# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### FORM 20-F

| (Mark One)  □ REGISTRATION STATEMENT PURSUANT TO SECTION   | · ·   | S EXCHANGE ACT OF 1934   |                                   |
|--|---|--|-----------------------------------|
|  | OR  |  |                                   |
| ■ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  | For the fiscal year ended Decemb  |  |                                   |
| □ TRANSITION REPORT PURSUANT TO SECTION 13 OR 1  | ` '   | IGE ACT OF 1934  |                                   |
| ☐ SHELL COMPANY REPORT PURSUANT TO SECTION 13  | OR OR 15(d) OF THE SECURITIES EXC   | CHANGE ACT OF 1934   |                                   |
| Date of event requiring this shell company report  | For the transition period from  | to   |                                   |
| Commission file number: 001-38587  | Tot the transition period from  |  |                                   |
| $\mathbf{A}$   | urora Mobile Lim (Exact name of Registrant as specified in its ch   |  |                                   |
|  | (Exact frame of Registrant as specified in its ch   | arter)   |                                   |
|  | N/A<br>(Translation of Registrant's name into Engli   | ish)   |                                   |
|  | Cayman Islands (Jurisdiction of incorporation or organization)  | on)  |                                   |
| No. 15, Gua  | 3/F, Building No. 7, Zhiheng Industrial Pa<br>nkou Road 2, Anle Community, Nantou Street<br>Shenzhen, Guangdong, 518052<br>People's Republic of China<br>(Address of principal executive offices)   |  |                                   |
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|  | registered or to be registered pursuant to Section  | , ,  |                                   |
| Title of Each Class  | registered of to be registered pursuant to section  | Name of Each Exchange On Which Regist  | tered                             |
| American depositary shares, every three of which represent two Class A of  | common shares   | The Nasdaq Stock Market LLC  | iereu                             |
| Class A common shares, par value US\$0.0001 per share*   |   | (The Nasdaq Global Market)   |                                   |
| Not for trading, but only in connection with the listing on the Nasdaq Global depositary shares.   | Market of American  |  |                                   |
| Securities registered or to be registered pursuant to Section 12(g) of the Act:  |   |  |                                   |
|  | None<br>(Title of Class)  |  |                                   |
| Securities for which there is a reporting obligation pursuant to Section 15(d) of the  |   |  |                                   |
| securities for which there is a reporting obligation parsuant to section 15(d) of the  | None  |  |                                   |
|  | (Title of Class)  |  |                                   |
| Indicate the number of outstanding shares of each of the issuer's classes of capital o<br>As of December 31, 2018, there were 76,548,012 common shares outstanding, par v<br>share and 17,000,189 Class B common shares, par value of US\$0.0001 per share.                |   |  | ares), par value of US\$0.0001 p  |
| 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 registran Indicate by check mark whether the registrant (1) has filed all reports required to be registrant was required to file such reports), and (2) has been subject to such filing to | it is not required to file reports pursuant to Sectifiled by Section 13 or 15(d) of the Securities Ex   | on 13 or 15(d) of the Securities Exchange Act of 1934. □ change Act of 1934 during the preceding 12 months (or f |                                   |
| Indicate by check mark whether the registrant has submitted electronically every lnt<br>months (or for such shorter period that the registrant was required to submit such fi  | eractive Data File required to be submitted purs  |  | pter) during the preceding 12     |
| Indicate by check mark whether the registrant is a large accelerated filer, an accelerate<br>"emerging growth company" in Rule 12b-2 of the Exchange Act.  | ed filer, a non-accelerated filer, or an emerging g   | rowth company. See the definitions of "large accelerated   | filer," "accelerated filer," and  |
| Large accelerated filer<br>Non-accelerated filer   | □<br><b>※</b>   | Accelerated filer<br>Emerging growth company   | □<br>Ø                            |
| If an emerging growth company that prepares its financial statements in accordance or revised financial accounting standards† provided pursuant to Section 13(a) of th   | e Exchange Act. □   |  |                                   |
| †The term "new or revised financial accounting standard" refers to any update issue  | •   | to its Accounting Standards Codification after April 5, 20   | 012.                              |
| Indicate by check mark which basis of accounting the registrant has used to prepare U.S. GAAP  | Internation   | nal Financial Reporting Standards as issued  | Other 🗆                           |
|  | ·   | ternational Accounting Standards Board   |                                   |
| If "Other" has been checked in response to the previous question, indicate by check If this is an annual report, indicate by check mark whether the registrant is a shell co   | empany (as defined in Rule 12b-2 of the Exchang   |  |                                   |
| (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDI  |   |  |                                   |
| Indicate by check mark whether the registrant has filed all documents and reports replan confirmed by a court. $\square$ Yes $\square$ No  | quired to be filed by Sections 12, 13 or 15(d) of   | the Securities Exchange Act of 1934 subsequent to the di   | istribution of securities under a |
| -  | · · · · · · · · · · · · · · · · · · ·   |  |                                   |

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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," "we," "us," "our company" and "our" are to Aurora Mobile Limited, our Cayman Islands holding company, and its subsidiaries and
  its consolidated variable interest entity;
- "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;
- "cumulative SDK installations" as of a certain date are to the cumulative number of times the SDKs offered as part of our developer services that are integrated into mobile apps have been downloaded and installed on mobile devices as of the same date. If an SDK is integrated into an app and the app is downloaded and installed on a specific mobile device, that specific single installation counts as one SDK installation. Moreover, the same SDK may be integrated into multiple apps installed on a single mobile device, and an app installed on a mobile device may have integrated more than one of our SDKs. Both scenarios count as multiple SDK installations;
- "customers" in a given period are to those that purchase at least one of our paid-for developer services or data solutions 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 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; and
- "US\$," "U.S. dollars," "\$," and "dollars" are to the legal currency of the United States.

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 RMB6.8755 to US\$1.00, the exchange rate in effect as of December 28, 2018 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 developer services and data solutions;
- · 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**

### 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, 2016, 2017 and 2018, selected consolidated balance sheets data as of December 31, 2017 and 2018 and selected consolidated cash flows data for the years ended December 31, 2016, 2017 and 2018 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. The selected consolidated balance sheets data as of December 31, 2016 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 Ended December 31, |                     |                    |            |
|---|---------------------------------|---------------------|--------------------|------------|
|   | 2016                            | 2017                | 2018               |            |
|   | RMB                             | RMB                 | RMB                | US\$       |
|   | (in t                           | housands, except fo | or per share data) |            |
| Consolidated Statements of Operations Data:                       |                                 |                     |                    |            |
| Revenues  | 70,322                          | 284,709             | 714,141            | 103,868    |
| Cost of revenues  | (47,722)                        | (213,370)           | (517,074)          | (75,205)   |
| Gross profit  | 22,600                          | 71,339              | 197,067            | 28,663     |
| Operating expenses:(1)  |                                 |                     |                    |            |
| Research and development expenses                                 | (33,717)                        | (71,651)            | (134,358)          | (19,542)   |
| Sales and marketing expenses                                      | (33,062)                        | (59,673)            | (83,853)           | (12,196)   |
| General and administrative expenses                               | (13,480)                        | (32,431)            | (71,641)           | (10,419)   |
| Total operating expenses  | (80,259)                        | (163,755)           | (289,852)          | (42,157)   |
| Loss from operations  | (57,659)                        | (92,416)            | (92,785)           | (13,494)   |
| Loss before income taxes  | (57,472)                        | (94,271)            | (66,167)           | (9,623)    |
| Net loss  | (61,382)                        | (90,291)            | (66,197)           | (9,627)    |
| Net loss attributable to Aurora Mobile Limited's shareholders     | (61,382)                        | (90,291)            | (66,197)           | (9,627)    |
| Accretion of contingently redeemable convertible preferred shares | (12,427)                        | (26,391)            | (24,094)           | (3,504)    |
| Net loss attributable to common shareholders                      | (73,809)                        | (116,682)           | (90,291)           | (13,131)   |
| Net loss per common share:  | ·                               |                     |                    |            |
| Basic and diluted   | (1.73)                          | (2.73)              | (1.57)             | (0.23)     |
| Weighted average number of shares used in calculating basic and   |                                 |                     |                    |            |
| diluted loss per common share:                                    |                                 |                     |                    |            |
| Common shares — Basic and diluted                                 | 42,666,670                      | 42,666,670          | _                  | _          |
| Class A common share — Basic and diluted                          |                                 | _                   | 40,441,999         | 40,441,999 |
| Class B common share — Basic and diluted                          | _                               | _                   | 17,000,189         | 17,000,189 |

Notes:

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

|                                     | For the Year Ended December 31, |       |        |       |
|-------------------------------------|---------------------------------|-------|--------|-------|
|                                     | 2016                            | 2017  | 2018   |       |
|                                     | RMB                             | RMB   | RMB    | US\$  |
| Cost of revenues                    | _                               | _     | _      |       |
| Research and development expenses   | 664                             | 1,408 | 9,448  | 1,374 |
| Sales and marketing expenses        | 189                             | 944   | 3,347  | 487   |
| General and administrative expenses | 1,850                           | 5,923 | 11,766 | 1,711 |
| Total                               | 2,703                           | 8,275 | 24,561 | 3,572 |

|   |           | As of December 31, |         |         |
|---|-----------|--------------------|---------|---------|
|   | 2016      | 2017               | 201     | 8       |
|   | RMB       | RMB                | RMB     | US\$    |
|   |           | (in thou           | sands)  |         |
| Consolidated Balance Sheet Data:                  |           |                    |         |         |
| Cash and cash equivalents                         | 103,168   | 208,161            | 576,562 | 83,857  |
| Accounts receivable, net                          | 9,444     | 49,594             | 141,911 | 20,640  |
| Prepayments and other current assets              | 13,508    | 34,228             | 80,578  | 11,719  |
| Total assets                                      | 165,944   | 359,450            | 992,068 | 144,290 |
| Accounts payable                                  | 1,110     | 8,340              | 18,811  | 2,736   |
| Deferred revenue and customer deposits            | 18,148    | 49,557             | 59,483  | 8,651   |
| Accrued liabilities and other current liabilities | 19,737    | 52,639             | 76,666  | 11,151  |
| Total liabilities                                 | 53,819    | 117,197            | 390,408 | 56,782  |
| Total mezzanine equity                            | 220,539   | 466,637            |         |         |
| Total shareholders' deficit                       | (108,414) | (224,384)          | 601,660 | 87,508  |
| Total liabilities, mezzanine equity and equity    | 165,944   | 359,450            | 992,068 | 144,290 |

|  | For the Year Ended December 31, |          |           |          |
|--|---------------------------------|----------|-----------|----------|
|  | 2016<br>RMB                     | 2017     | 2018      |          |
|  |                                 | RMB      | RMB       | US\$     |
|  | (in thousands)                  |          |           |          |
| Consolidated Cash Flow Data:   |                                 |          |           |          |
| Net cash used in operating activities                                  | (42,152)                        | (75,532) | (97,925)  | (14,241) |
| Net cash used in investing activities                                  | (29,928)                        | (28,644) | (139,206) | (20,246) |
| Net cash provided by financing activities                              | 135,348                         | 217,446  | 614,884   | 89,431   |
| Effect of foreign currency exchange rate changes on cash and cash      |                                 |          |           |          |
| equivalents and restricted cash  | 2,450                           | (8,282)  | (9,352)   | (1,362)  |
| Net increase (decrease) in cash and cash                               |                                 |          |           |          |
| equivalents and restricted cash  | 65,718                          | 104,988  | 368,401   | 53,582   |
| Cash and cash equivalents and restricted cash at the beginning of year | 37,570                          | 103,288  | 208,276   | 30,292   |
| Cash and cash equivalents and restricted cash at the end of year       | 103,288                         | 208,276  | 576,677   | 83,874   |

### B. <u>Capitalization and Indebtedness</u>

Not applicable.

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

Not applicable.

#### D. Risk Factors

#### 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 developer services and data solutions 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 RMB57.7 million, RMB92.4 million and RMB92.8 million (US\$13.5 million) for the years ended December 31, 2016, 2017 and 2018, and net losses of RMB61.4 million, RMB90.3 million and RMB66.2 million (US\$9.6 million) for the years ended December 31, 2016, 2017 and 2018, 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.

## We generate a significant portion of our revenues from targeted marketing solutions, and the reduction in spending by or loss of our marketing customers could materially harm our business.

The term of the contracts with our advertisers is generally one year, and advertisers may terminate the contracts with us upon the expiration of the term. Those advertisers may not continue to do business with us if we do not create more value (such as increased return on investment) than their available alternatives. If we do not provide superior value or deliver ads efficiently and competitively, we could see a decrease in revenue and other adverse impacts to our business. In addition, expenditures by advertisers tend to be cyclical and subject to changes in overall economic conditions and industry specific events or regulation. Adverse macroeconomic conditions can also have a material negative impact on user activity and the demand for advertising and cause our advertisers to reduce the amounts they spend on advertising, which could adversely affect our revenues and targeted marketing solution business.

The preferred format and technology associated with digital advertising may continue to evolve and may become less compatible with our solutions, which could adversely affect our revenues and targeted marketing solution business.

## If we cannot successfully execute our strategy and continue to develop and effectively market developer services and data solutions 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 mobile developer services and data solutions 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 data solutions 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 data solutions 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 developer services and data solutions, 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 and data solutions 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 and data solutions and 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 developer services and data solutions;
- 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 data solutions 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 developer services and data solutions 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 developer services or data solutions 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 developer services and data solutions. 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 data solutions. 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 data solutions. Our business plan assumes that the demand for data solutions 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 data solutions 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 data solutions, the growth of our business and results of operations may be adversely affected.

## If the market for our developer services and data solutions develops more slowly than we expect, our growth may slow or stall and our operating results could be harmed.

The market for developer services and data solutions 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 developer services and data solutions and 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 developer services or data solutions 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 data solutions, 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.

## Actual or alleged failure to comply with data privacy and protection laws and regulations could damage our reputation, and discourage current and potential app developers and customers from doing business with us.

Concerns about our practice of accessing, storing, processing and using data from mobile devices, even if unfounded, could damage our reputation, business and results of operations. We are subject to various data privacy and protection laws and regulations in China, including, without limitation, the PRC Cyber Security Law. To protect personal information, these laws and regulations regulate data collection, storage, use, processing, disclosure and transfer of personal information. Pursuant to these laws and regulations, an internet information service provider is required to obtain a user's consent to collect the user's personal information, and is prohibited from gathering personal information that is unrelated to the services it provides, and the internet information service provider must also inform the user of the purposes, the means and the scope of the information collection and uses. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Information Security," and "Item 4. Information on the Company—B. Business Overview—Regulations on Privacy Protection."

The PRC Cyber Security Law is relatively new and subject to interpretation by the regulator. 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 data solutions 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. The activities of third parties such as app developers and business partners are beyond our control. If our business partners or app developers violate the PRC Cyber Security Law and related laws and regulations relating to the protection of personal information, or fail to fully comply with the service agreements with us, or if any of our employees fail to comply with our internal control measures and misuse the information, we may be subject to penalties. For further information, see "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Privacy Protection." Any failure or perceived failure to comply with all applicable data privacy and protection laws and regulations, or any failure or perceived failure of our business partners or app developers to do so, or any failure or perceived failure of our employees to comply with our internal control measures, may result in negative publicity and legal proceedings or regulatory actions against us, and could damage our reputation, discourage current and potential app developers and customers from using our services and/or data solutions and subject us to fines and damages, which could have a material adverse effect on our business and results of operations.

Furthermore, the interpretation and application of personal information protection laws and regulations and standards are still uncertain and evolving. We cannot assure you that relevant governmental authorities will not interpret or implement the laws or regulations in ways that negatively affect us. In addition, it is possible that we may become subject to additional or new laws and regulations regarding the protection of personal information or privacy-related matters in connection with the data we have access to and the data solutions we provide to customers. Moreover, as we implement our strategy to expand into selected global markets, we may become subject to personal information protection laws and regulations in the jurisdictions that we expand into. We may also become subject to regulatory requirements as a result of installations of apps integrated with our SDKs by residents of, or travelers who visit, certain jurisdictions, such as the General Data Protection Regulation of the European Union. Complying with additional or new regulatory requirements could force us to incur substantial costs or require us to change our business practices. In addition to the regulatory requirements, user attitudes towards data privacy are also evolving, and user concerns about the extent to which personal information is accessible to, used by or shared with our customers or others may adversely affect our ability to gain access to data and provide certain data solutions to our customers. Any occurrence of the abovementioned circumstances may negatively affect our business and results of operations.

#### We rely on certain ad publishers for our targeted marketing business.

Our revenues from targeted marketing solutions are derived from placing display ads on publisher apps that we do not own. We currently access ad inventory through various channels, including major online media networks and we rely on certain advertisement publishers, such as Tencent, for access to a large amount of ad inventory. Our agreements with these publishers generally also do not include long-term obligations requiring them to make their inventory available to us. As a result, our ability to continue to purchase inventory from these publishers depends in part on our ability to consistently pay sufficiently competitive fees for their internet display ad inventory as well as other factors. Similarly, as more companies compete for ad impressions on major platforms with a large amount of supply of ad inventory, ad inventory may become more expensive, which may adversely affect our ability to acquire ad inventory and resell it on a profitable basis. Any interference with our ability to maintain access to such inventory could materially reduce the amount of ad inventory that our solution relies on in order to deliver ads for our clients. In addition, since we rely on a limited number of publishers for access to significant portions of advertising inventory that our targeted marketing business depends on, the loss of access to ad inventory from one of those publishers would negatively impact our ability to deliver internet display ads for our targeted marketing customers. Any of these consequences could therefore adversely affect our results of operations and financial condition.

With the expansion of the breadth and quality of businesses that utilize our solution, we expect that our publisher base will grow. In addition, in order to grow our advertiser base, we must expand our access to new sources of internet display ad inventory and maintain a steady supply of this inventory. Our ability to attract new publishers will depend on various factors, some of which are beyond our control. Therefore, we cannot assure you that we will successfully grow our relationships with new publishers or maintain and expand our access to ad inventory through other channels. In addition, even if we do grow our relationships, we cannot assure you that those relationships with publishers will be on favorable terms to us.

Therefore, if we are unable to acquire sufficient ad inventory through stable publisher relationships or intermediaries, our business and results of operations could be harmed.

### 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 Al-Powered Data Processing Platform—Data Security."

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. If our data security measures or the data security measures utilized by app developers and customers are breached as a result of third-party action, employee error, malfeasance or otherwise and, as a result, someone obtains unauthorized access to confidential information of developers, customers and app end users, our reputation may be damaged, our business may suffer and we could incur significant liability.

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.

Moreover, if a high profile security breach occurs with respect to another developer services or data solution provider, our customers and potential customers may lose trust in the security of our developer services or data solutions 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 data solutions. 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 developer services and data solutions 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 data solutions 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 developer services and data solutions, 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, 2018, within China, we have 43 patent applications pending and own 51 computer software copyrights, relating to various aspects of our developer services and data solutions. In addition, we have filed 7 trademark applications and have maintained 33 trademark registrations and 3 artwork copyrights in China. We have also registered 16 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 the State Internet Information Office, or the SIIO, 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—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. 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 become 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 the MLINK business 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 December 31, 2018, there were two lawsuits in respect of labor disputes pending against us with an aggregate amount of damages sought of approximately RMB300 thousand (US\$45 thousand). Any such 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 develop and maintain an effective system of internal controls, we may be unable to accurately or timely report our financial results or prevent fraud, and investor confidence and the market price of the ADSs may be materially and adversely affected.

Prior to our initial public offering, we have been a private company with limited accounting personnel and other resources with which to address our internal control over financial reporting. In connection with the audits of our consolidated financial statements as of December 31, 2017 and 2016 and for the years ended December 31, 2017 and 2016, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting.

As defined in the standards established by the U.S. Public Company Accounting Oversight Board, or PCAOB, a "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness that has been identified related to our lack of sufficient financial reporting personnel with appropriate level of knowledge and experience in application of U.S. GAAP and SEC reporting requirements to properly address complex U.S. GAAP accounting issues and to prepare and review our consolidated financial statements and related disclosures to fulfill U.S. GAAP and SEC financial reporting requirements.

