares	Amount RMB	paid-in capital RMB	comprehensive income RMB	Accumulated deficit RMB	shareholders' equity RMB
Balance as of January 1, 2021	78,392,359	48	988,812	10,813	(678,434)	321,239
Net loss	_	_	_	_	(140,584)	(140,584)
Translation adjustments	_	_	_	1,638	_	1,638
Exercise and vesting of share-based awards	644,103	1	2,937		_	2,938
Share-based compensation (Note 11)	_	_	30,212	_	_	30,212
Balance as of December 31, 2021	79,036,462	49	1,021,961	12,451	(819,018)	215,443
Balance as of December 31, 2021 in US\$		8	160,368	1,954	(128,522)	33,808

# AURORA MOBILE LIMITED CONSOLIDATED STATEMENTS OF CASH FLOWS (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

		Year ended December 31,			
	2019	2020	202		
Cash flaws from anavating activities	RMB	RMB	RMB	US\$	
Cash flows from operating activities: Net loss	(109,841)	(225,075)	(140,584)	(22,060)	
	(109,841)	(223,073)	(140,384)	(22,000)	
Adjustments to reconcile net loss to net cash used in operating activities:  Depreciation of property and equipment	30,059	37,704	27 227	4 200	
Amortization of intangible assets	2,307		27,337	4,290 703	
		4,366	4,481	/03	
Unrealized exchange gain	(1,731)	(90)	(246)	(20)	
Allowance for doubtful accounts	20,054	18,732	(246)	(39)	
Interest expenses, net	8,094	7,931	2,857	448	
Impairment of long-term investments	_	38,739	25,370	3,981	
Impairment of property and equipment		10,952		_	
Impairment of amount due from related companies	_	479		_	
Impairment of loans	_	4,500	528	83	
Loss/(gain) on disposal of property and equipment	15	23	(821)	(129)	
Gain on an equity investment sold	(6,778)	_	_	_	
Unrealized gain on equity investments held	(17,298)	_	_	_	
Change in fair value of structured deposits	(3,117)	(1,233)	(20)	(3)	
Change in fair value of foreign currency swap contract	_	_	(6,060)	(951)	
Share-based compensation expenses	47,284	28,858	30,212	4,741	
Changes in operating assets and liabilities,					
Accounts and notes receivable	(25,443)	71,799	1,271	199	
Prepayments and other current assets	1,149	43,281	13,572	2,130	
Amounts due from related parties	4,043	43	(35)	(5)	
Other non-current assets	702	11	370	58	
Accounts payable	1,220	(3,403)	1,699	267	
Deferred revenue and customer deposits	19,027	29,520	8,605	1,350	
Tax payable	162	(115)	(81)	(13)	
Accrued interest related to convertible notes	_		(21,049)	(3,303)	
Accrued liabilities and other current liabilities	13,219	8,908	(25,596)	(4,015)	
Amounts due to related parties	(8,809)	(56)	54	8	
Other non-current liabilities	(76)	(64)	1,486	233	
Net cash (used in)/provided by operating activities	(25,758)	75,810	(76,650)	(12,027)	
The cash (used in) provided by operating activities	(23,738)	73,010	(70,030)	(12,027)	

# AURORA MOBILE LIMITED CONSOLIDATED STATEMENTS OF CASH FLOWS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

	Year ended December 31,			
	2019 RMB	2020 RMB	RMB	US\$
Cash flows from investing activities:	KIVID	KIVID	KIVID	US\$
Purchase of short-term investments	(995,000)	(470,169)	_	_
Proceeds from maturities of short-term investments		391,964	50,000	7,846
Proceeds from maturities of structured deposits	1,000,201	_	_	_
Purchase of long-term investments	(47,286)	(36,012)	_	_
Proceeds from an equity investment sold	10,000		_	_
Investment in loans	_	(8,000)	(2,000)	(314)
Investment in convertible loans	(8,000)		(4,859)	(762)
Purchase of property and equipment	(39,494)	(19,685)	(16,291)	(2,556)
Proceeds from disposal of property and equipment	199	133	2,238	351
Purchase of intangible assets	(9,586)	(2,646)	(2,646)	(415)
Net cash (used in)/provided by investing activities	(88,966)	(144,415)	26,442	4,150
Cash flows from financing activities:				
Proceeds from short-term bank loan	_	_	150,000	23,538
Proceeds from issuance of common shares	_	_	1	_
Repurchase of ordinary shares	(37,559)	_	_	_
Repayment of convertible notes		_	(207,459)	(32,555)
Proceeds from exercise of share options	3,676	315	2,938	461
Net cash (used in)/provided by financing activities	(33,883)	315	(54,520)	(8,556)
Effect of exchange rate on cash and cash equivalents and restricted cash	3,504	(7,054)	3,080	483
Net decrease in cash and cash equivalents and restricted cash	(145,103)	(75,344)	(101,648)	(15,950)
Net decrease in cash and cash equivalents and restricted cash	(145,103)	(75,344)	(101,648)	(15,950)
Cash, cash equivalents and restricted cash at the beginning of year	576,677	431,574	356,230	55,900
Including:		· <u> </u>		
Cash and cash equivalents at the beginning of the year	576,562	431,459	356,115	55,882
Restricted cash at the beginning of the year	115	115	115	18
Cash, cash equivalents and restricted cash at the end of year	431,574	356,230	254,582	39,950
Including:				
Cash and cash equivalents at the end of the year	431,459	356,115	90,552	14,210
Restricted cash at the end of the year	115	115	164,030	25,740
Supplemental disclosures of cash flow information:				
Income tax paid	_	195	182	29
Interest expense paid	_	_	4,513	708
Non-cash investing and financing activities:				
Acquisition of long-term investments	27,410	8,000	_	_
Purchase of property and equipment included in accrued liabilities and other current liabilities	4,140	1,355	2,484	390
Purchase of intangible assets included in accrued liabilities and other current liabilities		2,503		

### AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 1 Organization and principal activities

Aurora Mobile Limited (the "Company" and where appropriate, the term "Company" also refers to its subsidiaries and variable interest entity) is a limited company incorporated in the Cayman Islands under the laws of the Cayman Islands on April 9, 2014. The Company, through its subsidiaries and variable interest entity ("VIE"), are principally engaged in providing targeted marketing and SAAS Businesses, which include developer services, financial risk management, market intelligence and location-based intelligence services, in the People's Republic of China (the "PRC").

As PRC laws and regulations prohibit and restrict foreign ownership of internet value-added businesses, the Company operates its business, primarily through the VIE. The Company, through JPush Information Consulting (Shenzhen) Co., Ltd. ("Shenzhen JPush" or "WFOE") entered into powers of attorney and an exclusive option agreement with the nominee shareholders of the VIE, Shenzhen Hexun Huagu Information Technology Co., Ltd., that gave WFOE the power to direct the activities that most significantly affect the economic performance of the VIE and to acquire the equity interests in the VIE when permitted by the PRC laws, respectively. In addition, pursuant to the supplementary agreements signed in March, 2018, the rights under the aforementioned power of attorney and the exclusive call option agreements were assigned to the board of directors of the Company (the "Board") or any officer authorized by the Board, which entitled the Company to receive economic benefits from the VIE that potentially could be significant to the VIE.

Despite the lack of technical majority ownership, the Company has effective control of the VIE through a series of VIE agreements and a parent-subsidiary relationship exists between the Company and the VIE. Through the VIE agreements and the supplementary agreements, the shareholders of the VIE effectively assigned all of their voting rights underlying their equity in the VIE to the Company. In addition, through the exclusive business operation agreement, the Company, through its WFOE in the PRC, have the right to receive economic benefits from the VIE that potentially could be significant to the VIE. Lastly, through the financial support agreement and the shareholder voting proxy agreement, the Company has the obligation to absorb losses of the VIE that could potentially be significant to the VIE. Therefore, the Company is considered the primary beneficiary of the VIE and consolidates the VIE as required by SEC Regulation S-X Rule 3A-02 and Accounting Standards Codification ("ASC") 810.

The following is a summary of the VIE agreements:

#### Exclusive Option Agreements

Pursuant to the exclusive option agreements entered into between VIE's nominee shareholders and the WFOE, the nominee shareholders irrevocably granted the WFOE an option to request the nominee shareholders to transfer or sell any part or all of its equity interests in the VIE, or any or all of the assets of the VIE, to the WFOE, or their designees. The purchase price of the equity interests in the VIE is equal to the minimum price required by PRC law. Without the WFOE's prior written consent, the VIE and its nominee shareholders cannot amend its articles of association, increase or decrease the registered capital, sell or otherwise dispose of its assets or beneficial interest, create or allow any encumbrance on its assets or other beneficial interests and provide any loans or guarantees. The nominee shareholders cannot request any dividends or other form of assets. If dividends or other form of assets were distributed, the nominee shareholders are required to transfer all received distribution to the WFOE or their designees. These agreements are not terminated until all of the equity interest of the VIE is transferred to the WFOE or the person (s) designated by the WFOE. None of the nominee shareholders have the right to terminate or revoke the agreements under any circumstance unless otherwise regulated by law.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 1 Organization and principal activities (continued)

#### Equity Interest Pledge Agreements

Pursuant to the equity interest pledge agreements, each nominee shareholder of the VIE has pledged all of their respective equity interests in the VIE to WFOE as continuing first priority security interest to guarantee the performance of their and the VIE's obligations under the powers of attorney agreement, the exclusive option agreement and the exclusive business cooperation agreement. WFOE is entitled to all dividends during the effective period of the share pledge except as it agrees otherwise in writing. If VIE or any of the nominee shareholder breaches its contractual obligations, WFOE will be entitled to certain rights regarding the pledged equity interests, including receiving proceeds from the auction or sale of all or part of the pledged equity interests of VIE in accordance with PRC law. None of the nominee shareholders shall, without the prior written consent of WFOE, assign or transfer to any third party, distribute dividends and create or cause any security interest and any liability in whatsoever form to be created on, all or any part of the equity interests it holds in the VIE. This agreement is not terminated until all of the technical support and consulting and service fees have been fully paid under the exclusive business cooperation agreement and all of VIE's obligations have been terminated under the other controlling agreements. On December 16, 2014, the Company registered the equity pledge with the relevant office of the administration for industry and commerce in accordance with the PRC Property Rights Law.

#### Exclusive Business Cooperation Agreement

Pursuant to the exclusive business cooperation agreement entered into by WFOE and VIE, WFOE provides exclusive technical support and consulting services in return for an annual service fee based on a certain percentage of the VIE's audited total operating income, which is adjustable at the sole discretion of WFOE. Without WFOE's consent, the VIE cannot procure services from any third party or enter into similar service arrangements with any other third party, except for those from WFOE. In addition, the profitable consolidated VIE has granted WFOE an exclusive right to purchase any or all of the business or assets of each of the profitable consolidated VIE at the lowest price permitted under PRC law. This agreement is irrevocable or can only be unilaterally revoked/amended by WFOE.

#### Powers of Attorney

Pursuant to the powers of attorney signed between VIE's nominee shareholders and WFOE, each nominee shareholder irrevocably appointed WFOE as its attorney-in-fact to exercise on each shareholder's behalf any and all rights that each shareholder has in respect of its equity interest in VIE (including but not limited to executing the exclusive right to purchase agreements, the voting rights and the right to appoint directors and executive officers of VIE). This agreement is effective and irrevocable as long as the nominee shareholder remains a shareholder of VIE.

In March 2018, the following supplementary agreements were entered into:

#### Financial Support Agreement

Pursuant to the financial support undertaking letter dated March 28, 2018, the Company is obligated to provide unlimited financial support to the VIE, to the extent permissible under the applicable PRC laws and regulations. The Company will not request repayment of the loans or borrowings if the VIE or its shareholders do not have sufficient funds or are unable to repay.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 1 Organization and principal activities (continued)

Shareholder Voting Proxy Agreement

The Nominee Shareholders also re-signed the powers of attorney agreement whereby they granted an irrevocable proxy of the voting rights underlying their respective equity interests in VIE from the WFOE to the Company, which includes, but are not limited to, all the shareholders' rights and voting rights empowered to the Nominee Shareholders by the company law and the Company's Article of Association.

Accordingly, as a result of the power to direct the activities of the VIE pursuant to the powers of attorney agreement and the obligation to absorb the expected losses of VIE through the unlimited financial support, the WFOE ceased to be the primary beneficiary and the Company became the primary beneficiary of the VIE on March 28, 2018.

In the opinion of the Company's legal counsel, (i) the ownership structure of the PRC subsidiary and the VIE are in compliance with the existing PRC laws and regulations; (ii) each of the VIE agreements is valid, binding and enforceable in accordance with its terms and applicable PRC laws or regulations and will not violate applicable PRC laws or regulations in effect; and (iii) are valid in accordance with the articles of association of the Company.

However, uncertainties in the PRC legal system could cause the Company's current ownership structure to be found in violation of existing and/or future PRC laws or regulations and could limit the Company's ability to enforce its rights under these contractual arrangements. Furthermore, the nominee shareholders of the VIE may have interests that are different than those of the Company, which could potentially increase the risk that they would seek to act contrary to the terms of the contractual agreements with the VIE.

In addition, if the current structure or any of the contractual arrangements is found to be in violation of any existing or future PRC laws or regulations, the Company could be subject to penalties, which could include, but not be limited to, revocation of business and operating licenses, discontinuing or restricting business operations, restricting the Company's right to collect revenues, temporary or permanent blocking of the Company's internet platforms, restructuring of the Company's operations, imposition of additional conditions or requirements with which the Company may not be able to comply, or other regulatory or enforcement actions against the Company that could be harmful to its business. The imposition of any of these or other penalties could have a material adverse effect on the Company's ability to conduct its business.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 1 Organization and principal activities (continued)

The following table set forth the assets and liabilities of the VIE included in the Company's consolidated balance sheets:

		As of December 31,		
	2020 RMB	RMB	21 US\$	
ASSETS:	KIVIB	KIVID	03\$	
Current assets:	115 712	55.046	0.770	
Cash and cash equivalents	115,713	55,946	8,779	
Restricted cash	115	158,032	24,799	
Short-term investments	50,000	30,000	4,708	
Accounts and notes receivable, net	44,539	43,415	6,813	
Prepayments and other current assets	27,915	37,807	5,933	
Amounts due from the Company and its subsidiaries	58,291	69,405	10,891	
Amounts due from related parties		35	5	
Total current assets	296,573	394,640	61,928	
Non-current assets:				
Property and equipment, net	45,928	45,068	7,072	
Intangible assets, net	9,491	5,398	847	
Long-term investments	113,408	90,618	14,220	
Other-non current assets	4,719	3,298	518	
Total non-current assets	173,546	144,382	22,657	
Total assets	470,119	539,022	84,585	
LIABILITIES:				
Current liabilities:				
Accounts payable	16,564	17,529	2,751	
Deferred revenue and customer deposits	104,681	115,900	18,187	
Accrued liabilities and other current liabilities	66,772	64,527	10,126	
Amounts due to the Company and its subsidiaries	224,124	389,063	61,053	
Amounts due to related parties	<del>-</del>	54	8	
Total current liabilities	412,141	587,073	92,125	
Non-current liabilities:				
Amounts due to the Company and its subsidiaries	297,000	277,000	43,467	
Deferred revenue	561	569	89	
Other non-current liabilities	_	560	88	
Total non-current liabilities	297,561	278,129	43,644	
Total liabilities	709,702	865,202	135,769	

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 1 Organization and principal activities (continued)

The table sets forth the results of operations and cash flows of the VIE included in the Company's consolidated statements of comprehensive loss and cash flows.

		For the years ended December 31,			
	2019	2020	2020 2021		
	RMB	RMB	RMB	US\$	
Revenues	900,454	465,066	351,243	55,118	
Cost of revenues	(628,109)	(248,637)	(83,259)	(13,065)	
Net loss	(95,829)	(173,865)	(100,782)	(15,815)	
Net cash provided by operating activities	16,059	168,971	68,336	10,723	
Net cash used in investing activities	(34,451)	(108,450)	(186)	(29)	
Net cash provided by/(used in) financing activities	197,943	(156, 124)	30,000	4,708	

There were no pledges or collateralization of the VIE's assets as of December 31, 2020. As of December 31, 2021, RMB157,900 (US\$24,778) of the restricted cash balance represents deposits held as collateral for the Company's short-term loan with Shanghai Pudong Development Bank.

The amount of net liabilities of the VIE was RMB239,583 and RMB326,180 (US\$51,184) as of December 31, 2020 and 2021, respectively. Creditors of the VIE have no recourse to the general credit of the primary beneficiary of the VIE, and such amounts have been parenthetically presented on the face of the consolidated balance sheets. The VIE holds certain assets, including data servers and related equipment for use in their operations. The VIE does not own any facilities except for the rental of certain office premises and data centers from third parties under operating lease arrangements. The VIE also holds certain value-added technology licenses, registered copyrights, trademarks and registered domain names, including the official website, which are also considered as revenue-producing assets. However, none of such assets was recorded on the Company's consolidated balance sheets as such assets were all internally developed and expensed as incurred as they did not meet the capitalization criteria. The Company has not provided any financial or other support that it was not previously contractually required to provide to the VIE during the periods presented.

#### 2 Summary of Significant Accounting Policies

#### Basis of presentation

The consolidated financial statements of the Company have been prepared in accordance with the generally accepted accounting principles of the United States ("U.S. GAAP").

#### Principles of consolidation

The consolidated financial statements include the financial statements of the Company, its subsidiaries, and the VIE. All significant intercompany transactions and balances have been eliminated upon consolidation.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Use of estimates

The preparation of the Company's consolidated financial statements in conformity with U.S. GAAP requires the use of estimates and judgments that affect the reported amounts in the consolidated financial statements and accompanying notes. These estimates form the basis for judgments that management make about the carrying values of assets and liabilities, which are not readily apparent from other sources. Management base their estimates and judgments on historical information and on various other assumptions that they believe are reasonable under the circumstances. U.S. GAAP requires management to make estimates and judgments in several areas, including, but not limited to, those related to allowance for doubtful accounts, volume rebates relates to targeted marketing service, useful lives of property and equipment and intangible assets, valuation of intangible asset acquisition, impairment of long-lived assets, fair value measurements and impairment for equity investments without readily determinable fair value, impairment of loans receivables, including due from related parties, valuation allowance for deferred tax assets, uncertain tax position, fair value change of derivative assets and share-based compensation. These estimates are based on management's knowledge about current events and expectations about actions that the Company may undertake in the future. Actual results could differ from those estimates.

#### Convenience translation

Translations of amounts from RMB into US\$ for the convenience of the reader have been calculated at the exchange rate of RMB6.3726 per US\$1.00 on December 30, 2021, as published on the website of the United States Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be, converted into US\$ at such rate.

#### Foreign currency translation

The functional currency of the Company and the Company's subsidiary outside the PRC are US\$. The Company's PRC subsidiary and VIE adopted RMB as their functional currencies. The determination of the respective functional currency is based on the criteria stated in ASC 830, *Foreign Currency Matters*. The Company uses RMB as its reporting currency. The consolidated financial statements of the Company are translated into RMB using the exchange rate as of the balance sheet date for assets and liabilities and average exchange rate for the year for income and expense items. Translation gains and losses are recorded in accumulated other comprehensive income, as a component of shareholders' equity.

Transactions in currencies other than the functional currency are remeasured and recorded in the functional currency at the exchange rate prevailing on the transaction date.

Monetary assets and liabilities denominated in currencies other than the functional currency are remeasured into the functional currency at the rates of exchange prevailing at the balance sheet dates. Transaction gains and losses are recognized in the consolidated statements of comprehensive loss during the period or year in which they occur.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Cash and cash equivalents

Cash and cash equivalents primarily consist of cash and demand deposits which are highly liquid. The Company considers highly liquid investments that are readily convertible to known amounts of cash and with original maturities from the date of purchase of three months or less to be cash equivalents. All cash and cash equivalents are unrestricted as to withdrawal and use.

#### Restricted cash

Restricted cash balance mainly represents (a) cash granted by the government for certain approved technology research and development projects, which are not available for use until the Company obtains pre-approval from the government; and (b) deposits held in designated bank accounts as collateral for the Company's short-term bank loan and foreign exchange swap contract, which are not available for the Company's general use for operations.

#### Derivative assets

Derivative assets include (a) embedded derivatives separated from the host contract of bank structured deposits with interest rates indexed to the gold price index, which are measured at fair value in the condensed consolidated balance sheets; and (b) balances from the Company's foreign currency swap contract with Shanghai Pudong Development Bank to reduce volatility in the Company's economic value caused by foreign currency fluctuations. The foreign currency swap contract is not designated as hedges. Both embedded derivatives and the foreign currency swap contract are marked to market at each reporting date, with changes in fair value recognized in the consolidated statements of comprehensive loss.

#### Short-term investments

The Company's short-term investments comprise primarily of bank structured deposits at fixed rates based on the guaranteed interest rate with maturities within twelve months and time deposits with original maturities over three months.

#### Accounts and notes receivable and allowance for doubtful accounts

Accounts and notes receivable are recorded at the realizable value amount, net of allowances for doubtful accounts. An allowance for doubtful accounts is recorded in the period when loss is probable based on many factors, including the age of the balance, the customer's payment history and credit quality of the customers, current economic trends and other factors that may affect the Company's ability to collect from customers. Bad debts are written off after all collection efforts have been exhausted.

#### Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and impairment. Depreciation is computed using the straight-line method over the estimated useful lives of the assets or the remaining lease term, whichever is shorter. The estimated useful lives of property and equipment are as follows:

Computer equipment and servers
Office furniture and equipment
Leasehold improvements

3 - 5 years 3 - 5 years

over the shorter of lease terms or estimated useful lives of the assets

Costs related to construction of property and equipment incurred before the assets are ready for their intended use are capitalized as construction in progress. Construction in progress is transferred to specific property and equipment items and depreciation of these assets commences when they are ready for their intended use. For the years ended December 31, 2020 and 2021, the Company's construction in progress balance mainly included leasehold improvements. Expenditures for repair and maintenance are expensed as incurred. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from their respective accounts, and any gain or loss on such sale or disposal is reflected in the consolidated statements of comprehensive loss.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Intangible assets

Intangible assets with finite lives are carried at cost less accumulated amortization. Intangible assets represent acquired computer software, systems and technology. All intangible assets with finite lives are amortized using the straight-line method over the estimated economic lives, which are as follows:

Acquired computer software, systems and technology 1-5 years

Residual values are considered nil.

#### Impairment of long-lived assets other than goodwill

The Company evaluates long-lived assets, such as property and equipment and purchased intangible assets with finite lives, for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC 360, *Property, Plant and Equipment*. When such events occur, the Company assesses the recoverability of the asset group based on the undiscounted future cash flow the asset group is expected to generate and recognizes an impairment loss when estimated undiscounted future cash flow expected to result from the use of the asset group plus net proceeds expected from disposition of the asset group, if any, is less than the carrying value of the asset group. If the Company identifies an impairment, the Company reduces the carrying amount of the asset group to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values. The Company uses estimates and judgments in its impairment tests and if different estimates or judgments had been utilized, the timing or the amount of any impairment charges could be different. For the years ended December 31, 2019, 2020 and 2021, the impairment recognized for long-lived assets were nil, RMB10,952 and nil, respectively.

#### Long-term investments

The Company's long-term investments consist of equity investments without readily determinable fair value.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Long-term investments (continued)

The Company accounts for investments in an investee over which the Company does not have significant influence and which do not have readily determinable fair value using the measurement alternative, which is defined as cost, less impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any.

The Company makes a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the Company has to estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, the Company has to recognize an impairment loss in consolidated statements of comprehensive loss equal to the difference between the carrying value and fair value. The Company recognized nil, RMB38,739 and RMB25,370 (US\$3,981) impairment in other income/(expense) in the consolidated statement of comprehensive loss for the years ended December 31, 2019, 2020 and 2021.