We have begun to implement measures to address the material weakness. See "Item 15. Controls and Procedures—Internal Control Over Financial Reporting." However, the implementation of these measures may not fully address the material weakness in our internal control over financial reporting, and our management concluded that the material weakness still existed as of December 31, 2018. Our failure to correct the material weakness or our failure to discover and address any other 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. As a result, our business, financial condition, results of operations and prospects, as well as the trading price of our ADSs, may be materially and adversely affected. Moreover, ineffective internal control over financial reporting could significantly hinder our ability to prevent fraud.

Our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting. It is possible that, had our independent registered public accounting firm conducted an audit of our internal control over financial reporting, such firm might have identified additional material weaknesses and deficiencies. We are subject to the Sarbanes-Oxley Act of 2002. Section 404 of the Sarbanes-Oxley Act, or Section 404, 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. In addition, as a public company, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation.

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

### 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, and a stock incentive plan in March 2017, or the 2017 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. In 2017 and 2018, we recorded RMB8.3 million and RMB24.6 million (US\$3.6 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.

## Our business, financial condition and results of operations, as well as our ability to obtain financing, may be adversely affected by a downturn in the global or Chinese economy.

The global macroeconomic environment is facing challenges, including the end of quantitative easing by the U.S. Federal Reserve, the economic slowdown in the Eurozone since 2014 and uncertainties over the impact of Brexit. The growth of the Chinese economy has slowed down since 2012 compared to the previous decade and the trend may continue. According to the National Bureau of Statistics of China, China's gross domestic product (GDP) growth was 6.6% in 2018. 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. There have been concerns over unrest and terrorist threats in the Middle East, Europe and Africa. There have also been concerns on the relationship between China and other countries, including surrounding Asian countries as well as the United States, which may potentially lead to foreign investors closing down their business or withdrawing their investment in China and thus exiting the China market, and other economic effects. 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 prolonged slowdown in the global or Chinese economy may have a negative impact on our business, results of operations and financial condition, and continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs. Our customers may reduce or delay spending with us, while we may have difficulty expanding our customer base fast enough, or at all, to offset the impact of decreased spending by our existing customers. In addition, to the extent we offer credit to any customer and the customer experiences financial difficulties due to the economic slowdown, we could have difficulty collecting payment from the customer. Moreover, a slowdown or disruption in the global or Chinese economy may have a material and adverse impact on the financing available to us. The weakness in the economy could erode investor confidence, which constitutes the basis of the credit market.

## 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.

### If we fail to establish branch offices in all areas we operate, we may be subject to penalties and our business operations could be adversely affected.

Under PRC law, a company setting up premises for business operations outside its residence address must register the premises as branch offices with the competent local industry and commerce bureau and obtain business licenses for them as branch offices. As of the date of this annual report, we have not been able to register all the premises as branch offices in the relevant cities where we operate our business, including Beijing, Shanghai, Guangzhou and Chengdu. We are in the process of applying for the registration of these premises and we cannot assure you whether the registration can be completed in a timely manner. Although we have not been subject to any query or investigation by any PRC government authority regarding the absence of such registration and the net revenue attributable to the operation from these premise is insignificant, if the PRC regulatory authorities determine that we are in violation of the relevant laws and regulations, we may be subject to penalties, including fines, confiscation of income and suspension of operation. If we become subject to these penalties, our business, results of operations, financial condition and prospects could be materially and adversely affected.

#### 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 snow storms, 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.

## 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 have not made employee benefit payments for all employees 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 are not allowed to own more than 50% of the equity interests in a value-added telecommunications service provider (excluding e-commerce) and any such foreign investor must have experience in providing value-added telecommunications services overseas and maintain a good track record.

We are a Cayman Islands 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 their financial results into our consolidated financial statements under U.S. GAAP. See "Item 4. Information on the Company—C. Organizational Structure" for further details.

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.

If we or our VIE were 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, including:

- levying fines or confiscating our income or the income of our PRC subsidiary or our VIE;
- revoking or suspending the business licenses or operating licenses of our PRC subsidiary or our VIE;
- · discontinuing or placing restrictions or onerous conditions on our operations through any transactions between our WFOE and our VIE;
- requiring us to restructure our ownership structure or operations, including terminating the contractual arrangements with our VIE and
  deregistering the equity pledges of our VIE, which in turn would affect our ability to consolidate, derive economic interests from, or exert
  effective control over our VIE;

- · restricting or prohibiting our use of the proceeds of our initial public offering to finance our business and operations in China; and
- taking other regulatory or enforcement actions that could be harmful to our business.

The imposition of any of these penalties would result in a material and adverse effect on our ability to conduct our business. In addition, it is unclear what impact the PRC government actions would have on us and on our ability to consolidate the financial results of our VIE in our consolidated financial statements, if the PRC government authorities were to find our legal structure and contractual arrangements to be in violation of PRC laws and regulations. If the imposition of any of these government actions causes us to lose our right to direct the activities of our VIE or our right to receive substantially all the economic benefits and residual returns from our VIE and we are not able to restructure our ownership structure and operations in a satisfactory manner, we would no longer be able to consolidate the financial results of our VIE in our consolidated financial statements. Either of these results, or any other significant penalties that might be imposed on us in this event, would have a material adverse effect on our financial condition and results of operations.

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

On March 15, 2019, the National People's Congress adopted the Foreign Investment Law of the PRC, which will become 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 Foreign Investment Law of the PRC 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 Foreign Investment Law of the PRC 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. 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

## 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 99.8%, 98.9% and 99.4% of our consolidated total net revenues for the years ended December 31, 2016, 2017 and 2018, 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

#### 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, the State Internet Information Office (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; (iii) the enterprise's primary assets, accounting books and records, comp

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 transfere (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 transfere, 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 transfere or other person who is obligated to pay for the transfer of equity interests in a PRC resident enterprise. Both the transferor and the transferee may be subject to penalties under PRC tax laws if the trans

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%. Our VIE has obtained a high and new technology enterprise status, or HNTE status, and is thus eligible to enjoy a preferential tax rate of 15% for 2017, to the extent it has taxable income under the PRC Enterprise Income Tax Law. Our VIE plans to reapply for the HNTE status in 2019. 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.

### Certain PRC regulations may make it more difficult for us to pursue growth through acquisitions.

Among other things, the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, adopted by six PRC regulatory agencies in 2006 and amended in 2009, established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex. Such regulation requires, among other things, that the

MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor acquires control of a PRC domestic enterprise or a foreign company with substantial PRC operations, if certain thresholds under the Provisions on Thresholds for Prior Notification of Concentrations of Undertakings, issued by the State Council in 2008 and was amended in 2018, were triggered. Moreover, the Anti-Monopoly Law promulgated by the Standing Committee of the PRC National People's Congress, or NPC, which became effective in 2008 requires that transactions which are deemed concentrations and involve parties with specified turnover thresholds must be cleared by the anti-monopoly authority before they can be completed. In addition, PRC national security review rules which became effective in September 2011 require acquisitions by foreign investors of PRC companies engaged in military related or certain other industries that are crucial to national security be subject to security review before consummation of any such acquisition. We may pursue potential strategic acquisitions that are complementary to our business and operations. Complying with the requirements of these regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval or clearance from the anti-monopoly authority, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

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.

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

In February 2012, SAFE promulgated the Notices on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly Listed Company, replacing earlier rules promulgated in 2007. Pursuant to these rules, PRC citizens and non-PRC citizens who reside in China for a continuous period of not less than one year who participate in any stock incentive plan of an overseas publicly listed company, subject to a few exceptions, are required to register with SAFE through a domestic qualified agent, which could be the PRC subsidiary of such overseas-listed company, and complete certain other procedures. In addition, an overseas-entrusted institution must be retained to handle matters in connection with the exercise or sale of stock options and the purchase or sale of shares and interests. We and our executive officers and other employees who are PRC citizens or who reside in the PRC for a continuous period of not less than one year and who have been granted options are subject to these regulations as our company has become an overseas-listed company. We are in process of applying for the aforesaid SAFE registration. Failure to complete SAFE registrations may subject them to fines of up to RMB300,000 for entities and up to RMB50,000 for individuals, and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiary and limit our PRC subsidiary' ability to distribute dividends to us. We also face regulatory uncertainties that could restrict our ability to adopt additional incentive plans for our directors, executive officers and employees under PRC law. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Foreign Currency Exchange—Stock Option Rules."

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 adverse effect on our results of operations and the value of your investment.

The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions in China and by China's foreign exchange policies. On July 21, 2005, the PRC government changed its decade-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. Since October 1, 2016, Renminbi has joined the International Monetary Fund's basket of currencies that make up the Special Drawing Right (SDR) along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2018, the Renminbi has depreciated significantly in the backdrop of a surging U.S. dollar and persistent capital outflows of China. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system, and 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.

Significant revaluation of the Renminbi may have a material and adverse effect on your investment. 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. To date, we have not entered into any hedging transactions 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.

#### 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.

Proceedings instituted by the SEC against certain PRC-based accounting firms, including our independent registered public accounting firm, could result in financial statements being determined to not be in compliance with the requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

In December 2012, the SEC brought administrative proceedings against five accounting firms in China, including our independent registered public accounting firm, alleging that they had refused to produce audit work papers and other documents related to certain other

China-based companies under investigation by the SEC. On January 22, 2014, an initial administrative law decision was issued, censuring these accounting firms and suspending four of these firms from practicing before the SEC for a period of six months. The decision is neither final nor legally effective unless and until reviewed and approved by the SEC. On February 12, 2014, four of these PRC-based accounting firms appealed to the SEC against this decision. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the CSRC. If the firms fail to meet specified criteria, during a period of four years starting from the settlement date, the SEC retains authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure. Additional remedies for any future noncompliance could include, as appropriate, an automatic six-month bar on a single firm's performance of certain audit work, commencement of additional proceedings against a firm, or in extreme cases the resumption of the current proceeding against all four firms.

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

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

## The audit report included in this annual report is prepared by an auditor who is not inspected by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit reports included in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the Public Company Accounting Oversight Board, or the PCAOB, is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditors are located in China, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, our auditors are not currently inspected by the PCAOB. On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statement reflects a heightened interest in an issue that has vexed U.S. regulators in recent years. However, it remains unclear what further actions the SEC and PCAOB will take to address the problem.

Inspections of other firms that the PCAOB has conducted outside of China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The lack of PCAOB inspections in China prevents the PCAOB from regularly evaluating our auditors' audits and its quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditors' audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

### 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 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;
- 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.

## 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 over a six-month period from November 20, 2018 through May 19, 2019. 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, 2018, we repurchased approximately US\$0.5 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 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 transfer of Class B common shares by a holder thereof to any person or entity 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 7,162,666 Class A common shares (including 62,666 Class A common shares represented by 94,000 ADSs) and 17,000,189 Class B common shares, which represent 77.2% of our total voting power, as of February 28, 2019. 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, 2019, we had 76,500,012 common shares outstanding, comprising of (i) 59,499,823 Class A common shares (excluding treasury shares), and (ii) 17,000,189 Class B common shares. Among these shares, 7,355,277 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 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. Holders of the convertible notes issued by us on April 17, 2018 may also cause us to register under the Securities Act the sale of their Class A common shares issuable upon conversion of the convertible notes at the then applicable conversion price, which is initially US\$11.7612 per common share, subject to certain anti-dilution adjustments. Assuming all the notes are converted into our Class A common shares at this initial conversion price, we would issue an aggregate of 2,975,897 Class A common shares to the holders of the convertible notes. 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.

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

In 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 Law (2018 Revision) 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 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 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 a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the 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 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. We have elected to rely on home country practice to be exempted from the corporate governance requirements that we have a majority of independent directors on our board of directors and the audit committee of our board of directors has a minimum of three members. We have utilized, and intend to continue to utilize, the foregoing exemptions from the applicable corporate governance requirements, and we do not have a majority of independent directors and our audit committee consists of two independent directors instead of three. As a result, 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, including an exemption from the rule that a majority of our board of directors must be independent directors or that we have to establish a nominating committee and a compensation committee composed entirely of independent directors. As a result, you will not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

There can be no assurance that we will not be a passive foreign investment company, or PFIC, for U.S. federal income tax purposes for any taxable year, which could result in adverse U.S. federal income tax consequences to U.S. Holders of the ADSs or our Class A common shares.

A non-U.S. corporation will be a passive foreign investment company, or PFIC, for any taxable year if either (i) at least 75% of its gross income for such year consists of certain types of "passive" income; or (ii) at least 50% of the value of its assets (based on an average of the quarterly values of the assets) during such year is attributable to assets that produce passive income or are held for the production of passive income (the "asset test"). Based on our income and assets, and the market value of the ADSs), we do not believe we were a PFIC for United States federal income tax purposes for the taxable year ended December 31, 2018 and we do not expect to be a PFIC for the current taxable year or the foreseeable future. However, no assurance can be given in this regard because the determination of whether we are or will become a PFIC is a fact-intensive inquiry made on an annual basis that depends, in part, upon the composition of our income and assets. Fluctuations in the market price of the ADSs may cause us to become a PFIC for the current or subsequent taxable years because the value of our assets for the purpose of the asset test may be determined by reference to the market price of the ADSs. The composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets and the cash raised in our initial public offering.

If we were to be or become a PFIC for any taxable year during which a U.S. Holder (as defined in "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations") holds the ADSs or our Class A common shares, certain adverse U.S. federal income tax consequences could apply to such U.S. Holder. See "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Rules."

# ITEM 4. INFORMATION ON THE COMPANY

# A. <u>History and Development of the Company</u>

Shenzhen Hexun Huagu 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 3/F, Building No. 7, Zhiheng Industrial Park, No. 15, Guankou Road 2, Anle Community, Nantou Street, Nanshan District, Shenzhen, Guangdong 518052, 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. Our agent for service of process in the United States is CCS Global Solutions, Inc., located at 530 Seventh Avenue, Suite 909, New York, NY 10018.

## B. <u>Business Overview</u>

#### 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 mobile big data solutions platform in China. Through our developer services, we reached approximately 1.04 billion monthly active unique mobile devices, accounting for approximately 90% of mobile device coverage in China, in December 2018. 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 (Al) 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 "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 data solutions.

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). Our services had been used by approximately 396,000 mobile app developers in a great variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, education and healthcare, as of December 31, 2018. We are the partner of choice for many major internet companies, as well as leading consumer brands. The number of mobile apps utilizing at least one of our developer services, or the cumulative app installations, increased from over 475,000 as of December 31, 2016 to over 707,000 as of December 31, 2017 and further to over 1,076,000 as of December 31, 2018.

Since our inception through December 31, 2018, we have accumulated data from over 19.8 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 Alpowered 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.

Al 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 data solutions. Leveraging these technologies built upon our massive and quality data foundation, we have developed a variety of data solutions that offer industry-specific, actionable insights for customers in a number of different areas. Our core data solutions include:

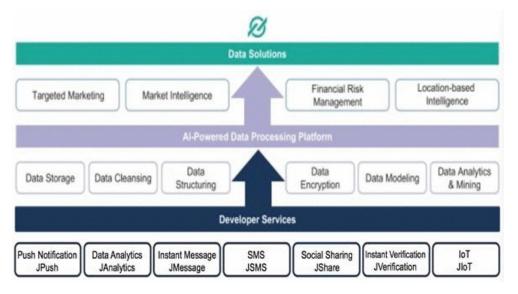
- Targeted marketing ("XiaoGuoTong"): We help advertisers improve their effectiveness by enabling them to target the right audience with the right content at the right time.
- Financial risk management: We assist financial institutions and financial technology companies in making informed lending and credit decisions.
- 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.
- 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.

We are also in the process of developing and launching new data solutions that will further leverage our data and insights to increase productivity for additional industries and customers.

We have built a robust technology infrastructure to support the usage of our developer services and data solutions throughout China on a real-time basis. We have developed a proprietary network of over 6,100 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 developer services and data solutions with great stability, immense speed and high reliability.

#### Our Business Model

We are a leading mobile big data solutions 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), verification and 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 data mining in order to gain actionable and effective insights from the data. Based on our data foundation and leveraging our AI-powered centralized data processing platform, we have developed a variety of data solutions that offer industry-specific, actionable insights for customers. Our core data solutions include targeted marking, market intelligence, financial risk management and location-based intelligence.



### **Developer Services**

We provide a comprehensive suite of services to mobile app developers in China. Our developer services provide core in-app functionalities needed by developers, including push notification, instant messaging, analytics, sharing and short message service (SMS), verification and device connection. 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 396,000 developers in mobile apps in a wide variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, education and healthcare, as of December 31, 2018. The number of mobile apps utilizing at least one of our developer services, or the cumulative app installations, increased from over 475,000 as of December 31, 2016 to over 707,000 as of December 31, 2017 and further to over 1,076,000 as of December 31, 2018. 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 the "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.

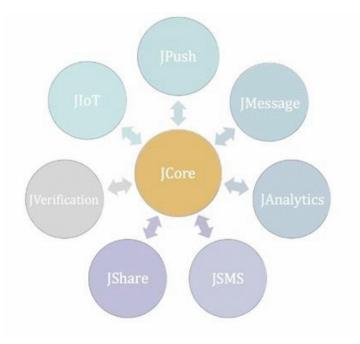
Our developer services are standardized to maximize efficiency and cohesiveness of operations. Our developer services are built upon our proprietary common module JCore, allowing developers to easily integrate additional and multiple functionalities provided by our developer services, as well as enabling 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.



### 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 6,100 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 25.1 billion messages to various app end users on an average daily basis in the three months ended December 31, 2018.

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.

## 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.

### JIoT—IoT

Our cloud service designed for IoT devices connection, or JIoT, enable IoT devices to connect with nearby devices within coverage area and adopt MQTT protocol, and provide customized messages for uplink and downlink, as well as real time statistics and charts that measure new users and activations, among others. We charge a fee for JIoT based on the number of active devices.

### 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 and JMessage 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 for smart home applications to satisfy the needs of IoT customers.

## 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 data 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 19 billion installations of our SDKs as part of our developer services since our inception as of December 31, 2018. In December 2018, we generated data from approximately 1.0 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 396,000 developers representing over 1,076,000 mobile apps in a variety of industries, such as media, entertainment, gaming, financial services, tourism, ecommerce, education and healthcare, as of December 31, 2018. 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 2018, we captured data from 2.3 billion monthly active SDKs and 238.9 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 data solutions as well as developer services. 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 mobile big data solutions, 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 data 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 Data Solutions**

Our data solutions currently comprise of targeted marketing, 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 data solutions. During the development stage of our data solutions, 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 data solutions 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 data solutions to be standardized, we make our data solutions 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 data solutions, including the "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.

## Targeted Marketing

We provide targeted marketing solutions in the form of integrated marketing campaigns to our advertising customers through our XiaoGuoTong marketing platform, which is built upon our massive amounts of multiple-dimensional data. We have developed and maintain on-going business relationships with many reputable ad inventory suppliers and our marketing platform is connected with theirs through APIs to streamline and automate the ad slots bidding and ad placement process. We utilize our massive amount of data and leverage our AI-driven data mining capabilities to choose the right targeted audience and the ad inventory that is most suitable for the customer's marketing needs through our platform. We vet our targeted marketing customers and screen their proposed ad content to ensure that they have the required licenses and qualifications to engage us for posting ads online and are otherwise in compliance with regulatory requirements. We also create, design, develop and optimize the content for our customers' ads, utilizing a wide variety of ad formats, such as graphics or videos. Through our XiaoGuoTong marketing platform, we bid for ad slots and place ads on a real-time basis on behalf of advertisers and monitor results. Our marketing solutions help our advertising customers generate higher ROIs on their advertising spend. Customers can also access our platform through a web-based dashboard to see the marketing results and direct to us any customer service inquiries.

We launched targeted marketing solutions in 2016. Our targeted marketing customers mainly include financial institutions, large media and entertainment app publishers, online game companies and ecommerce platforms. We intend to expand into other industry verticals and capture more market opportunities in the future.

Customers use our targeted marketing solutions for two main purposes: new user acquisition and existing user re-engagement. We assist our customers with ad placements that most effectively reach the potential group of people who, based on the results of our profiling analysis, are most likely to be attracted to our customers' products or services.