#### Convertible notes

At the commitment date, the fees and expenses associated with the issuance of the convertible notes are recorded as a discount to the debt liability in accordance with ASU 2015-03. The convertible notes, which is the proceeds net of fees and expenses payable to the creditor and the fair value of the bifurcated derivative, will be accreted to the redemption value on the maturity date using the effective interest method over the estimated life of the debt instrument.

ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability. ASU 2017-11 no longer requires the Company to consider down round features when determining whether its embedded Conversion Option is indexed to its own stock.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Value added taxes ("VAT")

The Company presents VAT assessed by government authorities as reductions of revenues. Pursuant to the PRC tax legislation, VAT is generally imposed in lieu of business tax in the modern service industries, on a nationwide basis. VAT of 6% applies to revenue derived from the provision of certain modern services. The Company is allowed to offset the qualified input VAT paid on taxable purchases against the output VAT chargeable on the modern services provided.

#### Treasury shares

Treasury shares represent shares repurchased by the Company that are no longer outstanding and are held by the Company. Treasury shares are accounted for under the cost method per ASC 505-30 *Treasury Stock*. Under this method, repurchase of shares were recorded as treasury shares at historical purchase price. On November 20, 2018, the Board of Directors of the Company approved a plan to repurchase its own issued and outstanding American depositary shares ("ADSs") up to an aggregate value of US\$10 million from the open market (the "Repurchase Plan"). As of December 31, 2021, under the Repurchase Plan, the Company had repurchased an aggregate of 920,606 ADSs, representing 613,737 Class A common shares on the open market for a total cash consideration of US\$5.91 million.

#### Revenue recognition

Under ASC 606, revenues are recognized when control of the promised goods or services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services. Revenues are presented net of value-added tax collected on behalf of the government.

Starting from 2020, the Company has changed the classification of revenue in the consolidated statements of comprehensive loss by reclassifying revenue from developer services and vertical applications, formerly named as other SAAS products, to revenues under SAAS Businesses. Revenue for the year ended December 31, 2019 were not retrospectively adjusted and continued to be presented under the prior reclassification. The Company generates revenues primarily through SAAS Businesses, formerly named as "SaaS products" and targeted marketing.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Targeted Marketing

The Company generates targeted marketing revenue by providing targeted marketing solution in the form of integrated marketing campaign to advertiser through the *XiaoGuoTong* marketing platform and built upon its multi-dimensional device-level mobile behavioral data or other third-party marketing platforms such as Guangdiantong of Tencent, which is identified as one performance obligation. The ads are displayed on a wide spectrum of reputable publishers, through bidding for ad slots using rates directly negotiated with the various publishers. Moreover, volume rebates to customers under targeted marketing revenue applied on a prospective basis when they recharge their target marketing accounts above a specific threshold are material rights. Such rebates are accounted for as changes in total transaction price and allocated directly to the separate performance obligations.

The Company enters into contractual arrangements with advertisers that stipulate the types of advertising to be delivered and the pricing. Advertising customers pay for the targeted marketing solutions primarily based on a cost-per-click ("CPC") or cost-per-action ("CPA") basis. Majority of the contract duration is less than one year. For certain arrangements, customers are required to pay the Company before the services are delivered. For other arrangements, the Company provided customers with a credit term less than one year. The Company acts as the principal in the targeted marketing arrangements under which the Company has control over the fulfillment of the service and has discretion in establishing price. Accordingly, the Company recognizes revenue on a gross basis and at a point in time once agreed actions are performed. Revenues are presented net of value-added tax collected on behalf of the government.

Starting from January 1, 2021, the Company has fully exited the Target Marketing business and financial results since then only reflect SAAS Businesses.

#### **SAAS Businesses**

The Company generates SAAS Businesses revenue primarily from developer services and vertical applications. For developer services, there are three types of contracts, subscription-based contracts, project-based contracts and consumption-based contracts. The Company primarily enters into subscription-based contracts with its customers to provide push notification or instant messaging (collectively "notification services"), which the Company provides its customers with access to its notification services platform. This enables customers to send notifications and messages to users. The Company generally recognizes revenue ratably over time under the subscription-based contracts as stand-ready obligations because the customer simultaneously receives and consumes the benefits as the Company provides subscription services throughout a fixed contract term. The Company uses an output method of progress based on fixed contract term as it best depicts the transfer of control to the customer.

The Company primarily enters into consumption-based contracts with its customers to provide short message services ("SMS"), one-click verification services and value-added services. For SMS, the Company enables customers to send short messages to users for developer-user communication and authentication. For one-click verification services, the Company enables users to verify the cellphone number of users without verification code after integrating the one-click verification SDK. Customers pay for SMS and one-click verification services based on the pre-agreed the rate per message and the number of messages delivered. The Company acts as the principal in the SMS and one-click verification services in which the Company has control over the fulfillment of services. The Company recognizes revenue on a gross basis and at the point in time when messages delivered. For value-added services, the Company built an APP Alliance which connects advertisers and APP developers, who are the suppliers of avenue where the ads will be displayed. The Company enters into contractual arrangements with advertisers that stipulate the types of advertising to be delivered and priced. Advertising customers pay for the value-added service primarily based on cost-per-action ("CPA") basis or cost-per-click ("CPC") basis. All of the contractual arrangements, duration is less than one year. For certain arrangements, customers are required to pay the Company before the services are delivered. For other arrangements, the Company provides customers with a credit term less than six months. The Company acts as the principal in the value-added services in which the Company has control over the fulfillment of the service and has discretion in establishing price. Accordingly, the Company recognizes revenue on a gross basis and at a point in time once agreed actions are performed.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### SAAS Businesses (continued)

The Company primarily enters into project-based contracts with its customers to provide private cloud-based developer services, which are designed to provide customizable services to customers who want a more controlled software environment and more comprehensive technology and customer support. The Company provides its customers one combined performance obligation including customized APP push notification system or instant messaging system and related system training services as both performance obligations are incapable of being distinct because the customer cannot derive economic benefit from the related system training services on its own. Meanwhile, the Company also provides post contract assurance-type maintenance services, which usually have a duration of one year. Under ASC 606, the Company recognize revenue at the point in time when the system is implemented, and the training service is provided, which is represented by the customer acceptance received by the Company. Meanwhile, the estimated cost of assurance-type maintenance services is accrued as "Costs of revenues", which is not material.

For vertical applications, the Company enters into agreements with its customers to provide data analytic solutions and there are three types of contracts, including subscription-based contracts, project-based contracts and consumption-based contracts. The Company primarily enters into subscription-based contracts with its customers to provide customizable service package for a fixed contract term, which allows the customers to subscribe a fixed number of apps to obtain unlimited volume of queries to the Company's analytic results. The Company generally recognizes revenue ratably over time under the subscription-based contracts, because the customer simultaneously receives and consumes the benefits as the Company provides subscription services throughout a fixed contract term.

The Company primarily enters into project-based contracts with its customers to provide in-depth analytics services and generate customized reports based on the customers' specific requirements. The Company recognizes revenue at the point in time when the customized reports are provided.

The Company primarily enters into consumption-based contracts with its customers to process the queries or provide features based on the customers' requirements. When the Company receives a placed order, it recognizes revenue at a point in time when the queries are processed, or the features are utilized by the customers.

For certain arrangements, customers are required to pay the Company before the services are delivered. For other arrangements, the Company provides customers with a credit term under six months.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Other revenue recognition related policies

Timing of revenue recognition may differ from the timing of invoicing to customers. Some customers are required to pay before the services are delivered to the customer. When either party to a revenue contract has performed, the Company recognizes a contract asset or a contract liability on the consolidated balance sheet, depending on the relationship between the Company's performance and the customer's payment.

Contract assets represent amounts related to the Company's rights to consideration received for private-cloud-based service and are included in "Prepayments and other assets" on the consolidated balance sheets. Amount of contract assets was not material as of December 31, 2020 and 2021, respectively.

Contract liabilities are mainly related to fees for services to be provided over the service period, which are presented as "Deferred revenue" on the consolidated balance sheets. Revenue recognized for the years ended December 31, 2020 and 2021 that was included in contract liabilities as of January 1, 2020 and 2021 was RMB34,449 and RMB62,790 (US\$9,853), respectively. A summary of contract liabilities is as follows:

	As o	As of December 31,		
	2020	202	21	
	RMB	RMB	US\$	
Contract liabilities	71,141	80,405	12,617	

Customer deposits relate to customer's unused balances that are refundable. Once this balance is utilized by the customer, the corresponding amount would be recognized as revenue.

As of December 31, 2020 and 2021, the Company's unsatisfied (or partially unsatisfied) performance obligations in contracts with its customers was RMB31,951 and RMB42,019 (US\$6,594), respectively. The Company expects to recognize the majority of its remaining performance obligations as revenue within the next year.

#### Costs of revenues

Cost of revenues consists primarily of the cost of purchasing ad inventory associated with targeted marketing services and channel cost associated with JG Alliance, bandwidth cost, staff costs and depreciation of servers used for revenue generating services. Starting from January 1, 2021, the Company had fully exited the targeted marketing business and the cost of revenues since then is only incurred from SAAS Businesses.

#### Research and development

Research and development expenses are primarily incurred in the development of new services, new features, and general improvement of the Company's technology infrastructure to support its business operations. Research and development costs are expensed as incurred unless such costs qualify for capitalization as software development costs. In order to qualify for capitalization, (i) the preliminary project should be completed, (ii) management has committed to funding the project and it is probable that the project will be completed and the software will be used to perform the function intended, and (iii) it will result in significant additional functionality in the Company's services. No research and development costs were capitalized during any of the years presented as the Company has not met all of the necessary capitalization requirements.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Advertising expenses

Advertising expenses, including promotion expenses, are charged to "sales and marketing expenses" as incurred. Advertising expenses amounted to RMB17,311, RMB9,789 and RMB12,767 (US\$2,003) for the years ended December 31, 2019, 2020 and 2021, respectively.

#### Other income (expenses)

Other income/(expenses) includes impairment loss of financial assets, government grants and profit-sharing program with Depositary Bank related to ADSs depositary. For the year ended December 31, 2021, impairment losses of RMB25,370 (US\$3,981) of long-term investments and RMB528 (US\$83) of loans receivables are recognized. For the year ended December 31, 2020, impairment losses of RMB39,181 of long-term investments and RMB4,500 of loans receivables are recognized. No such impairment losses occurred for the years ended December 31, 2019. Income from profit- sharing program is recognized as non-current deferred revenue over five-year period as specified in the contract based on certain parameters.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Government grants

Government grants primarily consist of financial grants received from provincial and local governments for operating a business in their jurisdictions and compliance with specific policies promoted by the local governments. For certain government grants, there are no defined rules and regulations to govern the criteria necessary for companies to receive such benefits, and the amount of financial subsidy is determined at the discretion of the relevant government authorities. The government grants of non-operating nature with no further conditions to be met are recorded as non-operating income in "Other income (expenses)" when received. When the grant relates to an expense item, it is recognized in the consolidated statement of comprehensive loss over the period necessary to match the grant to the related costs. Where the grant relates to an asset acquisition, it is recognized in the consolidated statements of comprehensive loss in proportion to the depreciation of the related assets.

#### **Operating leases**

Leases where substantially all the risks and rewards of ownership of assets remain with the lessor are accounted for as operating leases. Rentals applicable to such operating leases are recognized on a straight-line basis over the lease term. The Company had no capital leases during the years presented.

#### Employee defined contribution plan

Full time employees of the Company in the PRC participate in a government mandated defined contribution plan pursuant to which certain pension benefits, medical care, unemployment insurance, employee housing fund, and other welfare benefits are provided to employees. Chinese labor regulations require that the Company make contributions to the government for these benefits based on a certain percentage of the employee's salaries. The Company has no legal obligation for the benefits beyond the contributions. The total amount that was expensed as incurred was RMB20,724, RMB10,556 and RMB16,714 (US\$2,623) for the years ended December 31, 2019, 2020 and 2021, respectively.