Upon receiving orders from our customers, we first utilize our data and AI-powered data analytics capabilities to decide which ad inventory suppliers to use, taking into account the volume and quality of their traffic and the relevance to the advertisers, and then we purchase ad inventory from ad inventory suppliers on a real-time basis by bidding for ad slots on the ad inventory suppliers' online media networks using rates negotiated with various ad inventory suppliers. We then sell to our advertising customers our targeted marketing solutions in the form of integrated marketing campaigns, which include primarily creating and designing the right content for our customers' ads and placing the ads on the ad slots selected. Utilizing our multi-dimensional, as well as industry specific, data and leveraging our proprietary machine learning algorithms, we can better estimate targeted user click-through-rates (CTRs). Based on these estimates, we bid strategically and intelligently for ad placement, generating higher ROI for our advertising customers. We typically pay for ad placements on online media networks on a cost-per-thousand impressions (CPM) basis. For our targeted marketing solutions, we use performance-based fee arrangements whereby we charge the marketing customers primarily on a cost-per-click (CPC) or cost-per-action (CPA) basis. Based on our contractual relationships with our customers, we are obligated to satisfy the integrated marketing campaign objectives of the advertising customers and bear credit risk in case of advertisers' failure to pay.

In 2017, we sourced 49.4% of our ad inventories from Tencent, because we believed the user traffic provided by Tencent was more suitable for meeting our current customer mix and their marketing needs. In 2018, we sourced 14.8% of our ad inventories from Tencent. We have entered into a framework agreement with Tencent in 2016, pursuant to which we may select and purchase suitable ad inventories provided by Tencent's social networking platforms, such as GuangDianTong and WeChat/Weixin. Under the framework agreement, we have to prepay for the ad inventories through an account designated by Tencent, and Tencent may charge us fees based on a cost-per-click (CPC), cost-per-thousand impressions (CPM) or other basis. The framework agreement has an initial term that ended on December 31, 2016, and will automatically extend for successive one-year periods unless otherwise terminated with written notice prior to the expiration of the then current term. In addition, Tencent may terminate the agreement earlier if it is of the view that we or the ads placed by us are in violation of applicable laws and regulations. As of the date of this annual report, the agreement is still in full force and effect. In 2017 and 2018, we paid for the ad inventories purchased from Tencent on a CPM basis. As we expand our targeted marketing customer base and engage more customers from a broader spectrum of industries, we expect to diversify our sources of ad inventory by increasing the number of suppliers we work with and purchasing more ad inventories from other existing suppliers.

### 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, blacklist and location verification.

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.

Location verification. Our customers utilize information voluntarily submitted by credit applicants to them and verify it against the device-level location-based data that we have access to, in order to assess the potential fraud risk associated with the credit applicants.

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)

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. 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.

# **Technology Infrastructure**

We have built a robust technology infrastructure to support the usage of our developer services and delivery of data solutions throughout China on a real-time basis. We have strategically selected our data center locations in China. In total, we run over 6,100 servers in 9 data centers located in 4 cities in China, including Guangzhou, Beijing, Wuxi and Xiamen, 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 data solution 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 data solutions customers. We believe our ability to develop innovative solutions and enhance our existing service offerings is the key to maintaining our leadership. We incurred RMB33.7 million, RMB71.7 million and RMB134.4 million (US\$19.5 million) of research and development expenses in 2016, 2017 and 2018, respectively.

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 data solutions 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 2016, 2017 and 2018, we had 1,168, 2,263 and 3,024 customers who purchased our developer services or data solutions within the periods, respectively. We define customers in a given period as those that purchase at least one of our paid-for developer services or data solutions during the same period. No single customer represented more than 10% of our total revenues in the years ended December 31, 2016, 2017 and 2018.

Customers of 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. Our paying customers for developer services increased from 743 in 2016 to 1,118 in 2017 and further to 1,646 in 2018.

Customers of data solutions. We have paying customers for each line of data solutions we provide. The number of our customers for data solutions increased from 425 in 2016 to 1,145 in 2017 and further to 1,378 in 2018. The following describes our customer base for each of our core data solutions:

- 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.
- 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.

# 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 developer services or data solution 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 developer services or data solutions and 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 developer services and data solutions.

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 inter-connectedness of our data 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 solutions 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 data solutions 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 uses 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 developer services or data solutions 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. In 2018, our data analysis was quoted in approximately 47,000 articles. We also issued 43 data reports and 58 market intelligence reports.
- Offline events. We host and participate in various events, such as industry conferences and developer and industry salons, 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, 2018, we have 43 patent applications pending in China and own 51 computer software copyrights in China, relating to various aspects of our developer services and data solutions. In addition, we have filed 33 trademark applications and maintained 7 trademark registrations and 3 artwork copyrights in China. We have also registered 16 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 developer services and data solutions 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 solutions, 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 developer services and data solutions, 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 Foreign Investment

On March 15, 2019, the PRC National People's Congress adopted the Foreign Investment Law of the PRC, which will become effective on January 1, 2020. Pursuant to the Foreign Investment Law of the PRC, China will grant national treatment to foreign invested entities, except for those foreign-invested entities that operate in "restricted" or "prohibited" industries prescribed in the "negative list", which shall be released by or approved by the State Council.

## 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, information services, whether provided via internet networks or public communication networks, are classified as B2 type of value-added telecommunications services. The PRC Telecommunications 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 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 providers or their shareholders 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.

The Special Administrative Measures for Entrance of Foreign Investment (Negative List) (2018 Version), or the Negative List, which was promulgated jointly by MOFCOM and the National Development and Reform Commission on June 28, 2018 and became effective on July 28, 2018, regulate foreign investors' market access into China. Pursuant to the Negative List, foreign investors must refrain from making investment in any of the prohibited sectors specified in the Negative List, and foreign investors are required to obtain the permit for access to other sectors that are listed in the Negative List but are not classified as "prohibited". 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).

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 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 disclosure and 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 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 ICP License through our VIE Hexun Huagu, covering the provision of internet information services, issued by Guangdong Communications Administration Bureau. 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, 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 SIIO promulgated the Administrative Provisions on Mobile Internet Application Information Services, or the Mobile Application Administrative Provisions. 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 and October 2018, 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. Pursuant to the PRC Advertising Law, 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.

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. For example, 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.

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. PRC laws impose 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 measures 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.

Our VIE Hexun Huagu, as an internet information services provider, 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—Actual or alleged failure to comply with data privacy and protection laws and regulations could damage our reputation, and discourage current and potential app developers and customers from doing business with us" and "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business and Industry—Security and privacy breaches may hurt our business."

## **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, 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 telecommunications 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.

The General Rules of the Civil Law of the PRC adopted by the PRC National People's Congress on March 15, 2017, effective as of October 1, 2017, also stipulate that: (i) natural persons' personal information shall be protected by law; (ii) any organizations and individuals who need to obtain personal information of others shall obtain the information according to law and shall ensure the information safety; and (iii) it is not allowed to illegally collect, use, process or transfer the personal information of others. It is illegal to buy and sell, supply or publish the personal information of others.

To further regulate cyber security and privacy protection, the PRC Cyber Security Law 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 recorded by electronic or otherwise that can be used to independently identify or be combined with other 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 more than ten times the illegal gains, and may be

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. Furthermore, the authorities issuing the circular are expected to initiate a campaign to correct unlawful collection and usage of personal information via apps from January 2019 through December 2019.

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 data solutions 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—Actual or alleged failure to comply with data privacy and protection laws and regulations could damage our reputation, and discourage current and potential app developers and customers from doing business with

## 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 conducted in cooperation with any foreign organization, individual or the agency in the PRC of any foreign organization; (iii) market 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 Credit Reporting**

In accordance with the Administrative Regulations on Credit Reporting Industry issued by the State Council on January 21, 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 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, 2018, we have registered copyrights to 51 software programs in China.

## Artwork Copyrights

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, 2018, we have registered 3 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, repealing the Domain Name Measures since November 1, 2017. 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. In accordance with the Measures on the Regulation of Domain Name Disputes promulgated by the CNNIC, which became effective on September 1, 2014, domain name dispute can be resolved by a domain name dispute resolution institution recognized by the CNNIC. As of December 31, 2018, we have registered 16 domain names, 10 of which are Chinese top level domain names.

#### Trademark

The PRC Trademark Law, adopted in 1982 and amended in 1993, 2001 and 2013, 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, 2018, we have registered 7 trademarks and had filed 33 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 and 2008, respectively. 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, 2018, we are in the process of applying for 43 patents in China.

## **Regulations on Internet Infringement**

On December 26, 2009, the Standing Committee of National People's Congress promulgated the PRC Tort Law, which became effective on July 1, 2010. Under the PRC Tort Law, 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. If, after being notified, the internet service provider fails to take necessary measures in a timely manner to end the infringement, it will be jointly and severally liable for any additional harm caused by its failure to act. According to the PRC Tort Law, 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. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—Any failure to comply with PRC regulations regarding the registration requirements for employee stock incentive plans may subject the PRC plan participants or us to fines and other legal or administrative 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 applicable Enterprise Income Tax Law, or the EIT Law, and its implementation rules. On March 16, 2007, the National People's Congress of China enacted 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. 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%.

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 Relating 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 18, 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 People's Republic of China on Business Tax and Amending the Interim Value-Added Tax Regulations of the People's Republic of China, deciding to abolish the Interim Regulations of the People's Republic of China on Business Tax. Since then, business tax has been comprehensively canceled. 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 favorable tax treatment, the relevant tax authorities may adjust the favorable 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 Relating 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

Wholly foreign-owned enterprises and Sino-foreign equity joint ventures 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, these foreign-invested enterprises 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 Provisions on Registration of Social Insurance, promulgated by the Ministry of Human Resources and Social Security (formerly the Ministry of Labor and Social Security) on March 19, 1999 and effective since March 19, 1999;
- 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
- 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.

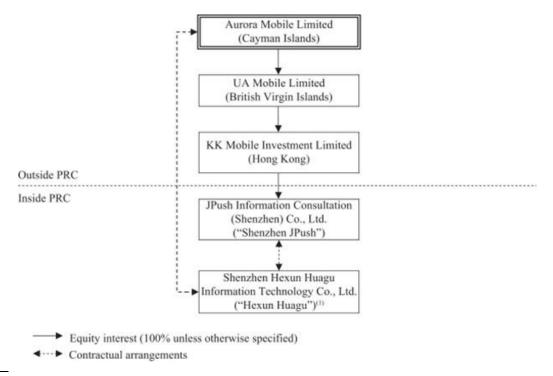
According to the PRC Labor Law and PRC Labor Contract Law, employers must execute written labor contracts with full-time employees. All employers must compensate their employees with wages equal to at least the local minimum wage standards. All employers are required to establish a system for labor safety 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.

Our WFOE and VIE Hexun Huagu 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 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, (ii) transfer or otherwise dispose of 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 undertakes 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 11,529 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 2,387, 1,693, 168 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 and Xiamen. 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 mobile big data solutions platform 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 data solutions that offer industry-specific, actionable insights for customers. Our core data solutions include targeted marketing, market intelligence, financial risk management and location-based intelligence. We currently generate revenue primarily from our data solutions, while we adopt a freemium model for most of our developer services.

## **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 big data solutions 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 developer services and data solutions 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 2016 to 2017 and further to 2018. Our number of customers increased from 1,168 in 2016 to 2,263 in 2017 and further to 3,024 in 2018. We define our customers in a given period as those that purchase at least one of our paid-for developer services or data solutions during the same period. The average spending per customer also increased from RMB60,207 in 2016 to RMB125,810 in 2017 and further to RMB236,158 (US\$34,348) in 2018. Along with the growth of our revenues from data solutions, our number of customers of data solutions increased from 425 in 2016 to 1,145 in 2017 and further to 1,378 in 2018, and the average spending per customer for data solutions increased from RMB110,885 in 2016 to RMB214,772 in 2017 and further to RMB474,626 (US\$69,032) in 2018. Over the same time periods, our revenues from developer services also increased, driven by an increase in our number of customers of developer services from 743 in 2016 to 1,118 in 2017 and further to 1,646 in 2018, as well as an increase in the average spending per customer for developer services from RMB31,219 in 2016 to RMB34,700 in 2017 and further to RMB36,516 (US\$5,311) in 2018. 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 developer services and data solutions, develop and productize new services and solutions, and effectively market and sell our services and solutions.

### Our ability to develop new developer services and data solutions that meet market demands

Our future success is significantly dependent on our ability to continually develop new developer services and data solutions that meet evolving market demands. We have dedicated and will continue to dedicate significant resources and efforts to developing new developer services and data solutions. 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. For our data solutions, we have expanded from our original focus on targeted marketing to more data solutions such as market intelligence, financial risk management and location-based intelligence. We will continue to enrich and expand our existing data solutions to better serve existing customers and attract new customers, and also seek to expand our data solutions 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 generate revenue primarily from our data solutions. Our ability to expand and improve our existing data solutions 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 data solutions and optimize our solution offerings, thereby allowing us to obtain more favorable pricing terms for our data solutions.

### 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 is mainly affected by the mix of our developer services and data solutions, as a majority of data solutions revenues are from targeted marketing solutions which incur cost of revenues for purchasing ad inventory, while developer services do not incur such cost of revenues. Our ability to increase our gross margin depends on our ability to expand our other vertical data solutions in addition to targeted marketing solutions and improve the margin of targeted marketing solutions. 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. Currently, we sell our data solutions 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 developer services and data solutions. The following table breaks down our total revenues by categories, by amounts and as percentages of total revenues for the periods presented:

|                    |        | For the Year Ended December 31,            |         |       |         |         |       |  |
|--------------------|--------|--|---------|-------|---------|---------|-------|--|
|                    | 2010   | 2016                                       |         | 2017  |         | 2018    |       |  |
|                    | RMB    | %  | RMB     | %     | RMB     | US\$    | %     |  |
|                    |        | (in thousands, except for percentage data) |         |       |         |         |       |  |
| Data solutions     | 47,126 | 67.0                                       | 245,914 | 86.4  | 654,035 | 95,126  | 91.6  |  |
| Developer services | 23,196 | 33.0                                       | 38,795  | 13.6  | 60,106  | 8,742   | 8.4   |  |
| Total              | 70.322 | 100.0                                      | 284.709 | 100.0 | 714.141 | 103.868 | 100.0 |  |

Data solutions. We generate data solutions revenues primarily by creating and delivering online targeted marketing and other vertical data solutions, such as market intelligence, financial risk management and location-based intelligence. Revenue from online targeted marketing solutions accounted for a majority of our revenues from data solutions in 2016, 2017 and 2018.

We generate targeted marketing revenue by providing targeted marketing solutions 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. We generally create, design, develop and optimize the ad content for our advertising customers. 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 solutions primarily based on a cost-per-click (CPC) or cost-per-action (CPA) basis. Revenue is recognized in the period in which the user performs the action the advertiser contracted for.

We recognize revenue on a gross basis as the primary obligor, as we use our mobile behavioral data and leverage our data analytics capabilities and our marketing platform to conduct targeted marketing campaigns with precision. Additionally, we have pricing latitude, have sole discretion to select those publishers to purchase ad slots from, are highly involved in the determination of service specifications and bear credit risk.

For other vertical data solutions, we charge customers fees primarily based on the number of queries we process or on a subscription basis. We recognize revenue when the services have been rendered.

Developer services. We enter into agreements with app developers to provide developer services, such as push notification and short messaging services (SMS). While we adopt a freemium model for most of our developer services, we charge a fee for SMS based on the number of messages delivered, and we also charge a fee for the VIP premium package of certain developer services and for private cloud-based services. Revenue from the VIP premium package of push notification services is recognized ratably over the service period. SMS revenue is recognized as the SMS is successfully delivered. Private cloud-based developer services revenue is recognized ratably over the post contract customer support period, once the software has been delivered to the customer.

We expect our total revenues will continue to increase in the foreseeable future as we further expand our business.

### Cost of revenues

Our cost of revenues consists primarily of the cost of purchasing ad inventory associated with our targeted marketing solutions, bandwidth cost, staff cost and depreciation of servers used for revenue generating services and solutions.

In relation to our targeted marketing solutions, 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. In 2017, 49.4% of the ad inventory was purchased from Tencent, and 44.0% of our cost of revenue was attributable to Tencent. In 2018, 14.8% of the ad inventory was purchased from Tencent, and 13.5% of our cost of revenue was attributable to Tencent. We expect this percentage will decrease, as we further expand our targeted marketing customer base and engage more customers from a broader spectrum of industries as well as introduce new products and technologies that will expand the ways in which we can access ad inventory supply.

In relation to our bandwidth 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 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,            |            |            |  |  |  |
|--------|-----------|--|------------|------------|--|--|--|
|        | 2016      | 2016 2017 2018                             |            |            |  |  |  |
|        | (in       | (in thousands, except for percentage data) |            |            |  |  |  |
| ofit   | RMB22,600 | RMB71,339                                  | RMB197,067 | US\$28,663 |  |  |  |
| nargin | 32.1%     | 25.1%                                      | 27.6%      | 27.6%      |  |  |  |

Our gross margin is mainly affected by the mix of our revenues, particularly between developer services and data solutions, as a majority of data solutions revenues were from targeted marketing solutions which incurred cost of revenues for purchasing ad inventory, while developer services do not incur such cost of revenues.

## 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, |  |         |       |         |        |       |
|-------------------------------------|---------------------------------|--|---------|-------|---------|--------|-------|
|                                     | 2016                            | _  | 2017    |       | 2018    |        |       |
|                                     | RMB                             | %  | RMB     | %     | RMB     | US\$   | %     |
|                                     |                                 | (in thousands, except for percentage data) |         |       |         |        |       |
| Research and development expenses   | 33,717                          | 42.0                                       | 71,651  | 43.8  | 134,358 | 19,542 | 46.4  |
| Sales and marketing expenses        | 33,062                          | 41.2                                       | 59,673  | 36.4  | 83,853  | 12,196 | 28.9  |
| General and administrative expenses | 13,480                          | 16.8                                       | 32,431  | 19.8  | 71,641  | 10,419 | 24.7  |
| Total                               | 80,259                          | 100.0                                      | 163,755 | 100.0 | 289,852 | 42,157 | 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, and professional fees. 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

Our company is not subject to income or capital gains tax under the current laws of the Cayman Islands. There are no other taxes likely to be material to us levied by the government 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, is not subject to tax on income or capital gains in the British Virgin Islands. In addition, payments of dividends by UA Mobile Limited to our company are not subject to withholding tax in the British Virgin Islands.

### Hong Kong

Our subsidiary incorporated in Hong Kong, KK Mobile Investment Limited, is subject to 16.5% Hong Kong profit tax on its taxable income generated from operations in Hong Kong. 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. Our VIE has obtained High and New Technology Enterprise status, or HNTE status, and is thus eligible to enjoy a preferential tax rate of 15% in 2017 and 2018, to the extent it has taxable income under the PRC Enterprise Income Tax Law. Our VIE plans to reapply for the HNTE status in 2019.

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 periods presented, both in absolute amount and as a percentage of our total revenues for the periods presented. Our business has grown rapidly in recent years. Period-to-period comparisons of historical results of operations should not be relied upon as indicative of future performance.

|  | For the Year Ended December 31, |           |                  |               |           |          |        |
|--|---------------------------------|-----------|------------------|---------------|-----------|----------|--------|
|  | 2016                            | 2016 2017 |                  |               | 2018      |          |        |
|  | RMB                             | %         | RMB              | %             | RMB       | US\$     | %      |
|  |                                 |           | (in thousands, e | xcept for per | centages) |          |        |
| Revenues                                     | 70,322                          | 100.0     | 284,709          | 100.0         | 714,141   | 103,868  | 100.0  |
| Cost of revenues                             | (47,722)                        | (67.9)    | (213,370)        | (74.9)        | (517,074) | (75,205) | (72.4) |
| Gross profit                                 | 22,600                          | 32.1      | 71,339           | 25.1          | 197,067   | 28,663   | 27.6   |
| Operating expenses:(1)                       |                                 |           |                  |               |           |          |        |
| Research and development expenses            | (33,717)                        | (47.9)    | (71,651)         | (25.2)        | (134,358) | (19,542) | (18.8) |
| Sales and marketing expenses                 | (33,062)                        | (47.0)    | (59,673)         | (21.0)        | (83,853)  | (12,196) | (11.7) |
| General and administrative expenses          | (13,480)                        | (19.2)    | (32,431)         | (11.4)        | (71,641)  | (10,419) | (10.0) |
| Total operating expenses                     | (80,259)                        | (114.1)   | (163,755)        | (57.5)        | (289,852) | (42,157) | (40.6) |
| Loss from operations                         | (57,659)                        | (82.0)    | (92,416)         | (32.5)        | (92,785)  | (13,494) | (13.0) |
| Foreign exchange (loss)/gain, net            | (328)                           | (0.5)     | (2,724)          | (1.0)         | 264       | 38       | 0.0    |
| Interest income                              | 283                             | 0.4       | 314              | 0.1           | 3,657     | 532      | 0.5    |
| Interest expense                             | _                               | _         | (122)            | (0.0)         | (7,054)   | (1,026)  | (1.0)  |
| Other income                                 | 232                             | 0.3       | 677              | 0.2           | 8,449     | 1,229    | 1.2    |
| Change in fair value of derivative liability | _                               | _         | _                | _             | 21,302    | 3,098    | 3.0    |
| Loss before income taxes                     | (57,472)                        | (81.7)    | (94,271)         | (33.1)        | (66,167)  | (9,623)  | (9.0)  |
| Income tax (expense) benefit                 | (3,910)                         | (5.6)     | 3,980            | 1.4           | (30)      | (4)      | (0.0)  |
| Net loss                                     | (61,382                         | (87.3)    | (90,291)         | (31.7)        | (66,197)  | (9,627)  | (9.3)  |

Notes:

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

|                                     |       | For the Year Ended December 31, |        |       |  |  |  |
|-------------------------------------|-------|---------------------------------|--------|-------|--|--|--|
|                                     | 2016  | 2016 2017                       |        |       |  |  |  |
|                                     | RMB   | RMB                             | RMB    | US\$  |  |  |  |
| Cost of revenues                    |       |                                 | _      |       |  |  |  |
| Research and development expenses   | 664   | 1,408                           | 9,448  | 1,347 |  |  |  |
| Sales and marketing expenses        | 189   | 944                             | 3,347  | 487   |  |  |  |
| General and administrative expenses | 1,850 | 5,923                           | 11,766 | 1,711 |  |  |  |
| Total                               | 2,703 | 8,275                           | 24,561 | 3,572 |  |  |  |

# Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

### Revenues

Our revenues increased by 150.8% from RMB284.7 million in 2017 to RMB714.1 million (US\$103.9 million) in 2018, with increases in revenues from both data solutions and developer services.

Our revenues from data solutions increased by 166.0% from RMB245.9 million in 2017 to RMB654.0 million (US\$95.1 million) in 2018, which was primarily due to the increase in the number of customers by 20.3% from 1,145 in 2017 to 1,378 in 2018 and the increase in average spending per customer by 120.9% from RMB214.8 thousand in 2017 to RMB474.6 thousand in 2018.

Our revenues from developer services increased by 54.9% from RMB38.8 million in 2017 to RMB60.1 million (US\$8.7 million) in 2018, which was mainly due to the growth in the number of customers by 47.2% from 1,118 in 2017 to 1,646 in 2018.

### Cost of revenues

Our cost of revenues increased by 142.3% from RMB213.4 million in 2017 to RMB517.1 million (US\$75.2 million) in 2018, while our business expanded and our revenues grew. Such increase was mainly attributable to the increases in the cost of purchasing of ad inventory by RMB281.2 million, bandwidth cost and depreciation of servers associated with revenue generation by RMB12.8 million, and cost of staff directly related to revenue generation by RMB3.5 million.

## Gross profit

Our gross profit increased by 176.4% from RMB71.3 million in 2017 to RMB197.1 million (US\$28.7 million) in 2018. Our gross margin increased from 25.1% to 27.6% during the same periods, due to the significant revenue growth during the same period.

## Research and development expenses

Our research and development expenses increased by 87.4% from RMB71.7 million in 2017 to RMB134.4 million (US\$19.5 million) in 2018. The increase was primarily attributable to the increases in research and development personnel compensation expenses by RMB42.3 million, bandwidth costs by RMB10.2 million, and depreciation expenses of servers used for research and development by RMB5.5 million.

### Sales and marketing expenses

Our sales and marketing expenses increased by 40.5% from RMB59.7 million in 2017 to RMB83.9 million (US\$12.2 million) in 2018. The increase was primarily attributable to the increase in the compensation expenses for personnel engaged in sales and marketing activities by RMB19.4 million and advertising and other marketing expenses associated with brand and product promotions by RMB2.6 million.

### General and administrative expenses

Our general and administrative expenses increased by 121.0% from RMB32.4 million in 2017 to RMB71.6 million (US\$10.4 million) in 2018. The increase was primarily due to the increases in compensation and other personnel related expenses by RMB14.3 million, professional fees by RMB13.9 million, and bad debt provision of RMB4.0 million.

### Net loss

As a result of the foregoing, we recorded a net loss of to RMB66.2 million (US\$9.6 million) for the year ended December 31, 2018, compared to a net loss of RMB90.3 million (US\$14.4 million) for the year ended December 31, 2017. Net loss margin improved from 31.7% in 2017 to 9.3% 2018.

## Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

### Revenues

Our revenues increased by 304.9% from RMB70.3 million in 2016 to RMB284.7 million in 2017, with increases in both data solutions and developer services.

Our revenues from data solutions increased by 421.8% from RMB47.1 million in 2016 to RMB245.9 million in 2017, which was primarily due to the increase in the number of customers by 169.4% from 425 in 2016 to 1,145 in 2017 and the increase in average spending per customer by 93.7% from RMB110.9 thousand in 2016 to RMB214.8 thousand in 2017.

Our revenues from developer services increased by 67.2% from RMB23.2 million in 2016 to RMB38.8 million in 2017, which was mainly due to the growth in the number of customers by 50.5% from 743 in 2016 to 1,118 in 2017.

## Cost of revenues

Our cost of revenues increased by 347.1% from RMB47.7 million in 2016 to RMB213.4 million in 2017, while our business expanded and our revenues grew. Such increase was mainly attributable to the increases in the cost of purchasing of ad inventory by RMB154.0 million, bandwidth cost and depreciation of servers associated with revenue generation by RMB4.9 million, and cost of staff directly related to revenue generation by RMB3.7 million.

### Gross profit

Our gross profit increased by 215.7% from RMB22.6 million in 2016 to RMB71.3 million in 2017. Our gross margin dropped from 32.1% to 25.1% during the same periods, primarily because our data solutions revenue grew much faster than our developer services in 2017 as we ramped up our data solutions business in the period, as a majority of data solutions revenues were from target marketing solutions which incurred cost of revenues for purchasing ad inventory, while developer services do not incur such cost of revenues.

### Research and development expenses

Our research and development expenses increased by 112.5% from RMB33.7 million in 2016 to RMB71.7 million in 2017. The increase was primarily attributable to the increases in research and development personnel compensation expenses by RMB28.9 million, depreciation of servers used for research and development by RMB3.0 million, and technical service fees paid to third-party service providers for maintaining such servers by RMB2.2 million.

### Sales and marketing expenses

Our sales and marketing expenses increased by 80.5% from RMB33.1 million in 2016 to RMB59.7 million in 2017. The increase was primarily attributable to the increase in the compensation expenses for personnel engaged in sales and marketing activities by RMB28.3 million, offset by the decrease in marketing expenses for brand and product promotion by RMB5.4 million. The decrease in marketing expenses was the result of our adjustment to marketing strategies by focusing more on performance-based online marketing in 2017.

## General and administrative expenses

Our general and administrative expenses increased by 140.6% from RMB13.5 million in 2016 to RMB32.4 million in 2017. The increase was primarily due to the increase in compensation and other personnel related expenses.

#### Net loss

As a result of the foregoing, we recorded a net loss of RMB90.3 million for the year ended December 31, 2017, compared to a net loss of RMB61.4 million for the year ended December 31, 2016. Net loss margin improved from 87.3% in 2016 to 31.7% in 2017.

## **Critical Accounting Policies**

### Revenue recognition

We recognize revenue once all of the following criteria have been met: (1) persuasive evidence of an arrangement exists; (2) services have been provided; (3) the price is fixed or determinable; and (4) collectability is reasonably assured.

## Data solutions

We generate data solutions revenues primarily by creating and delivering targeted marketing and other vertical data solutions, such as market intelligence, financial risk management and location based intelligence. We generate targeted marketing revenue by providing targeted marketing solutions 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. We generally create, design, develop and optimize the ad content for our advertising customers. 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. Advertisers pay for our targeted marketing solutions based on the number of clicks and downloads taken by the users. Revenue is recognized in the period in which the user performs the action the advertiser contracted for.

We recognize revenue on a gross basis as the primary obligor, as we use our mobile behavioral data and leverage our data analytics capabilities and our marketing platform to conduct targeted marketing campaigns with precision. Additionally, we have pricing latitude, have discretion in selecting publishers whose ad banner space will be purchased, are highly involved in the determination of service specifications and bear credit risk. Based on the advertiser's preference to avoid lower quality publishers, we may recommend a specific reputable online media network to certain advertisers. Leveraging our mobile behavioral data, we accurately pinpoint the specific mobile device that is most suitable for the customer's ads, and then bid for the available ad slots on the online media network and place ads for the customer.

For other vertical data solutions, we charge customers fees primarily based on the number of queries we process or on a subscription basis. We recognize revenue when the services have been rendered.

### Developer services

We enter into agreements with our customers to provide push notification and instant messaging (collectively "notification services"). Under the terms of the contractual agreements of notification services, we provide our customers with access to our notification services platform over the specified period. This enables customers to send notifications and messages to users. Revenue of notification services is recognized ratably over the service period.

We record deferred revenues when cash payments are received in advance of revenue recognition. Customer deposits relate to customer's unused balances that are refundable.

#### 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 their 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 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.

We evaluate our 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.

## 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 2016, 2017 and 2018:

| Grant Date            | Number of<br>Restricted<br>Share Units<br>Granted | Weighted-<br>Average Grant-<br>date Fair Value<br>per Restricted<br>Share Unit |
|-----------------------|---|--|
|                       |   | US\$   |
| Various dates in 2016 | _   | _  |
| Various dates in 2017 | _   | _  |
| Various dates in 2018 | 12,550  | 7.97   |

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, 2016, 2017 and 2018 were nil, nil and RMB447 thousand (US\$68 thousand), respectively.

## **Option Grants**

The following table sets forth information regarding the share options granted under our stock incentive plans in 2016, 2017 and 2018:

| Grant Date            | Number of<br>Options<br>Granted | Weighted-<br>Average Per<br>Option Exercise<br>Price | verage Per Average Grant-<br>tion Exercise date Fair Value |  |
|-----------------------|---------------------------------|--|--|--|
|                       |                                 | US\$   | US\$   |  |
| Various dates in 2016 | 2,423,445                       | 0.50   | 0.66   |  |
| Various dates in 2017 | 894,115                         | 2.41   | 1.53   |  |
| Various dates in 2018 | 1,736,390                       | 3.89   | 6.66   |  |

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, 2016, 2017 and 2018 were RMB2.7 million, RMB8.3 million, RMB24.6 million (US\$3.6 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 2016, 2017 and 2018 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.

|                                      | 2016            | 2017          | 2018            |
|--------------------------------------|-----------------|---------------|-----------------|
| Risk-free interest rate(1)           | 1.83% ~ 1.84%   | 2.27% ~ 2.41% | 2.27% ~ 2.93%   |
| Expected dividend yield(2)           | _               | _             | _               |
| Expected volatility range(3)         |                 | 46.33% ~      |                 |
|                                      | 47.33% ~ 47.60% | 47.15%        | 45.30% ~ 46.10% |
| Weighted average expected volatility | 47.44%          | 46.66%        | 45.98%          |
| Expected exercise multiple(4)        | 2.5             | 2.5           | 2.5             |

## Notes:

<sup>(1)</sup> 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.

<sup>(2)</sup> 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. 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.

We have early adopted ASU 2015-03, Interest – Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, and ASU 2017-11, Accounting for Certain Financial Instruments with Down Round Features. 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. The issuance cost of RMB8.5 million (US\$1.3 million) was currently presented as a direct deduction from the principal amount of the convertible notes on the consolidated balance sheet as of December 31, 2018. 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.

## Fair Value of Our Common Shares

Prior to our initial public offering, we were a private company with no quoted market prices for our common shares. We have therefore needed to make estimates of the fair value of our common shares on various dates for the following purposes:

- determining the fair value of our common shares at the date of issuance of convertible instruments as one of the inputs into determining the intrinsic value of the beneficial conversion feature, if any; and
- determining the fair value of our common shares at the date of the grant of a share-based compensation award as one of the inputs into
  determining the grant date fair value of the award.

The following table sets forth the fair value of our common shares estimated at different times with the assistance from an independent valuation firm:

|                    | Fair Value per |          |       |
|--------------------|----------------|----------|-------|
|                    | Common         | Discount |       |
| Date               | Share (US\$)   | Rate     | DLOM  |
| February 5, 2016   | 0.70           | 21.0%    | 18%   |
| October 31, 2016   | 1.024          | 21.0%    | 16.5% |
| May 10, 2017       | 2.38           | 20.5%    | 13%   |
| September 30, 2017 | 2.71           | 20.5%    | 10%   |
| January 1, 2018    | 5.97           | 18.5%    | 10%   |
| April 17, 2018     | 9.81           | 16.5%    | 9.5%  |

In determining the fair value of our common shares before our initial public offering, we relied in part on a valuation retrospectively determined with the assistance of an independent valuation firm based on data we provided. The valuation report provided us with guidelines in determining the fair value, but the determination was made by our management. We obtained a retrospective valuation instead of a contemporaneous valuation, because, on the various valuation dates, our financial and limited human resources were principally focused on our business development efforts. This approach is consistent with the guidance prescribed by the AICPA Audit and Accounting Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation, or the Practice Aid.

We applied the income approach/discounted cash flow analysis based on our projected cash flow using our best estimate as of the valuation date. The determination of the fair value of our common shares requires complex and subjective judgments to be made regarding our projected

financial and operating results, our unique business risks, the liquidity of our shares and our operating history and prospects at the time of valuation.

The major assumptions used in calculating the fair value of common shares include:

Discount rates. The discount rates listed out in the table above were based on the weighted average cost of capital, which was determined based on a consideration of the factors including risk-free rate, comparative industry risk, equity risk premium, company size and non-systemic risk factors.

Comparable companies. In deriving the weighted average cost of capital used as the discount rates under the income approach, five publicly traded companies were selected for reference as our guideline companies. The guideline companies were selected based on the following criteria: (i) they operate in similar industries as we do, and (ii) their shares are publicly traded in developed capital markets, i.e., the United States.

Discount for lack of marketability, or DLOM. We also applied a DLOM to reflect the fact that there is no ready market for shares in a closely-held company like us. When determining the DLOM, the Black-Scholes option pricing model was used. Under this option-pricing method, the cost of the put option, which can hedge the price change before the privately held shares can be sold, was considered as a basis to determine the DLOM. This option pricing method was used because it takes into account certain company-specific factors, including the volatility of the share price of the guideline companies engaged in the same industry.

The income approach involves applying appropriate discount rates to estimated cash flows that are based on earnings forecasts. Our revenue growth rates, as well as major milestones that we have achieved, contributed to the increase in the fair value of our common shares from February 2016 to April 2018. However, these fair values are inherently uncertain and highly subjective. The assumptions used in deriving the fair values are consistent with our business plan. These assumptions include: no material changes in the existing political, legal and economic conditions in China; our ability to retain competent management, key personnel and staff to support our ongoing operations; and no material deviation in market conditions from economic forecasts. These assumptions are inherently uncertain.

The option-pricing method was used to allocate enterprise value to preferred and common shares, taking into account the guidance prescribed by the AICPA Audit and Accounting Practice Aid, "Valuation of Privately-Held Company Equity Securities Issued as Compensation." The method treats common stock and preferred stock as call options on the enterprise's value, with exercise prices based on the liquidation preference of the preferred stock.

The option-pricing method involves making estimates of the anticipated timing of a potential liquidity event, such as a sale of our company or an initial public offering, and estimates of the volatility of our equity securities. The anticipated timing is based on the plans of our board of directors and management. Estimating the volatility of the share price of a privately held company is complex because there is no readily available market for the shares. We estimated the volatility of our shares to range from 46.33% to 47.60% based on the historical volatilities of comparable publicly traded companies engaged in similar lines of business. Had we used different estimates of volatility, the allocations between preferred and common shares would have been different.

The increase in the fair value of our common shares from US\$0.70 per share as of February 5, 2016 to US\$2.71 per share as of September 30, 2017 was primarily attributable to the rapid organic growth of our business, as evidenced by the increases in the number of customers and the average spending per customer from 2016 to 2017, the decrease of discount rate from 21.0% as of February 5, 2016 to 20.5% as of September 30, 2017, and the decrease of DLOM from 18% as of February 5, 2016 to 10% as of September 30, 2017. We raised additional capital by issuing Series C preferred shares at US\$4.725 per share on in April and October 2016 and Series D preferred shares at US\$5.3962 per share in May 2017. The funding strengthened our financial status, provided us with additional financial resources for expansion, and indicated an increase in investors' confidence in our business prospect.

The increase in the fair value of our common shares from US\$2.71 per share as of September 30, 2017 to US\$5.97 per share as of January 1, 2018 and further to US\$9.81 as of April 17, 2018 was primarily attributable to the rapid organic growth of our business. We also made an upward adjustment to our revenue projection in January 2018 and April 2018, taking into account the following factors:

- As part of our data solution offering, we developed a new targeted marketing solution to assist app developers reconnecting with their existing users. We began testing a proof of concept in the third quarter of 2017. In the fourth quarter of 2017, the revenue generated from this data solution increased significantly. The successful monetization of this data solution marked an important milestone in our business development, and as a result we revised our financial forecast upwards as of January 2018. Subsequently, during the first quarter of 2018, the revenue and average revenue per customer from the solution doubled those of the fourth quarter of 2017, which continued to exceed our expectations and original forecast and therefore, we further revised our forecast as of April 17, 2018.
- Our revenues from financial risk management solutions increased substantially in the fourth quarter of 2017 and the first quarter of 2018. Accordingly, we adjusted upward our projected revenue from financial risk management solutions.

The increase in the fair value of our common shares was also attributable to the decrease of discount rate from 20.5% as of September 30, 2017 to 18.5% as of January 1, 2018 and further to 16.5% as of April 17, 2018, and the decrease of DLOM from 10% as of September 30, 2017 to 9.5% as of April 17, 2018.

The increase in the fair value of the common shares from US\$9.81 per share as of April 17, 2018 to US\$12.75 per share, our initial public offering price, was primarily attributable to the organic growth of our business.

- Our revenues increased by 30.6% sequentially from RMB126.4 million in the three months ended March 31, 2018 to RMB165.1 million in the three months ended June 30, 2018;
- During the same periods, revenues from developer services increased from RMB12.5 million to RMB14.5 million, with the number of customers increasing from 894 to 1,005; and
- During the same periods, revenues from data solutions increased from RMB113.9 million to RMB150.6 million, with the number of customers increasing from 454 to 597, and the average spending per customer increasing from RMB251.0 thousand to RMB252.2 thousand.

The increase in the fair value of our common shares since April 17, 2018 was also attributable to the following factors:

- the launch of our initial public offering reduced the uncertainties associated with our initial public offering, and significantly lowered the discount for lack of marketability from 9.5% as of April 17, 2018 to 0% upon the completion of our initial public offering;
- as our preferred shares have been automatically converted into and re-designated as common shares upon the completion of our initial public offering, the increase in the estimated probability of initial public offering's success resulted in an allocation of a higher portion of our business enterprise value to common shares; and
- the completion of our initial public offering provided us with additional capital, enhance our ability to access capital markets to grow our
  business and raise our profile, allow us to make strategic acquisitions when opportunities arise, and enhance our brand value to attract new
  customers as a public company.