#### Income taxes

The Company accounts for income taxes using the liability approach and recognizes deferred tax assets and liabilities for the expected future consequences of events that have been recognized in the consolidated financial statements or in the Company's tax returns. Deferred tax assets and liabilities are recognized on the basis of the temporary differences that exist between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements using enacted tax rates in effect for the year end in which the differences are expected to reverse. Changes in deferred tax assets and liabilities are recorded in earnings. Deferred tax assets are reduced by a valuation allowance through a charge to income tax expense when, in the opinion of management, it is more-likely-than-not that a portion of or all of the deferred tax assets will not be realized. The Company evaluates the potential for recovery of deferred tax assets by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies. The components of the deferred tax assets and liabilities are classified as non-current.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Income taxes (continued)

The Company accounts for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of the benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained (defined as a likelihood of more than fifty percent of being sustained upon an audit, based on the technical merits of the tax position), the tax position is then assessed to determine the amount of benefits to recognize in the consolidated financial statements. The amount of the benefits that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. Interest and penalties on income taxes will be classified as a component of the provisions for income taxes.

The Company evaluated its income tax uncertainty under ASC 740. ASC 740 clarifies the accounting for uncertainty in income taxes by prescribing the recognition threshold a tax position is required to meet before being recognized in the financial statements. The Company elects to classify interest and penalties related to an uncertain tax position, if and when required, as part of income tax expense in the consolidated statements of comprehensive loss.

The Company did not recognize any income tax due to uncertain tax position or incur any interest and penalties related to potential underpaid income tax expenses during the years presented.

#### Share-based compensation

In accordance with ASC 718, Compensation-Stock Compensation, the Company determines whether an award granted to its employees should be classified and accounted for as a liability award or equity award. The Company's share-based compensation to its employees which were classified as equity awards were recognized in the consolidated statements of comprehensive loss based on the grant date fair value. The Company's share-based compensation to its employees which were classified as liability awards were recognized in the consolidated statements of comprehensive loss based on the fair value at each reporting date until settlement. The Company early adopted Accounting Standard Update ("ASU") ASU 2016-09—Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting and elected to account for forfeitures as they occur.

A change in any of the terms or conditions of the awards is accounted for as a modification of the award. Incremental compensation cost is measured as the excess, if any, of the fair value of the modified award over the fair value of the original award immediately before its terms are modified, measured based on the fair value of the awards and other pertinent factors at the modification date. For vested awards, the Company recognizes incremental compensation cost in the period the modification occurs. For unvested awards, the Company recognizes over the remaining requisite service period, the sum of the incremental compensation cost and the remaining unrecognized compensation cost for the original award on the modification date. If the fair value of the modified award is lower than the fair value of the original award immediately before modification, the minimum compensation cost the Company recognizes is the cost of the original award.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Fair value measurements

The carrying amounts of financial assets and liabilities, such as cash equivalents, restricted cash, accounts receivable, other receivables within prepaid expenses and other current assets, balances with related parties, accounts payable, and other payables with accrued liabilities and other current liabilities, approximate their fair values because of the short maturity of these instruments. The carrying amounts of convertible notes were recognized based on residual proceeds after allocation to the derivative liabilities at fair market value. The estimated fair values of the convertible notes are based on a valuation methodology using market approach since it bears interest rates which approximate market interest rates of issuers of similar credit risk profile.

#### Comprehensive loss

Comprehensive loss is defined as the increase or decrease in equity of the Company during a year from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. Accumulated other comprehensive income of the Company includes the foreign currency translation adjustments.

#### Loss per share

In accordance with ASC 260, *Earning per Share*, basic loss per share is computed by dividing net loss attributable to common shareholders by the weighted average number of common shares outstanding during the period using the two-class method. Under the two-class method, net loss is allocated between common shares based on dividends declared (or accumulated) and participating rights in undistributed earnings as if all the earnings for the reporting period had been distributed. For the year ended December 31, 2021, the two-class method is applicable because the Company has two classes of common shares outstanding, Class A and Class B common shares, respectively. The participating rights (liquidation and dividend rights) of the holders of the Company's Class A and Class B common shares are identical, except with respect to voting. As a result, and in accordance with ASC 260, as the liquidation and dividend rights are identical, the undistributed loss is allocated on a proportionate basis.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Loss per share (continued)

Diluted loss per share is computed by dividing net loss attributable to common shareholders as adjusted for the effect of dilutive common equivalent shares, if any, by the weighted average number of common and dilutive common equivalent shares outstanding during the years. Common equivalent shares consist of the common shares issuable upon the conversion of the Company's contingently redeemable convertible preferred shares and the convertible senior notes using the if-converted method and common shares, including partially paid shares, issuable upon the exercise of the share options, using the treasury stock method. Common share equivalents are excluded from the computation of diluted loss per share if their effects would be anti-dilutive.

#### Concentration of risks

#### Concentration of credit risk

Financial assets that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents, restricted cash, derivative assets, other receivables within prepayments and other current assets, short-term investments and accounts receivable.

The Company places its cash and cash equivalents with reputable financial institutions which have high-credit ratings. As of December 31, 2020 and 2021, the aggregate amount of cash and cash equivalents, derivative assets, short-term investments and restricted cash of RMB322,183 and RMB276,644 (US\$43,412), respectively, were held at major financial institutions located in the PRC, and US\$17,494 and US\$2,186 (RMB13,927), respectively, were deposited with major financial institutions located outside the PRC. There has been no recent history of default related to these financial institutions. The Company continues to monitor the financial strength of the financial institutions. The Company manages credit risk of accounts receivable through ongoing monitoring of the outstanding balances.

#### Concentration of suppliers

Approximately 57.7%, 71.0% and 46.4% of advertising costs were paid to three suppliers for the years ended December 31, 2019, 2020 and 2021, respectively.

#### Business and economic risk

The Company believes that changes in any of the following areas could have a material adverse effect on the Company's future consolidated financial position, results of operations or cash flows: changes in the overall demand for services; competitive pressures due to new entrants; advances and new trends in new technologies and industry standards; changes in certain strategic relationships; regulatory considerations and risks associated with the Company's ability to attract employees necessary to support its growth. The Company's operations could also be adversely affected by significant political, regulatory, economic and social uncertainties in the PRC.

#### Currency convertibility risk

Substantially all of the Company's businesses are transacted in RMB, which is not freely convertible into foreign currencies. All foreign exchange transactions take place either through the People's Bank of China ("PBOC") or other authorized financial institution at exchange rates quoted by PBOC. Approval of foreign currency payments by the PBOC or other regulatory institutions requires submitting a payment application form together with suppliers' invoices and signed contracts.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Concentration of risks (continued)

Foreign currency exchange rate risk

The functional currency and the reporting currency of the Company are the US\$ and the RMB, respectively. On June 19, 2010, the PBOC announced the end of the RMB's de facto peg to the US\$, a policy which was instituted in late 2008 in the face of the global financial crisis, to further reform the RMB exchange rate regime and to enhance the RMB's exchange rate flexibility. On March 15, 2014, the People's Bank of China announced the widening of the daily trading band for RMB against US\$. The depreciation of the US\$ against RMB was approximately 2.34% in 2021. Most of the Company's revenues and costs are denominated in RMB, while a portion of cash and cash equivalents, derivative assets, accounts receivable, and accounts payable are denominated in US\$. Any significant revaluation of RMB may materially and adversely affect the Company's consolidated revenues, earnings and financial position in US\$.

#### Impact of COVID-19

During the year ended December 31, 2020, COVID-19 has had limited impact on the Company's operations, including revenues declined compared to the prior period partly due to weakness in demand as its customers in certain industries are negatively impacted by COVID-19.

For the year ended December 31, 2021, there has been gradual recovery of the Company's overall business operations resulting from improving health statistics in China, which has also lessened the impact of COVID-19 on performance of the Company. However, the pandemic is still one of the triggers for evaluating whether there is impairment, as such the Company has provided allowances for loans receivable and recognized impairment charges on its long-term investments in the year ended December 31, 2021.

There are still uncertainties of COVID-19's future impact, and the extent of the impact will depend on a number of factors, including the duration and severity of the pandemic; the uneven impact to certain industries; and the macroeconomic impact of government measures to contain the spread of COVID-19 and related government stimulus measures. As a result, certain of the Company's estimates and assumptions, including the allowance for accounts and the valuation of certain equity investments subject to impairment assessments, require significant judgments and carry a higher degree of variabilities and volatilities that could result in material changes to the Company's current estimates in future periods. The extent of the impact of the COVID-19 on the Company's operational and financial performance in the longer term will depend on future developments, including the duration of the outbreak and related travel advisories and restrictions and the impact of the COVID-19 on overall demand for travel, all of which are highly uncertain and beyond the control of the Company and the impact cannot be reasonably estimated at this time.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Segment information

The Company's chief operating decision maker is the Chief Executive Officer, who makes resource allocation decisions and assesses performance based on the consolidated financial results. As a result, the Company has only one reportable segment.

As the Company generates substantially most of its revenues in the PRC, and substantially all of the Company's long-lived assets and revenues are located in and derived from PRC, no geographical segments are presented.

#### Recently issued accounting pronouncements

As a company with less than US\$1.07 billion in revenue for the last fiscal year, the Company qualifies as an "emerging growth company" pursuant to the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). An emerging growth company may take advantage of specified reduced reporting and other requirements that are otherwise applicable generally to public companies. These provisions include a provision 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. The Company will take advantage of the extended transition period.

In February 2016, the FASB issued ASU No. 2016-02, Leases (*Topic 842*) ("ASU 2016-02"). ASU 2016-02 modifies existing guidance for off-balance sheet treatment of a lessees' operating leases by requiring lessees to recognize lease assets and lease liabilities. The Company is required to adopt ASU 2016-02 and the respective updates for annual reporting periods beginning after December 15, 2021. The Company will adopt this new standard from January 1, 2022 using a modified retrospective transition method and selects the transition option to continue to apply the legacy guidance in ASC 840, *Leases*, including its disclosure requirements. The Company will also elect the short-term lease exemption for certain classes of underlying assets with a lease term of 12 months or less. The Company currently believes the most significant change will be related to the recognition of right-of-use assets and lease liabilities on the Company's balance sheet for certain in-scope operating leases. The Company does not expect any material impact on net assets and the consolidated statement of comprehensive loss as a result of adopting the new standard.

## AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 2 Summary of Significant Accounting Policies (continued)

#### Recently issued accounting pronouncements (continued)

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"). Subsequently, the FASB issued ASU 2019-05, Financial Instruments- Credit Losses (Topic 326): Targeted Transition Relief and codification improvements to Topic 326 in ASU 2019-04 and ASU 2018-19. The amendments update guidance on reporting credit losses for financial assets. These amendments affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. The amendments in this ASU are effective for annual reporting periods beginning January 1, 2023 and interim periods beginning January 1, 2023. The Company does not expect any material impact on the Company's consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes.* This guidance removes certain exceptions to the general principles in Topic 740 and enhances and simplifies various aspects of the income tax accounting guidance, including requirements such as tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. This standard is effective for the Company for the annual reporting periods beginning January 1, 2022 and interim periods beginning January 1, 2023. Early adoption is permitted. The Company does not expect any material impact on the Company's consolidated financial statements.

In January 2020, the FASB issued ASU 2020-01, *Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815) - Clarifying the Interactions* between Topic 321, Topic 323, and Topic 815. This guidance addresses accounting for the transition into and out of the equity method and provides clarification of the interaction of rules for equity securities, the equity method of accounting, and forward contracts and purchase options on certain types of securities. This standard is effective for the Company beginning January 1, 2022 including interim periods within the fiscal year. Early adoption is permitted. The Company will adopt the guidance on January 1, 2022, and expect no impact on the 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* (ASU 2021-08), which clarifies that an acquirer of a business should recognize and measure contract assets and contract liabilities in a business combination in accordance with ASC Topic 606, *Revenue from Contracts with Customers (Topic 606)*. This guidance will be effective for the Company in the first quarter of 2023 on a prospective basis, with early adoption permitted. The Company is currently evaluating the impact of the new guidance on our consolidated financial statements.