# **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 periods presented:

|   | For the Year Ended December 31, |            |           |          |
|---|---------------------------------|------------|-----------|----------|
|   | 2016                            | 2017       | 2018      | _        |
|   | RMB                             | RMB        | RMB       | US\$     |
| Selected Consolidated Cash Flow Data:                       |                                 | (in thousa | inds)     |          |
| Net cash used in operating activities                       | (42,152)                        | (75,532)   | (97,925)  | (14,241) |
| Net cash used in investing activities                       | (29,928)                        | (28,644)   | (139,206) | (20,246) |
| Net cash provided by financing activities                   | 135,348                         | 217,446    | 614,884   | 89,431   |
| Effect of exchange rate on cash and cash equivalents        |                                 |            |           |          |
| and restricted cash   | 2,450                           | (8,282)    | (9,352)   | (1,362)  |
| Net increase (decrease) in cash and cash equivalents        |                                 |            |           |          |
| and restricted cash   | 65,718                          | 104,988    | 368,401   | 53,582   |
| Cash and cash equivalents and restricted cash at the        |                                 |            |           |          |
| beginning of year or period                                 | 37,570                          | 103,288    | 208,276   | 30,292   |
| Cash and cash equivalents and restricted cash at the end of |                                 |            |           |          |
| the year or period  | 103,288                         | 208,276    | 576,677   | 83,874   |

We had net cash used in operating activities of RMB42.2 million, RMB75.5 million and RMB97.9 million (US\$14.2 million) for the years ended December 31, 2016, 2017 and 2018, respectively. The increase in net cash used in operating activities is driven by the rapid expansion of our business operations, as well as the growth in headcount to support such expansion and in preparation for our future growth. Our operating cash flow is 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 receivable represent primarily accounts receivable from the customers that purchased our data solutions. As of December 31, 2016, 2017 and 2018, our accounts receivable, net of allowance for doubtful accounts, were RMB9.4 million, RMB49.6 million and RMB141.9 million (US\$20.6 million), respectively. The increase reflected a significant growth in our business and revenues, especially our data solutions. Our accounts receivable turnover days increased from 36 days in 2016 to 37 days in 2017 and further to 48 days in 2018, which was due to the better credit terms we extended to certain qualified customers. Accounts receivable turnover days for a given period are equal to average balances of accounts 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 from whom we purchased ad inventory associated with online targeted marketing solutions. As of December 31, 2016, 2017 and 2018, our accounts payable were RMB1.1 million, RMB8.3 million and RMB18.8 million (US\$2.7 million), respectively. The increase reflected the growth of our targeted marketing solutions. Our accounts payable turnover days increased from 5 days in 2016 to 8 days in 2017 and further to 9 days in 2018, because we were able to negotiate better terms with the ad inventory suppliers as our business grew. 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) during the period and multiplied by the number of days during the period.

Our deferred revenue represent the cash payments made by our customers in advance of our provision of the data solutions and/or developer services they purchased from us, and our customer deposits represent the refundable cash deposits paid by our customers to us primarily in connection with our targeted marketing solutions. Due to the growth of our business, our deferred revenue and customer deposits increased substantially from RMB18.1 million as of December 31, 2016 to RMB49.6 million as of December 31, 2017 and further to RMB59.5 million (US\$8.7 million) as of December 31, 2018.

Our prepayments and other current assets represent primarily prepaid media cost, prepaid service fee and others. The increase in prepayments and other current assets from RMB13.5 million as of December 31, 2016 to RMB34.2 million as of December 31, 2017 and further to RMB80.6 million (US\$11.7 million) as of December 31, 2018 was primarily due to the growth of our targeted marketing solutions.

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 RMB19.7 million as of December 31, 2016 to RMB52.6 million as of December 31, 2017 and further to RMB76.7 million (US\$11.2 million) as of December 31, 2018 was primarily due to the growth in payroll and welfare accruals associated with the increase in our headcount.

Our primary sources of liquidity have been proceeds from equity and equity linked financing. As of December 31, 2018, we had RMB576.7 million (US\$83.9 million) in cash and cash equivalents and restricted cash, of which approximately 42.5% were held in U.S. dollars and the remainder was held in Renminbi and H.K. dollars.

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 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.

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 2018 was RMB97.9 million (US\$14.2 million). The principal items accounting for the difference between our net cash used in operating activities and our net loss of RMB66.2 million (US\$9.6 million) were a RMB19.9 million (US\$2.9 million) increase in deferred revenue and customer deposits, a RMB24.0 million (US\$3.5 million) increase in account liabilities and other current liabilities, and a RMB10.5 million (US\$1.5 million) increase in accounts payable, partially offset by a RMB 98.2 million (US\$14.3 million) increase in accounts receivable and a RMB46.4 million (US\$6.7 million) increase in prepayments and other current assets. The increases in accounts receivable, prepayments and other current assets, accounts payable, and deferred revenue and customer deposits were due to the growth of our business, especially the significant increase in revenues generated from our data solutions. The increase in accrued liabilities and other current liabilities was mainly due to the growth in payroll and welfare accruals associated with the increase in our headcount due to our business expansion in 2018.

Net cash used in operating activities in 2017 was RMB75.5 million. The principal items accounting for the difference between our net cash used in operating activities and our net loss of RMB90.3 million were a RMB31.1 million increase in deferred revenue and customer deposits, a RMB26.5 million increase in accrued liabilities and other current liabilities, and a RMB13.0 million increase in accounts payable, partially offset by a RMB48.3 million increase in accounts receivables and a RMB21.6 million increase in prepayments and other current assets. The increase in accrued liabilities and other current liabilities was mainly due to the growth in payroll and welfare accruals associated with the increase in our

headcount. The increases in deferred revenue and customer deposits, accounts receivable and accounts payable were due to the growth of our business. The increase in prepayments and other current assets is primarily due to the growth of our targeted marketing solutions.

Net cash used in operating activities in 2016 was RMB42.2 million. The principal items accounting for the difference between our net cash used in operating activities and our net loss of RMB61.4 million were a RMB14.5 million increase in accrued liabilities and other current liabilities and a RMB11.0 million increase in deferred revenue, partially offset by a RMB11.2 million increase in prepayments and other current assets. The increase in accrued liabilities and other current liabilities was mainly due to the growth in payroll and welfare accruals associated with the increase in our headcount. The increase in deferred revenue was due to the growth of our business. The increase in prepayment and other current assets is primarily due to the growth of our targeted marketing solutions.

## Investing activities

Net cash used in investing activities in 2018 was RMB139.2 million (US\$20.2 million), consisting of purchase of property and equipment, mainly servers, and purchase of long-term investments.

Net cash used in investing activities in 2017 was RMB28.6 million, consisting primarily of purchase of property and equipment, mainly servers, and purchase of long-term investment, partially offset by proceeds from maturity of time deposits.

Net cash used in investing activities in 2016 was RMB30.0 million, consisting primarily of purchase of property and equipment, mainly servers, and purchase of time deposits.

## Financing activities

Net cash provided by financing activities in 2018 was RMB614.9 million (US\$89.4 million), consisting primarily of proceeds from initial public offering.

Net cash provided by financing activities in 2017 was RMB217.4 million (US\$34.7 million), consisting of proceeds from the issuance of Series D preferred shares and certain Series C preferred shares.

Net cash provided by financing activities in 2016 was RMB135.3 million, consisting primarily of proceeds from the issuance of Series C preferred shares.

## Capital Expenditures

We made capital expenditures of RMB18.9 million, RMB28.4 million and RMB57.9 million (US\$8.4 million) in 2016, 2017 and 2018, respectively. Our capital expenditures mainly included our payment for purchases of property and equipment. We will continue to make such capital expenditures to support the expected growth of our business.

## **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 fits 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 "-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, 2018 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. Off-balance Sheet Arrangements

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.

## F. Tabular Disclosure of Contractual Obligations

The following table sets forth our contractual obligations as of December 31, 2018:

|                 |        | Less than 1 |                |           | More than |
|-----------------|--------|-------------|----------------|-----------|-----------|
|                 | Total  | year        | 1-3 years      | 3-5 years | 5 years   |
|                 |        | (in t       | housands of RM | B)        |           |
| Operating lease | 33,051 | 13,387      | 15,186         | 4,132     | 346       |

Our operating lease obligations relate to our leases of office premises and office equipment.

As of December 31, 2018, we had minimum payment obligations in the amount of RMB1.7 million (US\$0.3 million) under non-cancellable purchase commitment for bandwidth, which is scheduled to be paid within one year, and of RMB7.3 million (US\$1.1 million) under non-cancellable purchase commitment for consulting services, which is scheduled to be paid within one to two years.

## G. Safe Harbor

See "Forward-Looking Statements" on page 2 of this annual report.

# ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

# A. <u>Directors and Senior Management</u>

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                      | 38  | Chairman of the Board of Directors and Chief Executive Officer |
| Fei Chen                         | 46  | Co-founder and President                                       |
| Xin Huang                        | 30  | Chief Technology Officer                                       |
| Shan-Nen Bong                    | 47  | Chief Financial Officer  |
| Kwok Hin Tang                    | 39  | Director   |
| Siqi Liu                         | 37  | Director   |
| John Tiong Lu Koh                | 63  | Independent Director   |
| Peter Si Ngai Yeung              | 63  | 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. Fei Chen is our co-founder and has served as our president since October 2016. Mr. Chen has over 18 years of experience in the technology, media and telecom (TMT) sector, including 9 years of investment banking and research experience with Morgan Stanley, Merrill Lynch and Citigroup, and 9 years of corporate and startup experience in the high tech industry. From October 2013 to August 2016, he served as a managing director at Citigroup Asia, responsible for the China TMT investment banking business. Mr. Chen received a bachelor's degree from Tsinghua University in Beijing and received an MBA degree from University of Chicago Booth School of Business.

Mr. Xin Huang has served as our chief technology officer since January 2015. Mr. Huang has over 8 years of experience in software development, specializing in data mining. Prior to joining us, Mr. Huang served as a senior product director in charge of data mining and product development at Zhen'ai from February 2014 to November 2014. Prior to that, Mr. Huang served as a leading data scientist at Douban from June 2011 to February 2014. Mr. Huang received his bachelor's degree in software engineering from Northeastern University in China.

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. Kwok Hin Tang has served as our director since November 2014. Mr. Tang is a venture capitalist with 13 years of experience in corporate finance and venture capital investment in China and the U.S. 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.

Ms. Siqi Liu has served as our director since June 2018. Ms. Liu serves as co-executive president of Fosun RZ Capital. Ms. Liu has over 13 years of experience in the finance industry. Prior to joining Fosun RZ Capital, Ms. Liu served as investment director at Green Pine Capital Partners Co., Ltd. from September 2012 to May 2014. Prior to that, Ms. Liu was with Morgan Stanley Hong Kong from July 2006 to June 2012 and served as vice president of global capital markets since 2011. Ms. Liu was a chartered financial analyst and a PRC licensed lawyer. Ms. Liu received her bachelor's degree in communications engineering from Northeastern University in China and her master's degree in journalism and communications from Tsinghua University.

Mr. John Tiong Lu Koh has served as our director since July 2018. Mr. Koh has been the lead independent director of Mapletree Industrial Trust, one of the largest industrial REITs in Singapore, since January 2016 and its independent director since September 2010. 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 Library Board and 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, 2018, we paid cash compensation in an aggregate amount of approximately RMB2.2 million (US\$0.3 million) to our executive officers, and approximately RMB246 thousand (US\$36 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, 2019, options to purchase 5,494,811 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, 2019, options to purchase 2,523,488 Class A common shares and 12,550 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.

The following table summarizes, as of February 28, 2019, the awards granted under the 2014 Plan and the 2017 Plan to our directors and executive officers, excluding awards that were exercised, forfeited or canceled after the relevant grant dates.

|   | Common Shares<br>Underlying Options and | Exercise Price |   |   |
|---|---|----------------|---|---|
| Name  | Restricted Share Units                  | (US\$/Share)   | Date of Grant                                 | Date of Expiration                            |
| Weidong Luo                                     | _                                       | _              | _   | _   |
| Fei Chen  | 1,186,030                               | _              | October 31, 2016                              | October 31, 2026                              |
| Xin Huang                                       | 879,520                                 | 0.36 to 6.375  | Between May 13, 2015<br>and September 4, 2018 | Between May 13, 2025<br>and September 4, 2028 |
| Shan-Nen Bong                                   | *                                       | 5.396          | November 13, 2017 and<br>September 4, 2018    | November 13, 2027 and<br>September 4, 2028    |
| Kwok Hin Tang                                   | _                                       | _              | _   | _   |
| Siqi Liu  | _                                       | _              | _   | <u> </u>                                      |
| John Tiong Lu Koh                               | *(1)                                    | _              | September 4, 2018                             | September 4, 2028                             |
| Peter Si Ngai Yeung                             | *(1)                                    | _              | September 4, 2018                             | September 4, 2028                             |
| All directors and executive officers as a group | 2,374,605                               |                |   |   |

#### Notes:

- \* 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, 2019.
- (1) Represents restricted share units.

As of February 28, 2019, other employees as a group held outstanding options to purchase 5,656,244 Class A common shares of our company, at a weighted average exercise price of US\$1.17 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, two out of five of our directors meet the "independence" definition under the Nasdaq Stock Market Rules. As the Nasdaq Stock Market Rules permits a foreign private issuer like us to follow the corporate governance practices of its home country, we chose to rely on home country practice in lieu of the requirement to have a majority of independent directors on our board under Nasdaq 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.

Audit Committee. Our audit committee consists of Mr. John Tiong Lu Koh and Mr. Peter Si Ngai Yeung. Mr. Koh is the chairman of our audit committee. We have determined that Mr. Koh and Mr. Yeung 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 and Mr. Peter Si Ngai Yeung. Mr. Koh is the chairman of our compensation committee. We have determined that Mr. Koh and Mr. Yeung 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 and Mr. John Tiong Lu Koh. Mr. Yeung is the chairman of our nominating and corporate governance committee. We have determined that Mr. Yeung and Mr. Koh 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 act with skill and care. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved 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 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.

## D. Employees

We had a total of 296, 518 and 697 employees as of December 31, 2016, 2017 and 2018, respectively. The following table gives a breakdown of our employees as of December 31, 2018, by function:

|                            | Number |
|----------------------------|--------|
| Function:                  |        |
| Research and Development   | 328    |
| Sales and Marketing        | 233    |
| General and Administrative | 92     |
| Cost of Revenue            | 44     |
| Total                      | 697    |

As of December 31, 2018, we had 541 employees based in our headquarters in Shenzhen and a total of 156 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, 2019 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 76,500,012 common shares outstanding on an as-converted basis, consisting of 59,499,823 Class A common shares (excluding treasury shares) and 17,000,189 Class B common shares, as of February 28, 2019, excluding (i) 2,975,897 Class A common shares issuable upon the conversion of the zero coupon convertible notes due 2021 in the aggregate principal

amount of US\$35.0 million issued in April 2018, at an assumed initial conversion price of US\$11.7612 per common share, and (ii) 8,030,849 Class A common shares issuable upon the exercise of outstanding share options and restricted share units granted under our 2014 and 2017 Stock Incentive Plans.

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    | Class B                          | Total common<br>shares | Percentage of<br>total common<br>shares | Percentage of<br>aggregate<br>voting<br>power† |
| Directors and Executive Officers:**             |            |                                  |                        |   |  |
| Weidong Luo(1)                                  | 7,162,666  | 17,000,189                       | 24,162,855             | 31.6%                                   | 77.2%  |
| Fei Chen(2)                                     | 5,002,056  | _                                | 5,002,056              | 6.4%                                    | 2.2%   |
| Xin Huang(3)                                    | *          | _                                | *                      | *                                       | *  |
| Shan-Nen Bong(4)                                | *          | _                                | *                      | *                                       | *  |
| Kwok Hin Tang                                   | _          | _                                | _                      | _                                       | _  |
| Siqi Liu  | _          | _                                | _                      | _                                       | _  |
| John Tiong Lu Koh                               | _          | _                                | _                      | _                                       | _  |
| Peter Si Ngai Yeung                             | _          | _                                | _                      | _                                       | _  |
| All Directors and Executive Officers as a Group | 12,609,271 | 17,000,189                       | 14,309,460             | 37.9%                                   | 79.0%  |
|   |            |                                  |                        |   |  |
| Principal Shareholders:                         |            |                                  |                        |   |  |
| KK Mobile Limited(5)                            | 7,100,000  | 17,000,189                       | 24,100,189             | 31.5%                                   | 77.2%  |
| Mandra iBase Limited(6)                         | 14,988,074 | _                                | 14,988,074             | 19.5%                                   | 6.5%   |
| Entities affiliated with IDG-Accel(7)           | 7,837,640  | _                                | 7,837,640              | 10.2%                                   | 3.4%   |
| Fosun International Limited(8)                  | 6,727,358  | _                                | 6,727,358              | 8.8%                                    | 2.9%   |
| FIL Limited and its affiliated entities(9)      | 5,900,044  | _                                | 5,900,044              | 7.7%                                    | 2.6%   |
| Elite Bright International Limited(10)          | 3,816,026  | _                                | 3,816,026              | 5.0%                                    | 1.7%   |

#### 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, Fei Chen, Xin Huang and Shan-Nen Bong is 3/F, Building No. 7, Zhiheng Industrial Park, No. 15, Guankou Road 2, Anle Community, Nantou Street, Nanshan District, Shenzhen, Guangdong 518052, People's Republic of China. Mr. Kwok Hin Tang's business address is 10/F, Fung House, 19-20 Connaught Road Central, Hong Kong. Ms. Siqi Liu's business address is Room 747, 7th Floor, SCC Building A, Nanshan District, Shenzhen, People's Republic of China. 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) 94,000 ADSs, representing 62,666 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 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, 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.
- (3) Represents the Class A common shares Mr. Xin Huang has the right to acquire upon exercise of share options within 60 days after February 28, 2019.
- (4) 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, 2019.
- (5) Represents 7,100,000 Class A common shares and 17,000,189 Class B common shares held by KK Mobile Limited.
- (6) Represents 14,306,280 Class A common shares and 385,000 ADSs, representing 256,666 Class A common shares, directly held by Mandra iBase Limited, a British Virgin Islands company and 425,128 Class A common shares issuable to Mandra iBase Limited upon the conversion of the three-year convertible note in the principal amount of US\$5.0 million issued in April 2018, at an assumed initial conversion price of US\$11.7612 per common share, as reported on the Schedule 13G filed by Mandra iBase Limited and affiliated parties on February 11, 2019. 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.
- (7) Represents (i) 7,318,780 Class A common shares held by IDG-Accel China Growth Fund III L.P., a Cayman Islands limited partnership, and (ii) 518,860 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., IDG-Accel China III Investors L.P., and affiliated parties on February 11, 2019. The general partner of IDG-Accel China Growth Fund III L.P. is IDG-Accel China Growth Fund III Associates L.P., is IDG-Accel China Growth Fund III Associates L.P. is IDG-Accel China III Investors L.P. is IDG-Accel China Growth Fund GP III Associates Ltd. In 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 registered address of IDG-Accel China Growth Fund III L.P. and IDG-Accel China III Investors L.P. is 190 Elgin Avenue, George Town, Grand Cayman KY1-9005, Cayman Islands.
- (8) Represents 6,584,370 Class A common shares held by Greatest Investments Limited, a British Virgin Islands company, and 214,483 ADSs, representing 142,988 Class A common shares, held by Fidelidade Companhia de Seguros, S.A. and affiliated parties on January 30, 2019. The registered address of Greatest Investments Limited is c/o Vistra Corporate Service Centre, Wickhams Cay II, Road Town, Tortola, VG110, British Virgin Islands. Greatest Investments Limited is a wholly-owned subsidiary of Fosun International Limited, company organized under the laws of the Hong Kong Special Administrative Region of China and listed on the Main Board of the Hong Kong Stock Exchange.
- (9) Represents 5,900,044 Class A common shares beneficially owned by FIL Limited, as reported on the Schedule 13G filed by FIL Limited and affiliated parties on February 13, 2019. The address of FIL Limited is Pembroke Hall, 42 Crow Lane, Hamilton, Bermuda, HM19.
- (10) Represents 3,816,026 Class A common shares held by Elite Bright International Limited, a British Virgin Islands company.

To our knowledge, as of February 28, 2019, 7,449,580 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. Assuming all the notes are converted into our Class A common shares at this initial conversion price, we would issue 2,550,769 and 425,128 Class A common shares to Mercer Investments (Singapore) Pte. Ltd. and Mandra iBase Limited, respectively.

Investor Rights Agreement and Registration Rights

In connection with the issuance of convertible notes to Mercer Investments (Singapore) Pte. Ltd. and Mandra iBase Limited on April 17, 2018, we entered into an investor rights agreement on the same date. The investor rights agreement provides for certain special rights to the investors 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.

We have granted certain registration rights to the holders of our convertible notes under the investor rights agreement. Set forth below is a description of the registration rights.

Demand Registration Rights. At any time after the date that is 12 months after the closing of an initial public offering, holders of at least 50% of the convertible notes (or shares issued on conversion of the notes) then outstanding have 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 holders of our convertible notes 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 first 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 noteholders 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 noteholders' 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 convertible noteholder, when the registrable securities proposed to be sold by such holder may then be sold without registration in any 90-day period pursuant to Rule 144 under the Securities Act.

### **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" and "2017 Stock Incentive Plan."

# Transactions with Our Chief Executive Officer and Related Entities

Amounts due to Our Chief Executive Officer. As of December 31, 2016 and 2017, we had amounts of RMB5.6 million and RMB5.6 million, respectively, 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., 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 2016, 2017 and 2018, we provided targeted marketing services to Shenzhen Weixunyitong in the amount of RMB344,000, RMB2.8 million and RMB1.0 million (US\$0.1 million), respectively. As of December 31, 2016, 2017 and 2018, we had amounts of RMB65,000, RMB0.9 million and RMB1.5 million (US\$0.2 million), respectively, due from Shenzhen Weixunyitong.

In 2016, 2017 and 2018, we purchased ad inventory from and placed ads on the game apps of Shenzhen Weixunyitong in the amount of RMB0.4 million, RMB0.7 million and RMB20.9 million (US\$3.0 million), respectively. During the same periods, we also sub-leased office space from Shenzhen Weixunyitong for amounts of RMB1.2 million, RMB1.6 million and RMB0.5 million (US\$69 thousand), respectively. As of December 31, 2016, 2017 and 2018, we had aggregate amounts of RMB0.5 million, RMB0.5 million and RMB8.9 million (US\$1.3 million), 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 2017 and 2018, we provided certain data solutions to Guangzhou Tianlang in an amount of RMB0.8 million and RMB1.5 million (US\$0.2 million). As of December 31, 2017 and 2018, we had amount of RMB0.3 million and RMB1.3 million (US\$0.2 million), respectively, due from Guangzhou Tianlang.

In 2016, we incurred marketing expenses of RMB0.9 million through Guangzhou Tianlang. As of December 31, 2016, 2017 and 2018, we had amounts of RMB0.2 million, nil and nil, 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, 2016, 2017 and 2018, we had amounts of RMB26,000, RMB40,000 and nil, respectively, due from KK Mobile Limited, representing unpaid capital contribution. We received payment of the outstanding balance from the shareholder in June 2018.

Amounts due from Stable View Limited and Focus Axis Limited. Stable View Limited and Focus Axis Limited are holders of our common shares and wholly owned by Xiaodao Wang and Jiawen Fang, respectively. As of December 31, 2016, 2017 and 2018, we had amounts of RMB2,000, RMB17,000 and nil, respectively, due from each of Stable View Limited and Focus Axis Limited, representing unpaid capital contribution. We received payment of the outstanding balance from the shareholders in June 2018.

Amount due from Our President. As of December 31, 2018, we had amount of RMB1.7 million (US\$0.3 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. <u>Interests of Experts and Counsel</u>

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. 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

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

## 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. <u>Dilution</u>

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 Law (2018 Revision), 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 shareholders. 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 profit 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, 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 Law 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 Law 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 transfer 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 Law, 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 Law 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 or series of shares, the rights attached to any class or series of shares (unless otherwise provided by the terms of issue of the shares of that class or series), whether or not our company is being wound-up, may be 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 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 shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu with such existing class of shares.

Issuance of Additional Shares. Our memorandum 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 memorandum 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. 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 Law. The Companies Law 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.

No stamp duty is payable in respect of the issue of our common shares or on an instrument of transfer in respect of our common shares.

## 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 transferror, or the transfere 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."

## **United States Federal Income Tax Considerations**

The following discussion is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of the ADSs or our common shares by a U.S. Holder (as defined below) that acquires the ADSs and holds the ADSs or our common shares as "capital assets" (generally, property held for investment) under the U.S. Internal Revenue Code of 1986, as amended, or the Code. This discussion is based upon existing U.S. federal tax law, which is subject to differing interpretations or change, possibly with retroactive effect. No ruling has been sought from the Internal Revenue Service, or the IRS, with respect to any U.S. federal income tax consequences described below, and there can be no assurance that the IRS or a court will not take a contrary position. This discussion, moreover, does not address the U.S. federal estate, gift, Medicare, and alternative minimum tax considerations, or any state, local and non-U.S. tax considerations, relating to the ownership or disposition of the ADSs or our common shares (other than the discussion below relating to certain withholding rules and the U.S.-PRC income tax treaty (the "Treaty")). The following summary does not address all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual circumstances or to persons in special tax situations such as:

- banks and other financial institutions;
- insurance companies;
- pension plans;
- cooperatives;
- regulated investment companies;
- real estate investment trusts;
- broker-dealers;
- traders that elect to use a mark-to-market method of accounting;
- certain former U.S. citizens or long-term residents;
- tax-exempt entities (including private foundations);
- persons liable for alternative minimum tax;
- holders who acquire their ADSs or common shares pursuant to any employee share option or otherwise as compensation;
- investors that will hold their ADSs or common shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes;
- investors that have a functional currency other than the U.S. dollar;
- $\bullet \qquad \text{persons that actually or constructively own } 10\% \text{ or more of our stock (by vote or value)}; \\$
- persons required to accelerate the recognition of any item of gross income with respect to their ADSs or common shares as a result of such income being recognized on an applicable financial statement; or
- partnerships or other entities taxable as partnerships for U.S. federal income tax purposes, or persons holding ADSs or common shares through such entities;

all of whom may be subject to tax rules that differ significantly from those discussed below.

Each U.S. Holder is urged to consult its tax advisor regarding the application of U.S. federal taxation to its particular circumstances, and the state, local, non-U.S. and other tax considerations of the ownership and disposition of the ADSs or our common shares.

#### General

For purposes of this discussion, a "U.S. Holder" is a beneficial owner of the ADSs or our 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 in, or organized under the law of the United States or any state thereof or the District of Columbia;
- an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust (A) the administration of which is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise validly elected to be treated as a U.S. person under the Code.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of the ADSs or our common shares, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partnerships holding the ADSs or our common shares and their partners are urged to consult their tax advisors regarding an investment in the ADSs or our common shares.

For U.S. federal income tax purposes, a U.S. Holder of ADSs will generally be treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a U.S. Holder of the ADSs will be treated in this manner. Accordingly, deposits or withdrawals of common shares for ADSs will generally not be subject to U.S. federal income tax.

### Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be classified as a PFIC, for 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 (the "asset test"). For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the company's goodwill and other unbooked intangibles are taken into account. Passive income generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the 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 our income and assets, and the market value of our ADSs, we do not believe we were a PFIC for the taxable year ended December 31, 2018. However, no assurance can be given in this regard because the determination of whether we will be or become a PFIC is a factual determination made annually that will depend, in part, upon the composition of our income and assets. Fluctuations in the market price of the ADSs may cause us to be classified as a PFIC for the current or future taxable years because the value of our assets for purposes of the asset test, including the value of our goodwill and unbooked intangibles, may be determined by reference to the market price of the ADSs from time to time (which may be volatile). If our market capitalization subsequently declines, we may be or become classified as a PFIC for the current taxable year or future taxable years. Furthermore, the composition of our income and assets may also be affected by how, and how quickly, we use our liquid assets and the cash raised in our initial public offering. 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.

If we are classified as a PFIC for any year during which a U.S. Holder holds the ADSs or our common shares, the PFIC rules discussed below under "— Passive Foreign Investment Company Rules" generally will apply to such U.S. Holder for such taxable year, and unless the U.S. Holder makes certain elections, will apply in future years even if we cease to be a PFIC.

The discussion below under "—Dividends" and "—Sale or Other Disposition" is written on the basis that we are not and will not be or become classified as a PFIC for U.S. federal income tax purposes. The U.S. federal income tax rules that apply generally if we are treated as a PFIC are discussed below under "—Passive Foreign Investment Company Rules."

### Dividends

Any cash distributions paid on the ADSs or our common shares (including the amount of any PRC tax withheld) out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of common shares, or by the depositary, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution we pay will generally be treated as a "dividend" for U.S. federal income tax purposes. Dividends received on the ADSs or our common shares will not be eligible for the dividends received deduction allowed to corporations in respect of dividends received from U.S. corporations.

Individuals and other non-corporate U.S. Holders will 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 or our common shares on which the dividends are paid 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 benefit 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. For this purpose, ADSs listed on the Nasdaq Global Market will generally be considered to be readily tradable on an established securities market in the United States. U.S. Holders are urged to consult their tax advisors regarding the availability of the lower rate for dividends paid with respect to the ADSs or our common shares.

In the event that we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law, we may be eligible for the benefits of the Treaty. If we are eligible for such benefits, dividends we pay on our common shares, regardless of whether such shares are represented by the ADSs, and regardless of whether the ADSs are readily tradable on an established securities market in the United States, would be eligible for the reduced rates of taxation described in the preceding paragraph.

For U.S. foreign tax credit purposes, dividends paid on the ADSs or our Class A common shares generally will be treated as income from foreign sources and generally will constitute passive category income. If PRC withholding taxes apply to dividends paid to a U.S. Holder with respect to the ADSs or our common shares, such U.S. Holder may be able to obtain a reduced rate of PRC withholding taxes under the Treaty if certain requirements are met. In addition, subject to certain conditions and limitations, PRC withholding taxes on dividends that are non-refundable under the Treaty may be treated as foreign taxes eligible for credit against a U.S. Holder's U.S. federal income tax liability. A U.S. Holder who does not elect to claim a foreign tax credit for foreign tax withheld may instead claim a deduction for U.S. federal income tax purposes, in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex and U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

# Sale or Other Disposition

A U.S. Holder will generally recognize gain or loss upon the sale or other disposition of the ADSs or our common shares in an amount equal to the difference between the amount realized upon the disposition and the holder's adjusted tax basis in such ADSs or common shares. The gain or loss will generally be capital gain or loss. Individuals and other non-corporate U.S. Holders who have held the ADSs or our common shares for more than one year will generally be eligible for reduced tax rates. The deductibility of a capital loss may be subject to limitations. Any such gain or loss that the U.S. Holder recognizes will generally be treated as U.S. source income or loss for foreign tax credit limitation purposes, which will generally limit the availability of foreign tax credits. However, in the event we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law, we may be eligible for the benefits of the Treaty. In such event, if PRC tax were to be imposed on any gain from the disposition of the ADSs or our common shares, a U.S. Holder that is eligible for the benefits of the Treaty may elect to treat such gain as PRC source income. U.S. Holders are urged to consult their tax advisors regarding the creditability of any PRC tax.

### Passive Foreign Investment Company Rules

If we are classified as a PFIC for any taxable year during which a U.S. Holder holds the ADSs or our common shares, and unless the U.S. Holder makes a mark-to-market election (as described below), the U.S. Holder will generally be subject to special tax rules on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125 percent of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs or our common shares), and (ii) any gain realized on the sale or other disposition including, under certain circumstances, a pledge, of the ADSs or our common shares. Under the PFIC rules:

- the excess distribution or gain will be allocated ratably over the U.S. Holder's holding period for the ADSs or common shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC (each, a "pre-PFIC year"), will be taxable as ordinary income; and
- the amount allocated to each prior taxable year, other than a pre-PFIC year, will be subject to tax at the highest tax rate in effect for individuals or corporations, as appropriate, for that year, increased by an additional tax equal to the interest on the resulting tax deemed deferred with respect to each such taxable year.

If we are a PFIC for any taxable year during which a U.S. Holder holds the ADSs or our common shares and any of our subsidiaries, our VIE or any of the subsidiaries of our VIE entity is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. Holders are urged to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries, our VIE or any of the subsidiaries of our VIE.

As an alternative to the foregoing rules, a U.S. Holder of "marketable stock" (as defined below) in a PFIC may make a mark-to-market election with respect to such stock. If a U.S. Holder makes this election with respect to the ADSs, the holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of the ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the amount previously included in income as a result of the mark-to-market election. The U.S. Holder's adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes a mark-to-market election in respect of the ADSs and we cease to be classified as a PFIC, the holder will not be required to take into account the gain or loss described above during any period that we are not classified as a PFIC. If a U.S. Holder makes a mark-to-market election, any gain such U.S. Holder recognizes upon the sale or other disposition of the ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election.

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 United States Treasury regulations (although a lower threshold applies for the quarter in which the initial public offering occurs). The ADSs, but not our common shares, are treated as marketable stock upon their listing on the Nasdaq Global Market. We anticipate that the ADSs should qualify as being regularly traded, but no assurances may be given in this regard.

Because a mark-to-market election technically cannot be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the PFIC rules with respect to such U.S. Holder's indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

If a U.S. Holder owns the ADSs or our common shares during any taxable year that we are a PFIC, the holder must generally file an annual IRS Form 8621. You should consult your tax advisor regarding the U.S. federal income tax consequences of owning and disposing of the ADSs or our common shares if we are or become a PFIC.

## F. Dividends and Paying Agents

Not applicable.

## G. Statement by Experts

Not applicable.

# H. Documents on Display

We 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. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. 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

#### Inflation

To date, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the year-over-year percent changes in the consumer price index for December 2016, 2017 and 2018 were increases of 2.1%, 1.8% and 1.9%, respectively. Although we have not been materially affected by inflation in the past, we may be affected if China experiences higher rates of inflation in the future.

# **Market Risks**

## Foreign Exchange Risk

Substantially all of our revenues and expenses are denominated in Renminbi. The value of the 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. In July 2005, the PRC government changed its decades-old policy of pegging the value of the Renminbi to the U.S. dollar, and the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation subsided and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The Renminbi appreciated 6.9% against the U.S. dollar in 2017, while depreciation of the Renminbi against the U.S. dollar was approximately 4.8% in 2018. 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.

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 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 amounts available to us.

As of December 31, 2018, we had Renminbi-denominated cash balance of approximately RMB323.8 million and U.S. dollar-denominated cash balance of US\$36.4 million. Assuming we had converted RMB323.8 million into U.S. dollars at the exchange rate of RMB6.8755 for US\$1.00 as of December 28, 2018, our U.S. dollar cash balance would have been US\$83.5 million. If the Renminbi had depreciated by 10% against the U.S. dollar, our U.S. dollar cash balance would have been US\$79.2 million instead. Assuming we had converted US\$36.4 million into Renminbi at the exchange rate of RMB6.8755 for US\$1.00 as of December 28, 2018, our Renminbi cash balance would have been RMB574.1 million. If the Renminbi had depreciated by 10% against the U.S. dollar, our Renminbi cash balance would have been RMB599.1 million instead.

Any significant depreciation of the Renminbi may materially and adversely affect our revenues, earnings and financial position as reported in U.S. dollars. To the extent that we need to convert U.S. dollars we received 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 RMB amount we would receive from the conversion. Conversely, if we decide to convert our RMB amounts 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 amount available to us.

# 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. <u>Debt Securities</u>

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 ordinary  |  |
|---|--|
| shares or ADS holders must pay:   | For:   |
| \$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)  | Issuance of ADSs, including issuances resulting from a distribution of<br>Class A common shares or rights or other property  |
|   | <ul> <li>Cancellation of ADSs for the purpose of withdrawal, including if the<br/>deposit agreement terminates</li> </ul>  |
| \$0.05 (or less) per ADS  | Any cash distribution to ADS holders   |
| 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 | Distribution of securities distributed to holders of deposited securities<br>(including rights) that are distributed by the depositary to ADS<br>holders                       |
| \$0.05 (or less) per ADS per calendar year  | Depositary services  |
| Registration or transfer fees   | 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 |
| Expenses of the depositary  | Cable and facsimile transmissions (when expressly provided in the deposit agreement)   |
|   | Converting foreign currency to U.S. dollars  |
| 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 | As necessary   |
| Any charges incurred by the depositary or its agents for servicing the deposited securities   | 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. For the year ended December 31, 2018, we received reimbursement in the amount of approximately RMB966,000 (US\$140,000) 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, 2018, US\$17.0 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\$2.0 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**

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this report, as required by Rule 13a-15(b) under the Exchange Act.

Based upon that evaluation, our management has concluded that, as of December 31, 2018, our disclosure controls and procedures were effective in ensuring that the information required to be disclosed by us in the reports that we file and furnish under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, to allow timely decisions regarding required disclosure.

# Management's Annual Report on Internal Control over Financial Reporting

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report by our independent registered public accounting firm due to a transition period established by rules of the SEC for newly listed public companies.

# **Internal Control over Financial Reporting**

In connection with the audits of our consolidated financial statements as of December 31, 2017 and 2016 and for the years ended December 31, 2017 and 2016, we and our independent registered public accounting firm identified a material weakness in our internal control over financial reporting. As defined in the standards established by the U.S. Public Company Accounting Oversight Board, a "material weakness" is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness that has been identified related to our lack of sufficient financial reporting personnel with appropriate level of knowledge and experience in application of U.S. GAAP and SEC reporting requirements to properly address complex U.S. GAAP accounting issues and to prepare and review our consolidated financial statements and related disclosures to fulfill U.S. GAAP and SEC financial reporting requirements.

After identifying the material weakness, we implemented measures designed to improve our internal control over financial reporting to remediate the material weakness, including the following: (i) hired a chief financial officer, an additional financial reporting manager and an additional financial manager with experience in U.S. GAAP accounting and SEC reporting to lead accounting and financial reporting matters; and (ii) hired an internal audit manager with experience in SOX requirements and adopting accounting and internal control guidance on U.S. GAAP and SEC reporting.

In addition, we have started to take a number of other measures to strengthen our internal control over financial reporting, including: (i) continuing to upgrade our financial system to enhance its effectiveness and enhance control of financial analysis; (ii) continuing to establish effective oversight and clarifying reporting requirements for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are accurate, complete and in compliance with U.S. GAAP and SEC reporting requirements; (iii) continuing to organize regular training for our accounting staffs, especially training related to U.S. GAAP and SEC reporting requirements; and (iv) continuing to obtain advisory services from professional consultants with experience in SOX requirements and internal audit guidance on SEC reporting.

Because such remediation measures were not fully implemented, our management concluded that the material weakness still existed as of December 31, 2018. We expect to complete the measures discussed above by the end of 2019 and will continue to implement measures to remediate our internal control deficiencies in order to meet the deadline imposed by Section 404 of the Sarbanes Oxley Act.

## Changes in Internal Control over Financial Reporting

Other than as described above, 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 adopted a code of business conduct and ethics 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.

|               | For the Year End | For the Year Ended December 31, |  |  |
|---------------|------------------|---------------------------------|--|--|
|               | 2017             | 2018                            |  |  |
|               | (in thousan      | ds of RMB)                      |  |  |
| Audit fees(1) | 280              | 7,697                           |  |  |
| Tax fees(2)   | _                | 318                             |  |  |

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, including audit fees relating to our initial public offering in 2018.
- (2) "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 2018, 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 November 2018, our board of directors authorized a share repurchase program, under which we may repurchase up to US\$10 million of the ADSs or our common shares over six months from November 20, 2018 through May 19, 2019. The share repurchase program was publicly announced on November 20, 2018.