In November 2021, the FASB issued ASU No. 2021-10, Government Assistance (Topic 832): Disclosure by Business Entities about Government Assistance (ASU 2021-10), which improves the transparency of government assistance received by most business entities by requiring the disclosure of: (1) the types of government assistance received; (2) the accounting for such assistance; and (3) the effect of the assistance on a business entity's financial statements. This guidance will be effective for the Company in the year ended December 31, 2022, with early adoption permitted. The Company does not expect any material impact on the consolidated financial statements.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 3 Accounts and notes receivable, net

	As of December 31,		
	2020	202	1
	RMB	RMB	US\$
Accounts and notes receivable	88,706	81,550	12,797
Less: allowance for doubtful accounts	(43,820)	(37,690)	(5,914)
Total accounts and notes receivable, net	44,886	43,860	6,883

The following table presents the movement in the allowance for doubtful accounts:

	As of December 31,		
	2020	202	1
	RMB	RMB	US\$
Balance at beginning of year	28,516	43,820	6,876
Provisions	18,732	(246)	(39)
Write-offs	(3,428)	(5,884)	(923)
Balance at end of year	43,820	37,690	5,914

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 4 Prepayments and other current assets

Prepayments and other current assets consist of the following:

		As of December 31,		1,
		2020	202	
		RMB	RMB	US\$
Receivables on behalf of third party advertising companies	(i)	_	12,599	1,977
Prepaid service fee		12,028	11,410	1,790
VAT and other surcharges		10,467	5,618	882
Investment in a convertible loan		_	4,221	662
Loans granted to equity investees	(ii)	500	3,000	471
Office rental deposit		636	919	144
Prepaid media cost		_	551	87
Receivables from sales of shares on behalf of employees		11,060	180	28
Refund from prepaid media cost		6,838	_	_
Others		7,484	8,172	1,282
Total prepayments and other current assets		49,013	46,670	7,323

- (i) Starting from January 1, 2021, the Company has fully exited the Targeted Marketing business and this balance represents the receivables the Company acts as agent and collects on behalf of third party advertising companies for targeted marketing related services.
- (ii) For the years ended December 31, 2019, 2020 and 2021, the Company recognized impairment charges on loans granted to equity investees of nil, RMB4,500 and RMB528 (US\$83). The Company evaluates the impairment of the equity investments without readily determinable fair value along with loans the Company granted to those investees.

# 5 Property and equipment, net

Property and equipment consist of the following:

	As of December 31,		
	2020 2021		1
	RMB	RMB	US\$
Office furniture and equipment	4,414	4,744	744
Computer equipment and servers	162,587	163,392	25,640
Leasehold improvements	100	5,451	855
Construction-in progress	2,840	85	13
Less: Accumulated depreciation and impairment	(96,419)	(111,493)	(17,495)
Total property and equipment, net	73,522	62,179	9,757

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 5 Property and equipment, net (continued)

The Company recognized impairment charges on property and equipment of RMB10,952 for the year ended December 31, 2020, which was a result of the Company's "Going-Cloud" project undertaken. No impairment loss charges were recognized on property and equipment for the years ended December 31, 2019 and 2021.

Depreciation expense recognized for the years ended December 31, 2019, 2020 and 2021 were RMB30,059, RMB37,704 and RMB27,337 (US\$4,290), respectively.

### 6 Intangible assets, net

Intangible assets consist of the following:

As of December 31,		
2020	202	21
RMB	RMB	US\$
15,693	13,623	2,138
(6,174)	(8,225)	(1,291)
9,519	5,398	847
	2020 RMB 15,693 (6,174)	2020         2020           RMB         RMB           15,693         13,623           (6,174)         (8,225)

No impairment charges were recognized on intangible assets for the years ended December 31, 2019, 2020 and 2021, respectively.

The weighted average amortization period of intangible assets were 4.2 years, 3.9 years and 4.0 years for the years ended December 31, 2019, 2020 and 2021, respectively.

Amortization expense of intangible assets were RMB2,307, RMB4,366 and, RMB4,481 (US\$703) for the years ended December 31, 2019, 2020 and 2021, respectively.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 6 Intangible assets, net (continued)

Estimated amortization expense relating to the existing intangible assets with finite lives for each of the next five years is as follows:

	RMB	US\$
For the year ending December 31, 2022	2,782	437
2023	2,080	326
2024	522	82
2025	14	2
2026	_	_

There were no intangible assets with an indefinite useful life as of December 31, 2020 and 2021.

### 7 Long-term investments

### Equity investments without readily determinable fair value

As of December 31, 2020, the carrying amount of the Group's equity investments was RMB168,526, net of RMB38,739 in accumulated impairment.

As of December 31, 2021, the carrying amount of the Group's equity investments was RMB141,926 (US\$22,271), net of RMB63,902 (US\$10,028) in accumulated impairment.

Impairment charges recognized on equity investments without readily determinable fair value was nil, RMB38,739 and RMB25,370 (US\$3,981) for the years ended December 31, 2019, 2020 and 2021.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 7 Long-term investments (continued)

Total unrealized and realized gains and losses of equity investments without readily determinable fair values in 2019, 2020 and 2021 were as follows:

	For the years ended December 31			1
	2019	2020	202	1
	RMB	RMB	RMB	US\$
Gross unrealized gains (upward adjustments)	17,298		_	
Gross unrealized losses (downward adjustments including impairment)		(39,181)	(25,370)	(3,981)
Net unrealized gains/losses on equity investments held	17,298	(39,181)	(25,370)	(3,981)
Net realized gains on equity investments sold	6,778			
Total net gains/losses recognized in other income, net	24,076	(39,181)	(25,370)	(3,981)

In 2018 and 2019, the Company acquired a total 5.93% of the share capital of Zhuoxuan, a non-listed company, for RMB7,265. The Company recognized a fair value gain of RMB3,043 in "other income" in 2019 due to the observable price change.

In 2017, the Company acquired 6.25% of the share capital of Shuwei, a non-listed company, for RMB10,000, and the Company's ownership of share in Shuwei decreased to 4.27% in 2018 due to Shuwei's subsequent rounds of financing. In 2019, the Company disposed certain portion of equity ownership of Shuwei with the consideration RMB10,000, and recognized realized gain of RMB6,778 and a fair value gain of RMB14,255 for the remaining portion of equity ownership 2.89% in "other income".

#### 8 Short-term loan

	A	As of December 31,		
	2020	202	1	
	RMB	RMB	US\$	
Short-term bank borrowings	<u>—</u>	150,000	23,538	

As of December 31, 2020, the Company does not have any short-term loan.

In April 2021, the Group borrowed a secured RMB denominated loan of RMB150,000 (US\$23,538) with a fixed interest rate of 4.35% for a one-year term from the Shanghai Pudong Development Bank. As of December 31, 2021, the total deposits in restricted cash pledged for the short-term loan was RMB157,900 (US\$24,778).

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 9 Deferred revenue and customer deposits

Deferred revenue and customer deposits consist of the following:

	As	As of December 31,			
	2020	2020 202			
	RMB	RMB	US\$		
Deferred revenue	71,141	80,405	12,617		
Customer deposits	38,041	39,586	6,212		
Total deferred revenue and customer deposits – current	109,182	119,991	18,829		
Deferred revenue - non-current	6,049	3,845	603		

Roll-forward of customer deposits:

	Year ended December 31,			
	2020	1		
	RMB	RMB	US\$	
Balance at beginning of year	37,923	38,041	5,969	
Cash received from customers during the year	374,811	225,976	35,461	
Revenue recognized during the year	(363,963)	(220,333)	(34,575)	
Refunds paid during the year	(10,730)	(4,098)	(643)	
Balance at end of the year	38,041	39,586	6,212	

### 10 Accrued liabilities and other current liabilities

Accrued liabilities and other current liabilities consist of the following:

	As	As of December 31,		
	2020	20	21	
	RMB	RMB	US\$	
Accrued payroll and welfare payables	59,511	52,947	8,309	
Other taxes and surcharge	19,360	9,932	1,559	
Service fees	5,481	5,233	821	
Acquisition of intangible assets, property and equipment	3,858	840	132	
Government grant	4,564	4,500	706	
Rental and property management fee	3,278	3,418	536	
Payables for sales of employees' shares	10,308	180	28	
Payables to third party advertising companies	(i) —	4,066	638	
Others	2,776	4,189	659	
Total accrued liabilities and other current liabilities	109,136	85,305	13,388	

<sup>(</sup>i) Starting from January 1, 2021, the Company has fully exited the Targeted Marketing business and this balance represents the payments to third party advertising companies for targeted marketing related services as the Company acts as agent.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of options and per exercise option price)

#### 11 Share-based compensation

Share option plans

2014 Incentive Plan

On July 23 2014, the Company's board of directors and shareholders approved the 2014 Incentive Plan (the "2014 Plan"). Awards under the 2014 Plan vest to 4 years from the date of grant and expire no more than 10 years after the grant date. The Company reserved a total of 5,500,000 common shares for issuance under the 2014 Plan. As of December 31, 2021, 37,911 shares remain available for grant under the 2014 Plan.

#### 2017 Incentive Plan

On March 1, 2017, the Company's board of directors and shareholders approved the 2017 Incentive Plan (the "2017 Plan"). Awards under the 2017 Plan vest to 4 years from the date of grant and expire no more than 10 years after the grant date. The Company reserved a total of 6,015,137 common shares for issuance under the 2017 Plan. As of December 31, 2021, 934,572 shares remain available of grant under the 2017 Plan.

#### 2021 Incentive Plan

In December 2021, the Company's board of directors and shareholders approved the 2021 Incentive Plan (the "2021 Plan"). Awards under the 2021 Plan vest to 4 years from the date of grant and expire no more than 10 years after the grant date. The Company reserved a total of 4,000,000 common shares for issuance under the 2021 Plan. As of December 31, 2021, 4,000,000 shares remain available of grant under the 2021 Plan.

The exercise price, vesting and other conditions of individual awards are determined by the board of directors or any of the committees appointed by the board of directors to administer the 2014, 2017 and 2021 Plans. The awards are subject to multiple service vesting periods arranging from 1 to 4 years, and will expire 10 years after the date of award. Upon the termination of the Grantee's continuous service, the Company has the right to repurchase the vested award or shares obtained.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of options and per exercise option price)

### 11 Share-based compensation (continued)

### Share options

The following table summarizes the share option activity for the year ended December 31, 2021:

Options Granted to Employees and Directors	Number of Options	Weighted- Average Exercise Price RMB	Weighted- Average grant-date Fair Value per Option RMB	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value RMB
Outstanding, December 31, 2020	7,200,816	8.48	17.03	7.27	232,933
Granted	1,367,791	7.26	24.61	_	_
Forfeited	652,406	11.77	21.07	_	_
Expired	_		_		
Exercised	549,007	5.50	9.19	_	_
Cancelled					_
Outstanding, December 31, 2021	7,367,194	8.18	18.66	6.09	48,464
Vested and expected to vest at December 31, 2021	7,367,194	8.18	18.66	6.09	48,464
Vested at December 31, 2021	5,496,609	7.73	14.37	5.35	35,908

The aggregate intrinsic value in the table above represents the difference between the closing stock price on the last trading day in 2020 and 2021 and the option's respective exercise price.

The weighted average grant date fair value of the share options granted during the years ended December 31, 2019, 2020 and 2021 were RMB50.18, RMB18.97 and RMB24.61 (US\$3.86), respectively.

The aggregate fair value of options vested and recognized as expenses as of December 31, 2019, 2020 and 2021 were RMB47,284, RMB28,858 and RMB30,212 (US\$4,741), respectively.

Total intrinsic value of options exercised for the years ended December 31, 2019, 2020 and 2021 were RMB53,338, RMB38,585 and RMB24,640 (US\$3,867), respectively.