The table below is a summary of the shares repurchased by us in 2018. All shares were repurchased in the open market pursuant to the share repurchase program announced on November 20, 2018.

|                                 |           |          | Total Number |                  |
|---------------------------------|-----------|----------|--------------|------------------|
|                                 |           |          | of ADSs      |                  |
|                                 |           |          | Purchased as | Approximate      |
|                                 | Total     | Average  | Part of the  | Dollar Value of  |
|                                 | Number    | Price    | Publicly     | ADSs that May    |
|                                 | of ADSs   | Paid Per | Announced    | Yet Be Purchased |
| Period                          | Purchased | ADS      | Plan         | Under the Plan   |
| November 28 – November 30, 2018 | 1,500     | US\$6.20 | 1,500        | US\$9,990,700    |
| December 1 – December 31, 2018  | 67,955    | US\$6.75 | 67,955       | US\$9,532,004    |
| Total                           | 69,455    | US\$6.73 | 69,455       | US\$9,532,004    |

# ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

### ITEM 16G. CORPORATE GOVERNANCE

As a Cayman Islands 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. The Nasdaq Stock Market Rules require that a majority of a Nasdaq-listed company's board of directors be independent directors and that its audit committee has a minimum of three members. Our Cayman Islands counsel has provided a letter to Nasdaq dated July 3, 2018 certifying that under Cayman Islands law, we are not required to follow or comply with the requirement that a majority of our board members be independent directors and that the audit committee of our board of directors has a minimum of three members. Nasdaq has acknowledged the receipt of such letter and our home country practice with respect to the composition of our board of directors and our audit committee.

As of the date of this annual report, our board of directors consists of five directors, two of which meet the "independence" requirements of Rule 5605(c)(2) of the Nasdaq Stock Market Rules and Rule 10A-3 under the Exchange Act. Our audit committee consists of two members, each of whom is an independent director. See "Item 3. Key Information—D. Risk Factors—Risks Related to The ADSs—As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the Nasdaq listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the Nasdaq listing standards."

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.

# 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<br>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. 333-225993))   |
| 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))  |
| 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               | 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))   |
| 4.4               | 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))  |
| 4.5               | 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))  |
| 4.6               | 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)) |
| 4.7               | 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))                                |
| 4.8               | 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))                                      |
| 4.9               | 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))  |
| 4.10              | 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))          |
|                   | 105   |

| Exhibit<br>Number | Description of Document  |
|-------------------|--|
| 4.11              | Series D Preferred Share Purchase Agreement among the Registrant, Fidelity Funds, Fidelity China Special Situations PLC, Fidelity Investment Funds and certain other parties thereto dated May 10, 2017 (incorporated herein by reference to Exhibit 10.12 to the Form F-1 filed on June 29, 2018 (File No. 333-225993)) |
| 4.12              | Share Redemption Agreement between the Registrant and T.C.L. Industries Holdings (H.K.) Ltd. dated March 15, 2018 (incorporated herein by reference to Exhibit 10.13 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))   |
| 4.13              | Subscription Agreement among the Registrant, Mercer Investments (Singapore) Pte. Ltd., Mandra iBase Limited and certain other parties thereto dated April 11, 2018 (incorporated herein by reference to Exhibit 10.14 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))                                      |
| 4.14              | Investor Rights Agreement among the Registrant, Mercer Investments (Singapore) Pte. Ltd., Mandra iBase Limited and certain other parties thereto dated April 17, 2018 (incorporated herein by reference to Exhibit 10.15 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))                                   |
| 4.15              | Definitive Certificate for the Convertible Notes issued by the Registrant to Mercer Investments (Singapore) Pte. Ltd. dated April 17, 2018 (incorporated herein by reference to Exhibit 10.16 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))  |
| 4.16              | Definitive Certificate for the Convertible Notes issued by the Registrant to Mandra iBase Limited dated April 17, 2018 (incorporated herein by reference to Exhibit 10.17 to the Form F-1 filed on June 29, 2018 (File No. 333-225993))  |
| 4.17              | Form of Underwriting Agreement among the Registrant, Goldman Sachs (Asia) L.L.C., Credit Suisse Securities (USA) LLC and Deutsche Bank Securities Inc. and certain selling shareholders named therein (incorporated herein by reference to Exhibit 1.1 to the Form F-1/A filed on July 23, 2018 (File No. 333-225993))   |
| 8.1*              | List of Subsidiaries and Consolidated Variable Interest Entity of the Registrant   |
| 11.1*             | First Amended and Restated Code of Business Conduct and Ethics of the Registrant   |
| 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*          | XBRL Instance Document   |
| 101.SCH*          | XBRL Taxonomy Extension Scheme Document  |
| 101.CAL*          | XBRL Taxonomy Extension Calculation Linkbase Document  |
| 101.DEF*          | XBRL Taxonomy Extension Definition Linkbase Document   |
| 101.LAB*          | XBRL Taxonomy Extension Label Linkbase Document  |
| 101.PRE*          | XBRL Taxonomy Extension Presentation Linkbase 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 3, 2019

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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, 2017 and 2018, the related consolidated statements of comprehensive loss, shareholders' deficit and cash flows for each of the three years in the period ended December 31, 2018, 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, 2017 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, 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 3, 2019

# CONSOLIDATED BALANCE SHEETS

# (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

|   | Note | 2017<br>PMD | 2018    | TICE    |
|---|------|-------------|---------|---------|
| ASSETS  |      | RMB         | RMB     | US\$    |
| Current assets:   |      |             |         |         |
| Cash and cash equivalents   |      | 208,161     | 576,562 | 83,857  |
| Restricted cash   |      | 115         | 115     | 17      |
| Accounts receivable, net of allowances of RMB3,462 and RMB9,308 (US\$1,354) as of December 31, 2017 and 2018, respectively  | 3    | 49,594      | 141,911 | 20,640  |
| Prepayments and other current assets  | 4    | 34,228      | 80,578  | 11,719  |
| Amounts due from related parties  | 16   | 1,260       | 4,564   | 664     |
| Total current assets  | 10   | 293,358     | 803,730 | 116,897 |
| Non-current assets:   |      | 273,336     |         | 110,077 |
| Property and equipment, net   | 5    | 53,023      | 92,874  | 13,508  |
| Intangible assets, net  | 6    | 283         | 1,531   | 223     |
| Long-term investments   | 7    | 10,980      | 79,696  | 11,591  |
| Other non-current assets  | ,    | 1,806       | 14,237  | 2,071   |
| Total non-current assets  |      | 66,092      | 188,338 | 27,393  |
| Total assets  |      | 359,450     | 992,068 | 144,290 |
| LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' DEFICIT   |      | 337,430     | 772,000 | 144,270 |
| Current liabilities:  |      |             |         |         |
| Accounts payable (including accounts payable of the variable interest entity ("VIE") without recourse to the Company of RMB8,340 and RMB18,683 (US\$2,717) as of December 31, 2017 and 2018,                        |      |             |         |         |
| respectively)   |      | 8,340       | 18,811  | 2,736   |
| Deferred revenue and customer deposits (including deferred revenue and customer deposits of the VIE without recourse to the Company of RMB48,085 and RMB55,625 (US\$8,091) as of December 31, 2017 and              |      |             |         |         |
| 2018, respectively)   | 8    | 49,557      | 59,483  | 8,651   |
| Accrued liabilities and other current liabilities (including accrued liabilities and other current liabilities of the VIE without recourse to the Company of RMB31,631 and RMB59,556 (US\$8,662) as of December 31, |      |             |         |         |
| 2017 and 2018, respectively)  | 9    | 52,639      | 76,666  | 11,151  |
| Amounts due to related parties (including amount due to related parties of the VIE without recourse to the Company of RMB459 and RMB8,864 (USD\$1,289) as of December 31, 2017 and 2018,                            |      |             |         |         |
| respectively)   | 16   | 6,110       | 8,864   | 1,289   |
| Total current liabilities   |      | 116,646     | 163,824 | 23,827  |
| Non-current liabilities:  |      |             |         |         |
| Other non-current liabilities (including other non-current liabilities of the VIE without recourse to the Company of RMB216 and RMB140 (US\$20) as of December 31, 2017 and   |      |             |         |         |
| 2018, respectively)   |      | 216         | 140     | 20      |
| Deferred tax liabilities (including deferred tax liabilities of the VIE without recourse to the Company of RMB5 and RMB nil (US\$ nil) as of December 31, 2017 and 2018, respectively)                              | 12   | 5           | _       | _       |
| Deferred revenue (including deferred revenue of the VIE without recourse to the Company of RMB330 and RMB nil (US\$ nil) as of  |      | 220         | 10.265  | 1 402   |
| December 31, 2017 and 2018, respectively)  Convertible notes (including deferred revenue of the VIE without recourse to the Company of RMB nil and RMB nil (US\$ nil) as of   |      | 330         | 10,265  | 1,493   |
| December 31, 2017 and 2018, respectively)   | 13   |             | 216,179 | 31,442  |
| Total non-current liabilities   |      | 551         | 226,584 | 32,955  |
| Total liabilities   |      | 117,197     | 390,408 | 56,782  |
| Commitments and contingencies   | 14   |             |         |         |
| Mezzanine equity  |      |             |         |         |
|   |      |             |         |         |

# CONSOLIDATED BALANCE SHEETS (continued)

# (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

| Series A contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 11,111,120 and nil shares authorized, issued and outstanding  |     |           |           |          |
|---|-----|-----------|-----------|----------|
| as of December 31, 2017 and 2018, respectively)   | 10  | 26,979    | _         | _        |
| Series B contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 7,936,510 and nil shares authorized, issued and outstanding as of   | 10  | 52 722    |           |          |
| December 31, 2017 and 2018, respectively)   | 10  | 52,723    | _         | _        |
| Series C contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 4,999,540 and nil shares authorized, issued and outstanding as of December 31, 2017 and 2018, respectively)                   | 10  | 168,317   |           |          |
| Series D contingently redeemable convertible preferred shares (par value  | 10  | 108,317   | _         | _        |
| of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 5,559,487 and nil shares authorized, issued and outstanding  |     |           |           |          |
| as of December 31, 2017 and 2018, respectively)   | 10  | 218,618   | <u> </u>  | _        |
| Total mezzanine equity  |     | 466,637   |           | <u> </u> |
| Shareholders' (deficit) equity  |     |           |           |          |
| Common shares (par value of US\$0.0001 and nil per share as of December 31, 2017 and 2018; 470,393,343 and 50,000,000 shares authorized as of December 31, 2017 and 2018, 42,666,670 and nil shares issued and  | 16  | 26        |           |          |
| outstanding as of December 31, 2017 and 2018, respectively)   | 15  | 26        |           | _        |
| Class A common shares (par value of nil and US\$0.0001 per share as of December 31, 2017 and 2018; nil and 4,920,000,000 shares authorized as of December 31, 2017 and 2018, nil and 59,547,823 shares issued and outstanding as of December 31, 2017 and 2018, respectively) | 15  | _         | 37        | 5        |
| Class B common shares (par value of nil and US\$0.0001 per share as of December 31, 2017 and 2018; nil and 30,000,000 shares authorized as of December 31, 2017 and 2018, nil and 17,000,189 shares issued  |     |           |           |          |
| and outstanding as of December 31, 2017 and 2018)   | 15  | _         | 11        | 2        |
| Treasury shares (nil and 46,303 class A common shares as of December 31,  | 1.5 |           | (2.165)   | (460)    |
| 2017 and 2018, respectively)  | 15  | 12 (00    | (3,165)   | (460)    |
| Additional paid-in capital  |     | 13,689    | 944,500   | 137,372  |
| Accumulated deficit   |     | (234,810) | (348,123) | (50,632) |
| Accumulated other comprehensive loss  |     | (3,289)   | 8,400     | 1,221    |
| Total shareholders' (deficit) equity  |     | (224,384) | 601,660   | 87,508   |
| Total liabilities, mezzanine equity and shareholders' deficit   |     | 359,450   | 992,068   | 144,290  |

# 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 | 2016                    | 2017       | 2013       | 3          |
|  |      | RMB                     | RMB        | RMB        | US\$       |
| <b>Revenues</b> (including related party amounts of RMB3,507 and RMB2,543 (US\$370) for the years ended December 31, |      |                         |            |            |            |
| 2017 and 2018, respectively)   | 17   | 70,322                  | 284,709    | 714,141    | 103,868    |
| Cost of revenues (including related party amounts of RMB788 and RMB19,763 (US\$2,874) for the years ended            |      |                         |            |            |            |
| December 31, 2017 and 2018, respectively)  |      | (47,722)                | (213,370)  | (517,074)  | (75,205)   |
| Gross profit   |      | 22,600                  | 71,339     | 197,067    | 28,663     |
| Operating expenses   |      |                         |            |            |            |
| Research and development (including related party amounts of RMB762 and RMB200 (US\$29) for the years ended          |      |                         |            |            |            |
| December 31, 2017 and 2018, respectively)  |      | (33,717)                | (71,651)   | (134,358)  | (19,542)   |
| Sales and marketing (including related party amounts of RMB541 and RMB178 (US\$26) for the years ended               |      | (22.052)                | (=0.5=0)   | (0.2.0.2.) | 44.00      |
| December 31, 2017 and 2018, respectively)  |      | (33,062)                | (59,673)   | (83,853)   | (12,196)   |
| General and administrative (including related party amounts of RMB138 and RMB59 (US\$9) for the years ended          |      | 44.400                  |            | <b></b>    |            |
| December 31, 2017 and 2018, respectively)  |      | (13,480)                | (32,431)   | (71,641)   | (10,419)   |
| Total operating expenses   |      | (80,259)                | (163,755)  | (289,852)  | (42,157)   |
| Loss from operations   |      | (57,659)                | (92,416)   | (92,785)   | (13,494)   |
| Foreign exchange (loss)/ gain, net   |      | (328)                   | (2,724)    | 264        | 38         |
| Interest income  |      | 283                     | 314        | 3,657      | 532        |
| Interest expense   |      | _                       | (122)      | (7,054)    | (1,026)    |
| Other income   |      | 232                     | 677        | 8,449      | 1,229      |
| Change in fair value of derivative liability   | 19   |                         |            | 21,302     | 3,098      |
| Loss before income taxes   |      | (57,472)                | (94,271)   | (66,167)   | (9,623)    |
| Income tax (expense) benefit   | 12   | (3,910)                 | 3,980      | (30)       | (4)        |
| Net loss   |      | (61,382)                | (90,291)   | (66,197)   | (9,627)    |
| Net loss attributable to Aurora Mobile Limited's shareholders  |      | (61,382)                | (90,291)   | (66,197)   | (9,627)    |
| Accretion of contingently redeemable   |      |                         |            |            |            |
| convertible preferred shares   |      | (12,427)                | (26,391)   | (24,094)   | (3,504)    |
| Net loss attributable to common shareholders   |      | (73,809)                | (116,682)  | (90,291)   | (13,131)   |
| Net loss per share for class A and class B common shares:  | 16   |                         |            |            |            |
| Common shares - basic and diluted  |      | (1.73)                  | (2.73)     | _          | _          |
| Class A common shares - basic and diluted  |      | _                       | _          | (1.57)     | (0.23)     |
| Class B common shares - basic and diluted  |      | _                       | _          | (1.57)     | (0.23)     |
| Shares used in net loss per share computation:   |      |                         |            |            |            |
| Common shares - basic and diluted  |      | 42,666,670              | 42,666,670 | _          |            |
| Class A common shares - basic and diluted  |      | _                       | _          | 40,441,999 | 40,441,999 |
| Class B common shares - basic and diluted  |      | _                       | _          | 17,000,189 | 17,000,189 |
| Other comprehensive income (loss)  |      |                         |            |            |            |
| Foreign currency translation adjustments   |      | 1,896                   | (7,563)    | 11,688     | 1,700      |
| Total other comprehensive income (loss), net of tax  |      | 1,896                   | (7,563)    | 11,688     | 1,700      |
| Total comprehensive loss   |      | (59,486)                | (97,854)   | (54,509)   | (7,927)    |
| Comprehensive loss attributable to Aurora Mobile Limited   |      | (59,486)                | (97,854)   | (54,509)   | (7,927)    |

# CONSOLIDATED STATEMENTS OF SHAREHOLDERS' DEFICIT

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"), except for number of shares)

|   | Common     | shares        | Treasury<br>Shares | Additional<br>paid-in<br>capital | Accumulated<br>other<br>comprehensive<br>income | Accumulated deficit | Total<br>shareholders'<br>deficit |
|---|------------|---------------|--------------------|----------------------------------|---|---------------------|-----------------------------------|
|   | Number of  | A             |                    |                                  |   |                     |                                   |
|   | shares     | Amount<br>RMB |                    | RMB                              | RMB   | RMB                 | RMB                               |
| Balance as of January 1, 2016                                       | 42,666,670 | 26            | _                  | 1.711                            | 2,378   | (44,319)            | (40,204)                          |
| Net loss  |            | _             | _                  |                                  |   | (61,382)            | (61,382)                          |
| Other comprehensive loss  | _          | _             | _                  | _                                | 1,896   | _                   | 1,896                             |
| Contribution from shareholder                                       | _          | _             | _                  | 1,000                            | · —   | _                   | 1,000                             |
| Accretion of contingently redeemable                                |            |               |                    |                                  |   |                     |                                   |
| convertible preferred shares  | _          | _             | _                  | _                                | _   | (12,427)            | (12,427)                          |
| Share-based compensation  |            |               |                    | 2,703                            |   |                     | 2,703                             |
| Balance as of December 31, 2016                                     | 42,666,670 | 26            |                    | 5,414                            | 4,274   | (118,128)           | (108,414)                         |
|   |            |               |                    |                                  |   |                     |                                   |
| Balance as of January 1, 2017                                       | 42,666,670 | 26            | _                  | 5,414                            | 4,274   | (118,128)           | (108,414)                         |
| Net loss  | _          | _             | _                  | _                                | _   | (90,291)            | (90,291)                          |
| Other comprehensive loss  | _          | _             | _                  | _                                | (7,563)   | _                   | (7,563)                           |
| Accretion of contingently redeemable                                |            |               |                    |                                  |   |                     |                                   |
| convertible   |            |               |                    |                                  |   | (2.5.2.1)           | (2.5.201)                         |
| preferred shares  | _          | _             | _                  |                                  | _   | (26,391)            | (26,391)                          |
| Share-based compensation (Note 11)                                  |            |               |                    | 8,275                            |   |                     | 8,275                             |
| Balance as of December 31, 2017                                     | 42,666,670 | <u>26</u>     |                    | 13,689                           | (3,289)   | (234,810)           | (224,384)                         |
|   |            |               |                    |                                  |   |                     |                                   |
| Balance as of January 1, 2018                                       | 42,666,670 | 26            | _                  | 13,689                           | (3,289)   | (234,810)           | (224,384)                         |
| Net loss  | _          | _             | _                  | _                                |   | (66,197)            | (66,197)                          |
| Other comprehensive loss  | _          | _             | _                  | _                                | 11,689  | _                   | 11,689                            |
| Issuance of Class A common shares in connection                     |            |               |                    |                                  |   |                     |                                   |
| with initial public offering  | 6,059,708  | 4             |                    | 464,376                          | _   |                     | 464,380                           |
| Conversion of all outstanding contingently                          | 0,037,700  | -             |                    | 404,570                          |   |                     | 404,300                           |
| redeemable convertible preferred shares                             |            |               |                    |                                  |   |                     |                                   |
| to Class A common shares  | 27,867,937 | 18            | _                  | 357,222                          |   | 44,451              | 401,691                           |
| Redemption of contingently redeemable                               |            |               |                    |                                  |   |                     |                                   |
| convertible   |            |               |                    |                                  |   |                     |                                   |
| preferred shares  | _          | _             | _                  | _                                | _   | (6,915)             | (6,915)                           |
| Accretion of contingently redeemable                                |            |               |                    |                                  |   |                     |                                   |
| convertible   |            |               |                    | 04.670                           |   | (0.4.650)           |                                   |
| preferred shares  | (46.202)   | <del>-</del>  | (2.165)            | 84,652                           | _   | (84,652)            | (2.165)                           |
| Repurchased shares  | (46,303)   | _             | (3,165)            | 24.561                           | _   | _                   | (3,165)                           |
| Share-based compensation (Note 11)  Balance as of December 31, 2018 | 76,548,012 | 48            | (3,165)            | 24,561<br><b>944,500</b>         | 9 400   | (2.49.122)          | 24,561                            |
| · · · · · · · · · · · · · · · · · · ·                               |            |               |                    |                                  | 8,400   | (348,123)           | 601,660                           |
| Balance as of December 31, 2018 in US\$                             | 76,548,012 | 7             | (460)              | 137,372                          | 1,222   | (50,632)            | 87,508                            |