The aggregate unrecognized share-based compensation expense was RMB17,366 (US\$2,725) as of December 31, 2021, which the Company expects to recognize over an estimated weighted-average period of 1.86 years.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of options and per exercise option price)

#### 11 Share-based compensation (continued)

#### Share options (continued)

The Company estimates the fair value of each award on grant date using the binomial option pricing model with the assistance of an independent third-party valuation firm. The binomial model requires the input of highly subjective assumptions, including the expected share price volatility and the suboptimal early exercise factor. For expected volatility, the Company has made reference to historical volatilities of several comparable companies. The suboptimal early exercise factor was estimated based on the Company's expectation of exercise behavior of the grantees. The risk-free rate for periods within the contractual life of the options is based on the market yield of U.S. Treasury Bonds in effect at the time of grant. Prior to the IPO, the estimated fair value of the ordinary shares, at the option grant dates, were determined by the assistance of an independent third-party valuation firm. Subsequent to the IPO, fair value of the common shares is the price of the Company's publicly traded shares. The Company's management is ultimately responsible for the determination of the estimated fair value of its ordinary shares.

The Company recognizes share-based compensation expense using the accelerated recognition method over the requisite service period, which is generally subject to graded vesting.

The following table presents assumptions used to estimate the fair values of share options granted for the years ended December 31, 2019, 2020 and 2021:

	2019	2020	2021
Risk-free interest rate	1.65% - 2.54%	0.63% - 1.88%	0.94% - 1.70%
Dividend yield	0%	0%	0%
Expected volatility	44.23% - 44.71%	44.37% - 47.83%	47.45% - 56.62%
Weighted average expected volatility	44.53%	46.37%	50.26%
Expected exercise multiple	2.5	2.5 - 2.8	2.2 - 2.8

- (i) Risk-free interest rate The risk-free interest rate for periods within the contractual life of the options is based on the US Treasury yield curve in effect at the time of the grant for a term consistent with the contractual term of the awards.
- (ii) Dividend yield The dividend yield is estimated based on the Company's expected dividend policy over the expected term of the options.
- (iii) Expected volatility Expected volatility is estimated based on the historical volatility of common shares of several comparable publicly-traded companies in the same industry.
- (iv) Expected exercise multiple Expected exercise multiple is estimated based on changes in expected intrinsic value of the option and the likelihood of early exercise by employees.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of options and per exercise option price)

### 11 Share-based compensation (continued)

### Restricted share units

Starting from September 4, 2018, the Company granted restricted Class A common shares of the Company ("Restricted Shares").

A summary of the restricted share units for the year ended December 31, 2021 was stated below:

Restricted Share Units Granted to Employees and Directors	Number of Share Units	Weighted- Average Exercise Price RMB	Weighted- Average grant-date Fair Value per Option RMB	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value RMB
Outstanding, December 31, 2020	95,094	_	20.37	10.66	3,751
Granted	119,568	_	13.92	_	_
Forfeited	_	_	_	_	_
Expired	_	_	_	_	_
Exercised	95,096	_	19.09	_	_
Cancelled		_	_	_	_
Outstanding, December 31, 2021	119,566	_	14.94	9.88	1,189
Vested and expected to vest at December 31, 2021	119,566	_	14.94	9.88	1,189
Exercisable at December 31, 2021		_	_	_	_

The weighted average grant-date fair value per share of restricted share units granted for the years ended December 31, 2019, 2020 and 2021 were RMB45.09, RMB20.41 and RMB13.92 (US\$2.18), respectively.

As of December 31, 2021, there was RMB1,144 (US\$180) of unrecognized share-based compensation cost related to restricted shares, which the Company expects to recognize over an estimated weighted-average period of 0.86 year.

Total compensation costs recognized for the years ended December 31, 2019, 2020 and 2021 were as follows:

		Year ended December 31,				
	2019					
	RMB	RMB	RMB	US\$		
Cost of Revenue	73	4	41	6		
Research and development	12,819	7,176	13,801	2,166		
Sales and marketing	6,040	3,965	2,609	409		
General and administrative	28,352	17,713	13,761	2,160		
Total	47,284	28,858	30,212	4,741		

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 12 Income taxes

#### Cayman Islands

Under the current tax laws of Cayman Islands, the Company and its subsidiaries are not subject to tax on income or capital gains. Besides, upon payment of dividends by the Company to its shareholders, no Cayman Islands withholding tax will be imposed.

#### British Virgin Islands

Under the current laws of the British Virgin Islands ("BVI"), the Company's BVI incorporated subsidiary are not subject to tax on income or capital gains arising in BVI. In addition, upon payments of dividends by this entity to its shareholders, no BVI withholding tax will be imposed.

#### Hong Kong

Under the Hong Kong tax laws, the subsidiary in Hong Kong are subject to the Hong Kong profits tax rate at 16.5% and it may be exempted from income tax on its foreign-derived income and there are no withholding taxes in Hong Kong on remittance of dividends.

#### China

Effective from January 1, 2008, the PRC's statutory, Enterprise Income Tax ("EIT") rate is 25%. In accordance with the implementation rules of EIT Law, a qualified "High and New Technology Enterprise" ("HNTE") is eligible for a preferential tax rate of 15%. The HNTE certificate is effective for a period of three years. An entity must file required supporting documents with the tax authority and ensure fulfillment of the relevant HNTE criteria before using the preferential rate. An entity could re-apply for the HNTE certificate when the prior certificate expires. The certificate of high and new technology enterprise of the VIE was obtained in November 2016 and expired in November 2019. The VIE obtained the certificate of high and new technology enterprise in December 2019 with a validity period of three years starting from December 2019 onwards. It was entitled to the preferential rate of 15% for 2019,2020 and 2021. In early 2021, the WFOE was recognized as an HNTE and was eligible for 15% preferential tax rate from 2020 to 2022.

The Company's loss before income taxes consists of:

		As of December 31,				
	2019	2019 2020 2021				
	RMB	RMB	RMB	US\$		
Cayman Islands	(16,716)	(31,966)	(23,555)	(3,696)		
British Virgin Islands	(30)	(27)	(2)			
Hong Kong	(3,097)	(1,790)	(1,564)	(245)		
China	(89,836)	(191,206)	(115,431)	(18,114)		
Total loss before income taxes	(109,679)	(224,989)	(140,552)	(22,055)		

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 12 Income taxes (continued)

Composition of income tax expense

The current and deferred portions of income tax expense included in the consolidated statements of comprehensive loss are as follows:

	2019 RMB	2020	202	21
	RMB	RMB	RMB	US\$
Current income tax expense	(162)	(86)	(32)	(5)
Deferred tax benefit				
Total income tax expense	(162)	(86)	(32)	(5)

Reconciliation between expenses of income taxes

Reconciliation between the expense of income taxes computed by applying the statutory tax rate to loss before income taxes and the actual provision for income taxes is as follows:

	As of December 31,			
	2020	202		
	RMB	RMB	US\$	
Loss before income tax	(224,989)	(140,552)	(22,055)	
Income tax expense computed at PRC statutory rate (25%)	(56,247)	(35,138)	(5,514)	
International tax rate differential	8,151	6,023	945	
Preferential tax rate	21,963	21,437	3,364	
Deferred tax items tax rate differential	(23,337)	(22,935)	(3,599)	
Research and development super-deduction	(27,455)	(32,595)	(5,115)	
Non-deductible expenses	7,132	8,092	1,270	
Deferred tax expenses	347		_	
Recognition of prior year tax loss/ Expired prior year tax loss	3,382	(4,851)	(761)	
Changes in valuation allowance	66,150	59,999	9,415	
Income tax expense	86	32	5	

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 12 Income taxes (continued)

Deferred tax assets and liabilities

The tax effects of temporary differences that give rise to the deferred tax balances as of December 31, 2020 and 2021 are as follows:

	As of December 31,			
	2020 RMB	RMB	US\$	
Deferred tax assets	KMB	RMB	0.5\$	
Provision for doubtful debts	23,418	27,327	4,288	
Accrued expense	10,841	12,923	2,028	
Net operating loss carry forward	164,559	218,042	34,216	
Government grant related to assets	684	1,411	221	
Property and equipment depreciation	144		_	
Estimated liabilities	7	_	_	
Less: Valuation allowance	(188,119)	(248,118)	(38,935)	
Total deferred tax assets	11,534	11,585	1,818	
Deferred tax liabilities				
Property and equipment depreciation	_	(867)	(136)	
Net unrealized gain on equity investments held	(3,564)	(3,564)	(559)	
Unrealized loan interest income	(7,970)	(7,154)	(1,123)	
Total deferred tax liabilities	(11,534)	(11,585)	(1,818)	
Net deferred tax assets				
Net deferred tax liabilities				

The Company operates through its WFOE and VIE and evaluates the potential realization of deferred tax assets on an entity basis. The Company recorded valuation allowance against deferred tax assets of those entities that were in a three-year cumulative financial loss and are not forecasting profits in the near future as of December 31, 2020 and 2021. In making such determination, the Company also evaluated a variety of factors including the Company's operating history, accumulated deficit, existence of taxable temporary differences and reversal periods.

The Company had deferred tax assets related to net operating loss carry forwards of RMB164,559 and RMB218,042 (US\$34,216) from its WFOE and the VIE in China as of December 31, 2020 and 2021, which can be carried forward to offset taxable income. The net operating loss of WOFE and VIE will expire in years 2022 to 2031 if not utilized.

The Company did not record any dividend withholding tax, as there were no undistributed earnings arising from the WFOE noted as of December 31, 2020 and 2021.

As of December 31, 2020 and 2021, the Company concluded that there was no significant tax uncertainties in its consolidated financial results. The Company did not record any interest and penalties related to an uncertain tax position for each of the year ended December 31, 2020 and 2021. The Company does not expect the amount of unrecognized tax benefits would increase significantly in the next 12 months. In accordance with relevant PRC tax administration laws, the tax year from 2016 through 2021 remain open to examination by the respective tax authorities. The Company may also be subject to the examinations of the tax filings in other jurisdictions, which are not material to the consolidated financial statements.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 13 Convertible notes

On April 17, 2018, the Company issued zero coupon convertible notes (the "Convertible Notes") due 2021 in an aggregate principal amount of US\$35,000 to one existing and one new investor. The Convertible Notes will mature on their third anniversary date. Holders of the convertible notes may, at their option during a period starting from the issue date until seven days prior to the maturity of the notes, subject to certain exceptions, convert the notes into common shares of the Company at the then applicable conversion price, which is initially US\$11.76 per share, subject to certain anti-dilution and other adjustments (the "Conversion Option"). On the commitment date, the conversion option did not qualify for derivative accounting as the underlying common shares which the Convertible Note could be converted into were not publicly traded nor could they be readily convertible into cash in accordance with ASC 815-15 and ASC 815-40. Upon the initial public offering, whilst the net settlement criteria is subsequently met, the Conversion Option continued not to qualify for derivative accounting as it meets the scope exception provided for under ASC 815-10-15-74(a).

If no qualified IPO were to occur within two years of the issue date, the outstanding obligation at their principal amount with an amount representing a total internal rate of return of 8% per annum, under the Convertible Notes would be immediately due and payable ("Contingent Redemption Option"). If the event of default as defined in the Convertible Notes were to occur, a simple interest of 15% will accrue on the principal. If the Company fails to deliver and register title to any shares following conversion of any Convertible Note, an interest represents a total internal rate of return of 15% per annum will accrue on the principal (both "Contingent Interest Feature").

The Company evaluated and determined there were no embedded derivatives requiring bifurcation and to determine if there were any beneficial conversion features ("BCF").

The Company also evaluated the Contingent Redemption Option and Contingent Interest Feature contained in the Convertible Notes in accordance with ASC 815. Both features qualify for derivative accounting as they are not clearly and closely related to the debt host and will be accounted for as a single compound derivative. At issuance date, the Company recognized a derivative liability of US\$3,224, which was subsequently accounted for at fair value with a change in fair value of US\$3,224 recognized in current earnings for the year ended December 31, 2018 due to a qualified IPO.

Furthermore, as the most favorable conversion price used to measure the BCF for the Convertible Note was the issuance price of US\$11.76, no BCF was recognized for the Convertible Note as the fair value per ordinary share at the commitment date was US\$9.87, which was less than the most favorable conversion price.

Both principal amount subsequent to the bifurcation of its compound derivative and the issuance costs are amortized as interest expense using the effective interest rate method through the maturity dates of the convertible notes. The effective interest rate was 4.69%.

During 2021, US\$35 million of convertible notes due in April 2021 were fully repaid. As of December 31, 2021, the balance of convertible notes was nil.

The principal amount, contingent redemption feature, contingent interest feature and debt issuance costs as of December 31, 2021 were as follows:

	As of	Charge to		Foreign currency		
	December 31, 2020 RMB	profit and loss RMB	Redemption RMB	translation adjustment RMB	As of Decer	mber 31, 2021 US\$
Principal amount	228,372	_	(228,508)	136	_	_
Contingent redemption feature, contingent interest feature and debt						
issuance costs	(3,143)	3,108		35		
Total	225,229	3,108	(228,508)	171		

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 14 Commitments and contingencies

Operating lease commitments

The Company leases office premises in the PRC under non-cancellable operating leases ranging from one year to five years. Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases.

Total operating lease expenses were RMB16,380 and RMB16,584 and RMB12,707 (US\$1,994) for the years ended December 31, 2019, 2020 and 2021, respectively.

As of December 31, 2021, future minimum payments under non-cancellable operating leases were as follows:

	RMB	US\$
2022	9,333	1,465
2023	6,577	1,032
2024	5,381	844
Total	21,291	3,341

The Company's operating lease commitments have no renewal options, rent escalation clauses and restrictions or contingent rents. There are no lease payments in 2025 and after.

#### Capital commitments

As of December 31, 2021, future minimum payment under non-cancellable purchase commitment for consulting service is nil.

#### 15 Share capital

During the year ended December 31, 2019, the Company had repurchased under the Repurchase Plan an aggregate of 920,606 ADSs, representing 613,737 Class A common shares. As of December 31, 2019, the Company has no plan for cancellation of these repurchased shares. These shares were recorded at their purchase cost on the consolidated balance sheets. As at December 31, 2019, there were 60,106,037 and 17,000,189 Class A and Class B ordinary shares outstanding respectively.

During the years ended December 31, 2020 and 2021, no ADS were repurchased by the Company. As of December 31, 2020 and 2021, total share repurchased under the Repurchase Plan was an aggregate of 920,606 ADSs, representing 613,737 Class A common shares.

As at December 31, 2020, there were 61,392,170 and 17,000,189 Class A and Class B ordinary shares outstanding respectively.

As at December 31, 2021, there were 62,036,273 and 17,000,189 Class A and Class B ordinary shares outstanding respectively.

# AURORA MOBILE LIMITED

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of options and per exercise option price)

### 15 Share capital (continued)

Basic and diluted loss per share is calculated as follows:

	For the year December			For the year ended December 31, 2020		For the year ended December 31, 2021			
	Class A	Class B	Class A	Class B	Class	s A	Class	з В	
	RMB	RMB	RMB	RMB	RMB	US\$	RMB	US\$	
Numerator:									
Net loss attributable to									
Class A and Class B									
common shareholders	(85,502)	(24,339)	(175,650)	(49,425)	(110,258)	(17,301)	(30,326)	(4,759)	
Net loss attributable to									
common shareholders	(85,502)	(24,339)	(175,650)	(49,425)	(110,258)	(17,301)	(30,326)	(4,759)	
Denominator:									
Weighted average number of shares used in calculating basic and diluted loss per									
share	59,721,341	17,000,189	60,415,978	17,000,189	61,809,501	61,809,501	17,000,189	17,000,189	
Basic and diluted loss per share	(1.43)	(1.43)	(2.91)	(2.91)	(1.78)	(0.28)	(1.78)	(0.28)	

For the years ended December 31, 2019, 2020 and 2021, the two-class method is applicable because the Company has Class A and Class B ordinary shares outstanding, and both classes have contractual rights with regards to dividends and distributions upon liquidation of the Company. The effect of all outstanding share options, restricted share units and convertible notes were excluded from the computation of diluted loss per share for the years ended December 31, 2019, 2020 and 2021 as their effects would be anti-dilutive.

### 16 Related party transactions

The table below sets forth the major related parties and their relationships with the Company:

Name of related parties
Weidong Luo
Shenzhen Weixunyitong Information Technology Co., Ltd.
Guangzhou Tianlang Network Technology Co., Ltd.

Founder, Chief Executive Officer
Company that is significantly influenced by Weidong Luo
Company that is significantly influenced by Weidong Luo

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 16 Related party transactions (continued)

Details of related party balances as of December 31, 2020 and 2021 are as follows:

# 16.1 Amounts due from related parties

		As o	31,	
		2020	2020 202	
		RMB	RMB	US\$
Guangzhou Tianlang Network Technology Co., Ltd.			35	5
Total amounts due from related parties	(i)	_	35	5

# 16.2 Amounts due to related parties

		As o	f December	31,
		2020 20		21
		RMB	RMB	US\$
Guangzhou Tianlang Network Technology Co., Ltd.		_	54	8
Total amounts due to related parties	(i)		54	8

Details of related party transactions for the years ended December 31, 2019, 2020 and 2021 are as follows:

# 16.3 Transactions with related parties

				the year en ecember 3	
		2019 RMB	2020 RMB	RMB	21 US\$
Services provided to:	(i)	KIVID	KIVID	KIVID	USS
Guangzhou Tianlang Network Technology Co., Ltd.		266		100	16
Services received from:	(ii)				
Shenzhen Weixunyitong Information Technology Co.,Ltd.		11,600			

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 16 Related party transactions (continued)

- (i) The Company entered into agreements with Guangzhou Tianlang Network Technology Co., Ltd. to provide advertising services and JG Alliance service in 2021 and to provide certain data solutions and targeted marketing services in 2019.
- (ii) The Company entered into an agreement with Shenzhen Weixunyitong Information Technology Co., Ltd to purchase ad inventory in 2019.

#### 17 Revenues

Revenues consist of the following:

		Year ended December 31,			
	2019	2019 2020		1	
	RMB	RMB	RMB	US\$	
Targeted Marketing	696,190	213,662			
SAAS Businesses		·			
Developer Services	93,553	173,457	252,859	39,679	
Vertical Applications	116,715	84,495	104,463	16,393	
Total SAAS Businesses	210,268	257,952	357,322	56,072	
Total revenues	906,458	471,614	357,322	56,072	

For the years ended December 31, 2019, 2020 and 2021, revenues recognized at the point in time are RMB784,442, RMB342,542 and RMB222,856 (US\$34,971), respectively. For the years ended December 31, 2019, 2020 and 2021, revenues recognized over time are RMB122,016, RMB129,072 and RMB134,466 (US\$21,101), respectively.

Starting from January 1, 2021, the Company has fully exited the Target Marketing business and financial results since then only reflect SAAS Businesses.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 18 Other income (expenses)

	Year ended December 31,			
	2019	2020	2021	
	RMB	RMB	RMB	US\$
Government grants	12,546	10,346	20,879	3,276
Gain on an equity investment sold (Note 7)	6,778			_
Unrealized gain on equity investments held (Note 7)	17,298	_	_	_
Impairment for long-term investments (Note 7)	_	(39,181)	(25,370)	(3,981)
Impairment for loan receivables (Note 4)	_	(4,500)	(528)	(83)
Income from ADR profit-sharing program	2,190	2,257	2,111	332
Others	_	264	_	_
Total	38,812	(30,814)	(2,908)	(456)

### 19 Short-term investments

Short-term held-to-maturity securities were mainly deposits in commercial banks with maturities less than one year and structured deposits issued by commercial banks and other financial intuitions for which the Company has the positive intent and ability to hold those securities to maturity.

Short-term investments classification as of December 31, 2020 and 2021 were shown as below:

		As of December 31, 2020					
	Cost or Amortized	Gross unrecognized holding	Gross unrecognized holding	Gross unrecognized	Gross unrecognized		
	cost RMB	gains	losses	gains	losses	Fair value RMB	
Held-to-maturity debt investments	80,000	_	_	_	_	80,000	

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 19 Short-term investments (continued)

		As of December 31, 2021						
			Gross	Gross				
	Cost		unrecognized	unrecognized	Gross	Gross		
	Amort	ized	holding	holding	unrecognized	unrecognized		
	cos	st	gains	losses	gains	losses	Fair va	alue
	RMB	USD					RMB	USD
Held-to-maturity debt investments	30,000	4,708	_	_	_	_	30,000	4,708

As of December 31, 2020, the Company's short-term investments comprise primarily of principal guaranteed structured deposits placed with financial institutions with maturities within twelve months and interest rates indexed to gold price. The indexation of interest rates to gold prices are considered embedded derivatives that are separated from the host contract of bank structured deposits and are recorded separately in "Derivative assets" and measured at fair value in the consolidated balance sheets. The fair value of the derivatives assets is disclosed in Note 20.

As of December 31, 2021, the Company's short-term investments only comprises of time deposits with original maturities over three months.

#### 20 Fair value measurements

ASC 820-10, Fair Value Measurements and Disclosures: Overall, establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1 Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets
- Level 2 Include other inputs that are directly or indirectly observable in the marketplace
- Level 3 Unobservable inputs which are supported by little or no market activity

ASC 820-10 describes three main approaches to measuring 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.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 20 Fair value measurements (continued)

### Assets and liabilities measured or disclosed at fair value

The Company measures bifurcated embedded redemption feature derivative of convertible notes at fair value on a recurring basis, which is classified within Level 3 as the fair value is measured based on risk-free interest rate, volatility, mature date, conversion price, and other factors. There are no derivative liabilities as of December 31, 2020 and 2021, respectively. For further information on the convertible notes see Note 13.

The Company measures derivative assets at fair value on a recurring basis. The derivative assets are classified within Level 2 as the fair value is measured by using inputs derived from or corroborated by observable market data. The Company had RMB100 and RMB5,989 (US\$940) of derivative assets as of December 31, 2020 and 2021 respectively.

The Company's non-financial long-lived assets, such as intangible assets and property and equipment, would be measured at fair value only if they were determined to be impaired. Company uses a combination of valuation methodologies, including market approach based on the Company's best estimate to determine the fair value of these non-financial assets. The Company measures non-recurring fair value measurements as of the observable transaction dates. The fair value (Level 2) was evaluated for certain property and equipment based on quoted prices for similar assets in markets that are not active.

For equity investments accounted for under the measurement alternative, when there are observable price changes in orderly transactions for identical or similar investments of the same issuer, the investments are re-measured to fair value (Note 7). The non-recurring fair value measurements to the carrying amount of an investment usually requires management to estimate a price adjustment for the different rights and obligations between a similar instrument of the same issuer with an observable price change in an orderly transaction and the investment held by the Company. These non-recurring fair value measurements were measured as of the observable transaction dates. The valuation methodologies involved require management to use the observable transaction price at the transaction date and other unobservable inputs (level 3) such as volatility of comparable companies and probability of exit events as it relates to liquidation, redemption preferences and qualified IPO.

The Company measures certain financial assets, including equity securities accounted for at fair value using measurement alternative at fair value on a non-recurring basis only if an impairment loss or upward valuation were to be recognized.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 20 Fair value measurements (continued)

For the year ended December 31, 2020, assets measured at fair value are summarized below:

			using		
			Significant		
	Total Fair	Quoted prices in	other	Significant	
	Value at	active markets	observable	unobservable	
	December 31,	for identical	inputs	inputs	Fair value
	2020	assets (Level 1)	(Level 2)	(Level 3)	<u>adjustment</u>
	RMB	RMB	RMB	RMB	RMB
Fair value measurements on a recurring basis:					
Derivative assets	100		100		
Fair value measurement on a non-recurring basis:					
Equity investments accounted for at fair value using the					
alternative measurement	_	_	_	_	(38,739)
Property and equipment, net	4,505	_	4,505	_	(10,952)
Total assets and liabilities measured at fair value	4,605		4,605		(49,691)

For the year ended December 31, 2021, assets measured at fair value are summarized below:

			Fair value measu			
	Total Valu Deceml 202 RMB	e at per 31,	Quoted prices in active markets for identical assets (Level 1)	significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3) RMB	Fair value adjustment RMB
Fair value measurements on a recurring basis						
Derivative assets	5,989	940	_	5,989	_	5,989
Fair value measurement on a non-recurring basis						
Equity investments accounted for at fair value using the alternative						
measurement (i)	585	92			585	(25,340)
Total assets and liabilities measured at fair value	6,574	1,032	_	5,989	585	(19,351)

<sup>(</sup>i) For equity securities accounted for under the measurement alternative, when there are observable price changes in orderly transactions for identical or similar investments of the same issuer, the investments are re-measured to fair value. The Company recognized impairment charges of long-term investments during the year ended December 31, 2021.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 21 Subsequent Event

On January 27, 2022 (the "Effective Date"), the Company entered into a revolving Line of Credit Agreement (the "Agreement") with Baosheng County Bank ("Baosheng Bank"). The Baosheng Bank Agreement provided the Company with a line of credit up to RMB10,000 (the "Line of Credit"), representing the maximum aggregate amount of the advances of funds from the Line of Credit that may be outstanding at any time under the Line of Credit. The Company may draw down from the Line of Credit at any time through the day immediately preceding the third annual anniversary of the Effective Date. Interest will be payable at the rate of 7.5% per annum, and payable monthly on a pro rata basis. On March 31, 2022, the Company has drawn down RMB10,000 from Baosheng Bank under the Agreement for general corporate purposes.

On March 8, 2022, the Company completed the acquisition of 52.37% of the equity interests in Wuhan SendCloud Technology Co., Ltd., ("SendCloud"), China's leading Email API platform for consumer marketing and user-centric transactional email services, with total cash consideration of RMB34,473. At the same time, the Company issued 1,366,128 restricted shares to certain management members of SendCloud with a service vesting period of nine months.

#### 22 Restricted net assets

The Company's ability to pay dividends is primarily dependent on the Company receiving distributions of funds from its subsidiaries. Relevant PRC statutory laws and regulations permit payments of dividends by the VIE incorporated in PRC only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. The consolidated results of operations reflected in the consolidated financial statements prepared in accordance with U.S. GAAP differ from those reflected in the statutory financial statements of the Company's subsidiaries.

Under PRC law, the Company's subsidiary and VIE located in the PRC (collectively referred as the "PRC entities") are required to provide for certain statutory reserves, namely a general reserve, an enterprise expansion fund and a staff welfare and bonus fund. The PRC entities are required to allocate at least 10% of their after tax profits on an individual company basis as determined under PRC accounting standards to the statutory reserve and has the right to discontinue allocations to the statutory reserve if such reserve has reached 50% of registered capital on an individual company basis. In addition, the registered capital of the PRC entities is also restricted.

Appropriations to the enterprise expansion fund and staff welfare and bonus fund are at the discretion of the Board of Directors of the subsidiary. The PRC entities are also subject to similar statutory reserve requirements. These reserves can only be used for specific purposes and are not transferable to the Company in the form of loans, advances or cash dividends.

Amounts of net assets restricted include paid-in capital and statutory reserve of the Company's PRC subsidiary and the net assets of the VIE in which the Company has no legal ownership, totaling RMB616,559 and RMB529,963 (US\$83,163) as of December 31, 2020 and 2021, respectively.

### 23 Condensed financial information of the parent company

### Basis of presentation

For the presentation of the parent company only condensed financial information, the Company records its investments in subsidiaries and VIE under the equity method of accounting as prescribed in ASC 323, *Investments—Equity Method and Joint Ventures*. Such investments are presented on the condensed balance sheets as "Long-term investments" and the subsidiaries' and VIE's losses as "Share of losses of subsidiaries and VIE" on the condensed statements of comprehensive loss.

The subsidiaries did not pay any dividends to the Company for the periods presented.

The Company does not have significant commitments or long-term obligations as of the period end other than those presented.

The parent company only financial statements should be read in conjunction with the Company's consolidated financial statements.

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 23 Condensed financial information of the parent company (continued)

# **Condensed Balance Sheets**

	A		
	2020	202	US\$
ASSETS:	RMB	RMB	08\$
Current assets:			
Cash and cash equivalents	92.123	6,724	1.055
Restricted cash	_	5,998	941
Derivative assets	_	5,989	940
Due from the entities within the Group	6,930	6,871	1,078
Prepayments and other current assets	2,511	7,314	1,148
Total current assets	101,564	32,896	5,162
Non-current assets:			
Long-term investments	494,394	400,809	62,896
Other receivables	_	638	100
Intangible assets, net	28	_	_
Total non-current assets	494,422	401,447	62,996
Total assets	595,986	434,343	68,158
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Short-term loans	_	150,000	23,538
Accrued liabilities and other current liabilities	2,018	2,258	354
Due to the entities within the Group	42,012	63,366	9,944
Convertible notes	225,229	_	_
Total current liabilities	269,259	215,624	33,836
Non-current liabilities:			
Deferred revenue	5,488	3,276	514
Total non-current liabilities	5,488	3,276	514
Total liabilities	274,747	218,900	34,350
Shareholders' equity			
Class A common shares (par value of US\$0.0001 per share as of December 31, 2020 and 2021; 4,920,000,000			
shares authorized as of December 31, 2020 and 2021, 61,392,170 shares and 62,036,273 shares issued and			
outstanding as of December 31, 2020 and 2021, respectively)	37	38	6
Class B common shares (par value of US\$0.0001 per share as of December 31, 2020 and 2021; 30,000,000			
shares authorized as of December 31, 2020 and 2021, 17,000,189 shares and 17,000,189 shares issued and			
outstanding as of December 31, 2020 and 2021)	11	11	2
Additional paid-in capital	988,812	1,021,961	160,368
Accumulated deficit	(678,434)	(819,018)	(128,522)
Accumulated other comprehensive income	10,813	12,451	1,954
Total shareholders' equity	321,239	215,443	33,808
Total liabilities and shareholders' equity	595,986	434,343	68,158

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 23 Condensed financial information of the parent company (continued)

# **Condensed Statements of Comprehensive Loss**

	Years ended December 31,			
	2019 RMB	2020 RMB	RMB	US\$
Revenues	—	—	—	—
Cost of Revenues				
Gross profit	_	_	_	_
Operating expenses				
Research and development	_	_	_	_
Sales and marketing	_		(553)	(87)
General and administrative	(14,389)	(15,938)	(17,785)	(2,791)
Share of losses of subsidiaries and VIE	(93,328)	(193,109)	(117,029)	(18,364)
Total operating expenses	(107,717)	(209,047)	(135,367)	(21,242)
Loss from operations	(107,717)	(209,047)	(135,367)	(21,242)
Foreign exchange loss, net	_	6	(3,351)	(525)
Interest income	2,754	544	363	57
Interest expense	(10,178)	(10,654)	(7,820)	(1,227)
Other income (loss)	5,300	(5,924)	(469)	(74)
Change in fair value of foreign currency swap contract			6,060	951
Loss before income taxes	(109,841)	(225,075)	(140,584)	(22,060)
Income tax expenses				
Net loss	(109,841)	(225,075)	(140,584)	(22,060)

# AURORA MOBILE LIMITED NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued) (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 23 Condensed financial information of the parent company (continued)

**Condensed Statements of Comprehensive Loss (continued)** 

	Year ended December 31,			
	2019	2020	202	1
	RMB	RMB	RMB	US\$
Net loss attributable to common share holders	(109,841)	(225,075)	(140,584)	(22,060)
Other comprehensive income (loss)				
Foreign currency translation adjustments	(2,037)	4,450	1,638	257
Total other comprehensive income (loss), net of tax	(2,037)	4,450	1,638	257
Comprehensive loss	(111,878)	(220,625)	(138,946)	(21,803)

### **Condensed Statements of Cash Flows**

	Year ended December 31,			
	2019	2020	202	21
	RMB	RMB	RMB	US\$
Net cash provided by/ (used in) operating activities	15,273	(17,412)	(24,383)	(3,826)
Net cash used in investing activities	(95,412)	(6,525)	(4,859)	(762)
Net cash provided by/ (used in) financing activities	(33,845)	5,257	(54,520)	(8,555)
Effect of exchange rate changes	(9,763)	(3,686)	4,361	683
Net decrease in cash and cash equivalents	(123,747)	(22,366)	(79,401)	(12,460)
Cash and cash equivalents at the beginning of year	238,236	114,489	92,123	14,456
Cash and cash equivalents at the end of year	114,489	92,123	12,722	1,996

# List of Subsidiaries and Consolidated Variable Interest Entity of the Registrant

Subsidiaries	Place of Incorporation
UA Mobile Limited	British Virgin Islands
KK Mobile Investment Limited	Hong Kong
JPush Information Consultation (Shenzhen) Co., Ltd. (吉浦斯信息咨询(深圳)有限公司)	People's Republic of China
Consolidated Variable Interest Entity	Place of Incorporation
Shenzhen Hexun Huagu Information Technology Co., Ltd. (深圳市和讯华谷信息技术有限公司)	People's Republic of China

# Certification by the Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

### I, Weidong Luo, certify that:

- 1. I have reviewed this annual report on Form 20-F of Aurora Mobile Limited;
- 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (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 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 14, 2022

By: /s/ Weidong Luo

Name: Weidong Luo

Title: Chief Executive Officer

### Certification by the Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

### I, Shan-Nen Bong, certify that:

- 1. I have reviewed this annual report on Form 20-F of Aurora Mobile Limited;
- 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 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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (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 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 14, 2022

By: /s/ Shan-Nen Bong

Name: Shan-Nen Bong
Title: Chief Financial Officer

### Certification by the Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Aurora Mobile Limited (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, Weidong Luo, 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 14, 2022

By: /s/ Weidong Luo

Name: Weidong Luo
Title: Chief Executive Officer

### Certification by the Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Aurora Mobile Limited (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, Shan-Nen Bong, 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 14, 2022

By: /s/ Shan-Nen Bong

Name: Shan-Nen Bong
Title: Chief Financial Officer

### Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-228839) pertaining to the 2014 Stock Incentive Plan and 2017 Stock Incentive Plan of Aurora Mobile Limited;
  - (2) Registration Statement (Form S-8 No. 333-262205) pertaining to the 2021 Share Incentive Plan of Aurora Mobile Limited; and
  - (3) Registration Statement (Form F-3 No. 333-260944) of Aurora Mobile Limited.

of our report dated April 14, 2022, with respect to the consolidated financial statements of Aurora Mobile Limited included in this Annual Report (Form 20-F) for the year ended December 31, 2021.

/s/ Ernst & Young Hua Ming LLP Shenzhen, the People's Republic of China April 14, 2022 20/F, Kerry Plaza Tower 3, 1-1 Zhongxinsi Road, Futian District Shenzhen 518048, Guangdong, PRC Tel: +86 755 3680 6500 Fax: +86 755 3680 6599 Beijing · Shanghai · Shenzhen · Hong Kong www.hankunlaw.com

HANKUN 汉坤律师事务所 Han Kun Law Offices

Date: April 14, 2022

### **Aurora Mobile Limited**

14/F, China Certification and Inspection Building No. 8 Keji South 12th Road, Nanshan District Shenzhen, Guangdong 518057 People's Republic of China

### Dear Sir/Madam:

We hereby consent to the use of our name and the summary of our opinion under the headings, "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure", "Item 4. Information on the Company—C. Organizational Structure" and "Item 4. Information on the Company—B. Business Overview—Regulations", included in Aurora Mobile Limited's Annual Report on Form 20-F for the year ended December 31, 2021 (the "Annual Report"), which will be filed with the Securities and Exchange Commission (the "SEC") in the month of April 2022, and further consent to the incorporation by reference of the summary of our opinion under these headings into the Registration Statement on Form S-8 (File No. 333-228839) pertaining to Aurora Mobile Limited's 2014 Stock Incentive Plan and the 2017 Stock Incentive Plan, and into the Registration Statement on Form S-8 (File No. 333-262205) pertaining to Aurora Mobile Limited's 2021 Share Incentive Plan. We also consent to the filing of this consent letter with the SEC 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 Sincerely,

/s/ Han Kun Law Offices

Han Kun Law Offices