# CONSOLIDATED STATEMENTS OF CASH FLOWS

# (Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

|   |          | Year ended Decen | iber 31,  |               |
|---|----------|------------------|-----------|---------------|
|   | 2016     | 2017             | 2018      |               |
|   | RMB      | RMB              | RMB       | US\$          |
| Cash flows from operating activities:   |          |                  |           |               |
| Net loss  | (61,382) | (90,291)         | (66,197)  | (9,627)       |
| Adjustments to reconcile net loss to net cash used in operating activities:     |          |                  |           |               |
| Depreciation of property and equipment  | 3,433    | 8,805            | 18,084    | 2,630         |
| Amortization of intangible assets   | _        | 35               | 307       | 45            |
| Unrealized exchange (gain) loss   | (369)    | 339              | 11,689    | 1,700         |
| Allowance for doubtful accounts   | 1,049    | 2,427            | 5,846     | 850           |
| Deferred tax expense (benefit)  | 3,910    | (3,980)          | _         | _             |
| Share-based compensation  | 2,703    | 8,275            | 24,561    | 3,572         |
| Changes in operating assets and liabilities,                                    |          |                  |           |               |
| Accounts receivable   | (5,870)  | (48,266)         | (98,163)  | (14,278)      |
| Prepayments and other current assets  | (11,233) | (21,558)         | (46,350)  | (6,741)       |
| Amounts due from related parties  | (65)     | (1,169)          | (3,303)   | (480)         |
| Other non-current assets  | _        | (492)            | (1,431)   | (208)         |
| Accounts payable  | 822      | 13,015           | 10,471    | 1,523         |
| Deferred revenue and customer deposits  | 11,018   | 31,144           | 19,861    | 2,889         |
| Accrued liabilities and other current liabilities                               | 14,469   | 26,503           | 24,027    | 3,495         |
| Amounts due to related parties  | 676      | (243)            | 2,754     | 401           |
| Change in deferred tax liabilities  | _        | _                | (5)       | (1)           |
| Other non-current liabilities   | (1,313)  | (76)             | (76)      | (11)          |
| Net cash used in operating activities   | (42,152) | (75,532)         | (97,925)  | (14,241)      |
| Cash flows from investing activities:   |          |                  |           |               |
| Purchase of time deposits   | (10,000) | _                | _         | _             |
| Proceeds from maturity of time deposits   | =        | 10,053           | _         | _             |
| Increase in long-term prepayment  | _        | _                | (11,000)  | (1,600)       |
| Purchase of long-term investment  | (1,041)  | (10,000)         | (68,716)  | (9,994)       |
| Purchase of property and equipment  | (18,887) | (28,378)         | (57,934)  | (8,426)       |
| Purchase of intangible assets   | =        | (319)            | (1,556)   | (226)         |
| Net cash used in investing activities   | (29,928) | (28,644)         | (139,206) | (20,246)      |
| Cash flows from financing activities:   |          |                  |           | ( , , , , , , |
| Proceeds from issuance of contingently redeemable convertible preferred shares, |          |                  |           |               |
| net of issuance cost  | 134,348  | 217,446          | 216,179   | 31,442        |
| Proceeds from initial public offering, net of issuance cost                     |          | 217,110          | 464,380   | 67,541        |
| Redemption of contingently redeemable convertible preferred shares              | _        | _                | (62,510)  | (9,092)       |
| Repurchase of ordinary shares   | _        | _                | (3,165)   | (460)         |
| Contribution from shareholder   | 1,000    | _                | (5,105)   | (.00)         |
| Net cash provided by financing activities                                       | 135,348  | 217,446          | 614,884   | 89,431        |
|   | 2,450    |                  |           |               |
| Effect of exchange rate on cash and cash equivalents and restricted cash        |          | (8,282)          | (9,352)   | (1,362)       |
| Net increase in cash and cash equivalents and restricted cash                   | 65,718   | 104,988          | 368,401   | 53,582        |
| Cash, cash equivalents and restricted cash at the beginning of year             | 37,570   | 103,288          | 208,276   | 30,292        |
| Including:  | 25.550   | 102.160          | 200.161   | 20.276        |
| Cash and cash equivalents at the beginning of the year                          | 37,570   | 103,168          | 208,161   | 30,276        |
| Restricted cash at the beginning of the year                                    | _        | 120              | 115       | 17            |
| Cash, cash equivalents and restricted cash at the end of year                   | 103,288  | 208,276          | 576,677   | 83,874        |
| Including:  |          |                  |           |               |
| Cash and cash equivalents at the end of the year                                | 103,168  | 208,161          | 576,562   | 83,857        |
| Restricted cash at the end of the year  | 120      | 115              | 115       | 17            |
| Supplemental disclosures of cash flow information:                              |          |                  |           |               |
| Interest expense paid   | <u> </u> | 122              |           |               |
| Purchase of property and equipment included in accrued liabilities and other    |          | 0.521            | 101       |               |
| current liabilities   |          | 9,731            | 104       | 15            |

#### 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 data solutions which include targeted marketing, industry insights, financial risk management 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, 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.

### 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.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 1 Organization and principal activities (continued)

### 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.

## 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.

# 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, |        |  |  |
|---|---------|--------------------|--------|--|--|
|   | 2017    | 2018               |        |  |  |
|   | RMB     | RMB                | US\$   |  |  |
| ASSETS:   |         |                    |        |  |  |
| Current assets:                                   |         |                    |        |  |  |
| Cash and cash equivalents                         | 49,853  | 31,763             | 4,620  |  |  |
| Restricted cash                                   | 115     | 115                | 17     |  |  |
| Accounts receivable                               | 49,561  | 141,705            | 20,609 |  |  |
| Prepayments and other current assets              | 29,637  | 64,532             | 9,386  |  |  |
| Amounts due from the Company and its subsidiaries | 3,806   | 3,965              | 577    |  |  |
| Amounts due from related parities                 | 1,186   | 2,848              | 414    |  |  |
| Total current assets                              | 134,158 | 244,928            | 35,623 |  |  |
| Non-current assets:                               |         |                    |        |  |  |
| Long-term investments                             | 10,000  | 71,512             | 10,401 |  |  |
| Other receivables-non current                     | 1,354   | 2,529              | 368    |  |  |
| Property and equipment, net                       | 24,258  | 46,271             | 6,730  |  |  |
| Intangible assets, net                            | 283     | 1,406              | 204    |  |  |
| Long-term prepayment                              | _       | 11,000             | 1,600  |  |  |
| Total non-current assets                          | 35,895  | 132,718            | 19,303 |  |  |
| Total assets                                      | 170,053 | 377,646            | 54,926 |  |  |
| LIABILITIES:                                      |         |                    |        |  |  |
| Current liabilities:                              |         |                    |        |  |  |
| Accounts payable                                  | 8,340   | 18,683             | 2,717  |  |  |
| Deferred revenue and customer deposits            | 48,085  | 55,625             | 8,091  |  |  |
| Accrued liabilities and other current liabilities | 31,631  | 59,556             | 8,662  |  |  |
| Amounts due to the Company and its subsidiaries   | 39,861  | 15,534             | 2,259  |  |  |
| Amounts due to related parties                    | 459     | 8,864              | 1,289  |  |  |
| Total current liabilities                         | 128,376 | 158,262            | 23,018 |  |  |
| Non-current liabilities:                          | · ·     |                    |        |  |  |
| Amounts due to the Company and its subsidiaries   | 60,000  | 240,000            | 34,907 |  |  |
| Other non-current liabilities                     | 216     | 140                | 20     |  |  |
| Deferred tax liabilities                          | 5       | _                  | _      |  |  |
| Deferred revenue and customer deposits            | 330     | _                  | _      |  |  |
| Total non-current liabilities                     | 60,551  | 240,140            | 34,927 |  |  |
| Total liabilities                                 | 188,927 | 398,402            | 57,945 |  |  |
|   |         | <u>=</u>           |        |  |  |

#### 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.

|   |          | As of December 31, |           |          |  |
|---|----------|--------------------|-----------|----------|--|
|   | 2016     | 2016 2017 2018     |           |          |  |
|   | RMB      | RMB                | RMB       | US\$     |  |
| Revenues                                  | 70,148   | 284,348            | 709,594   | 103,206  |  |
| Cost of revenues                          | (47,559) | (206,789)          | (499,589) | (72,662) |  |
| Net income/(loss)                         | 18,681   | (40,003)           | (16,785)  | (2,441)  |  |
| Net cash used in operating activities     | 7,590    | (51,016)           | (68,316)  | (9,936)  |  |
| Net cash used in investing activities     | <u> </u> | (10,000)           | (104,675) | (15,224) |  |
| Net cash provided by financing activities | 1,000    | _                  | 154,901   | 22,529   |  |

There were no pledges or collateralization of the VIE's assets as of December 31, 2017 and 2018. The amount of net liabilities of the VIE was RMB 18,874 and RMB 20,756 (US\$3,019) as of December 31, 2017 and 2018, 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.

## 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 revenue recognition, collectability of accounts receivable, commitments, convertible notes, useful lives and impairment assessment of intangible assets, property and equipment, long-term investment, income taxes, valuation allowance for deferred tax assets, fair value change of derivative liability, 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.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 2 Summary of Significant Accounting Policies (continued)

#### Convenience translation

Translations of amounts from RMB into US\$ for the convenience of the reader have been calculated at the exchange rate of RMB6.8755 per US\$1.00 on December 31, 2018, 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 loss, as a component of shareholders' deficit.

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.

### 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 represents cash granted by the government and designated only for the purchase of property and equipment for certain approved projects.

### Accounts receivable and allowance for doubtful accounts

Accounts 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. 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 3-5 years Office furniture and equipment 3-5 years Leasehold improvements over the shorter

over the shorter of lease terms or estimated useful lives of the assets

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.

#### 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 purchased computer software. All intangible assets with finite lives are amortized using the straight-line method over the estimated economic lives, which are as follows:

Computer software and systems

1 - 3 years

#### 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. No impairment loss was recognized for the years ended December 31, 2016, December 31, 2017 and 2018, respectively.

#### Long-term investments

In accordance with ASC 325-20, *Investments-Other: Cost Method Investments*, the Company carries at cost its investments in investees which do not have readily determinable fair value and the Company does not have significant influence. The Company only adjusts for other-than-temporary declines in fair value and distributions of earnings that exceed the Company's share of earnings since its investment.

Management regularly evaluates the impairment of the cost method investments based on performance and financial position of the investee as well as other evidence of market value. Such evaluation includes, but is not limited to, reviewing the investee's cash position, recent financing, projected and historical financial performance, cash flow forecasts and financing needs. An impairment loss is recognized in earnings equal to the excess of the investment's cost over its fair value at the balance sheet date of the reporting period for which the assessment is made. The fair value would then become the new cost basis of investment.

### Deferred revenue and customer deposits

Deferred revenue consists of payments from customers in advance of revenue recognition. 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.

### 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.

The Company has early adopted ASU 2015-03, Interest – Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, and ASU 2017-11, Accounting for Certain Financial Instruments with Down Round Features. 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. The issuance cost of RMB8,436 (US\$1,227) was currently presented as a direct deduction from the principal amount of the Convertible Notes on the consolidated balance sheet as of December 31, 2018. 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.

### 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.

#### Share split

On March 1, 2017, the board of directors approved a 1 for 10 share split. Share and per share amounts for common shares and contingently redeemable convertible preferred shares disclosed for all prior periods have been retroactively adjusted to reflect the effects of the share split.

#### 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, 2018, under the Repurchase Plan, the Company had repurchased an aggregate of 69,455 ADSs, representing 46,303 Class A common shares on the open market for a total cash consideration of US\$468.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 2 Summary of Significant Accounting Policies (continued)

#### Revenue recognition

The Company recognizes revenue once all of the following criteria have been met: (1) persuasive evidence of an arrangement exists; (2) services have been provided; (3) the price is fixed or determinable; and (4) collectability is reasonably assured.

#### Data solutions

The Company generates data solutions revenues primarily by creating and delivering targeted marketing and other vertical data solutions. Targeted marketing revenue is generated by the Company providing an integrated marketing campaign to advertisers mainly through the Company's Xiaoguotong marketing platform, which is built upon the Company's multi-dimensional mobile device dataset. The Company generally will create, design, develop and optimize the advertising content for its advertisers. The advertisements are displayed on a wide spectrum of reputable publishers, through bidding for advertisement slots using rates directly negotiated with the various publishers.

The arrangements with advertisers are evidenced through contractual agreements that stipulate the types of advertising to be delivered, the timing and the pricing. Advertisers pay for targeted advertisements based on the number of clicks and downloads taken by the users. Revenue is recognized in the period in which the user performs the action the advertiser contracted the Company for.

The Company recognizes revenue on a gross basis as the primary obligor, as it uses its own platform's mobile device dataset with its comprehensive demographic targeting ability to accurately pinpoint the specific mobile devices that is most suitable for the customer's ads. Additionally, the Company has pricing latitude, has discretion in selecting publishers whose advertisement slots will be purchased, is highly involved in the determination of service specifications and bears credit risk. Based on the advertiser's preference to avoid lower quality publishers, the Company may recommend a specific reputable online media network to certain advertisers. After pinpointing the specific mobile devices that are most suitable for the customer's ads using its mobile device dataset, it bids for the available advertising slots on the network and then places the advertisement.

### Developer services

The Company enters into agreements with its customers to provide push notification and instant messaging (collectively "notification services"). Under the terms of the contractual agreements of notification services, the Company provides its customers with access to its notification services platform over the specified period. This enables customers to send notifications and messages to users. Revenue from notification services is recognized using a specific performance method.

## Costs of revenues

Cost of revenues consists primarily of depreciation, labor, bandwidth costs and purchasing of advertising inventory. The Company incurs various sales tax and surcharges such as, city construction tax and education surcharges and cultural development fee in connection with the services provided. In accordance with ASC subtopic 605-45, Revenue Recognition, Principal Agent Considerations ("ASC 605-45"), the Company includes the sales tax and surcharges incurred in cost of revenues.

## 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.

## Advertising expense

Advertising expenses, including promotion expenses, are charged to "sales and marketing expenses" as incurred. Advertising expenses amounted to RMB10,377, RMB5,277 and RMB6,697 (US\$974) for the year ended December 31, 2016, 2017 and 2018, respectively.

#### 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 income

Other income represents government grants and profit sharing program with Depositary Bank related to ADSs depositary. Government grants are recognized when there is reasonable assurance that the Company will comply with the attached conditions. When the grant relates to an expense item, it is recognized on a systemic basis 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. Profit sharing program is recognized over five-year period as specified in the contract based on certain parameters.

### 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, net" when received. The government grants with certain operating conditions are recorded as "deferred income" when received and will be recorded as operating income when the conditions are met.

### **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 RMB5,455, RMB12,121 and RMB11,301 (US\$1,644) for the year ended December 31,2016, December 31,2017 and 2018, 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.

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

#### 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 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.

#### Fair value measurements

Fair value is the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be recorded at fair value, the Company considers the principal or most advantageous market in which it would transact and the market-based risk measurement or assumptions that market participants would use when pricing the asset or liability.

Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement:

Level 1-Quoted prices in active markets for identical assets or liabilities.

Level 2-Observable inputs other than quoted prices in active markets, quoted prices for identical or similar assets and liabilities in inactive markets or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3-Inputs that are generally unobservable and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

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 restricted cash (non-current) approximate its fair value since it bears interest rates which approximate market interest rates.

### 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 loss of the Company includes the foreign currency translation adjustments.

#### 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

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 income 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, 2018, 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.

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, 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, 2017 and 2018, the aggregate amount of cash and cash equivalents and restricted cash of RMB82,609 and RMB331,374 (US\$48,198), respectively, were held at major financial institutions located in the PRC, and US\$19,232 and US\$35,678 (RMB245,303), 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 81.3% and 50.9% of advertising costs were paid to three suppliers for the year ended December 31, 2017 and 2018, 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.

## 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 appreciation of the US\$ against RMB was approximately 4.79% in 2018. Most of the Company's revenues and costs are denominated in RMB, while a portion of cash and cash equivalents, short-term investments, 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\$.

#### 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, no geographical segments is 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 May 2014, the Financial Accounting Standard Board ("FASB") issued Accounting Standard Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606). The guidance substantially converges final standards on revenue recognition between the FASB and the International Accounting Standards Board providing a framework on addressing revenue recognition issues and, upon its effective date, replaces almost all existing revenue recognition guidance, including industry-specific guidance, in current U.S. GAAP.

The core principle of the guidance is that an entity should recognize revenues to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle, an entity should apply the following steps:

- Step 1: Identify the contract(s) with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

In August 2015, the FASB issued its final standard formally amending the effective date of the new revenue recognition guidance. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2018, including interim periods beginning after January 1, 2020. As an "emerging growth company," or EGC, the Company has elected to take advantage of the extended transition period provided in the Securities Act Section 7(a)(2)(B) for complying with new or revised accounting standards applicable to private companies. In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customer - Principal versus Agent Considerations ("ASU 2016-08"), which clarifies the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU 2016-10, Revenue from Contracts with Customer - Identifying Performance Obligations and Licensing, which clarifies guidance related to identifying performance obligations and licensing implementation guidance contained in ASU 2014-09. In May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers - Narrow-Scope Improvements and Practical Expedients ("ASU 2016-12"), which addresses narrow-scope improvements to the guidance on collectability, non-cash consideration and completed contracts at transition and provides practical expedients for contract modifications at transition and an accounting policy election related to the presentation of sales taxes and other similar taxes collected from customers. The effective dates for these amendments are the same as the effective date of ASU 2014-09. Early adoption is permitted.

The Company will adopt ASU 2014-09 for the annual reporting periods beginning January 1, 2019, using the modified retrospective method. The cumulative effect of initially applying the new standard will be recognized on the day of initial application and prior periods will not be retrospectively adjusted. The Company's implementation efforts are substantially complete. The Company also estimate that there will not be a material impact to the beginning balance of retained earnings.

#### 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 January 2016, the FASB issued ASU No. 2016-01, Financial Instruments—Overall (Subtopic 825-10). The amendments require all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under equity method of accounting or those that result in consolidation of the investee). The amendments also require an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instruments-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments. In addition, the amendments in this ASU eliminate the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public business entities. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2018, including interim periods after December 15, 2019. The Company is in the process of evaluating the impact of the adoption of this guidance on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*. This ASU modifies existing guidance for off-balance sheet treatment of a lessees' operating leases by requiring lessees to recognize lease assets and lease liabilities, whilst, lessor accounting is largely unchanged. The amendments in this ASU are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements ("ASU 2018-11"), which provides another transition method in addition to the existing transition method by allowing entities to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption consistent with preparers' requests. The amendments in this Update are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public entities. The Company is in the process of evaluating the impact of adoption of this guidance on its consolidated financial statements.

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"). This ASU is intended to improve financial reporting by requiring timelier recording of credit losses on loans and other financial instruments held by financial institutions and other organizations. This ASU requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This ASU requires enhanced disclosures to help investors and other financial statement users better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of the Company's portfolio. These disclosures include qualitative and quantitative requirements that provide additional information about the amounts recorded in the financial statements. The amendments in this ASU are effective for fiscal years beginning after December 15, 2020, including interim periods within fiscal years beginning after December 15, 2021. In November 2018, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, Financial Instruments—Credit Losses ("ASU 2018-19"), which amends ASU 2016-13 to clarify that receivables arising from operating leases are not within the scope of Subtopic 326-20, and instead, impairment of such receivables should be accounted for in accordance with Topic 842, Leases. ASU 2016-13 and ASU 2018-19 are effective for fiscal years and interim periods within those years beginning after December 15, 2019, with early adoption permitted as of the fiscal years beginning after December 15, 2018. An entity will apply the amendments in these updates through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective (that is, a modified-retrospective approach). The Company is currently evaluat

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. This ASU reduces the existing diversity in practice in financial reporting across all industries by clarifying certain existing principles in ASC 230, Statement of Cash Flows ("ASC 230"), including providing additional guidance on how and what an entity should consider in determining the classification of certain cash flows. The amendments in this ASU are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company has early adopted this standard.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash. This ASU requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This ASU does not provide a definition of restricted cash or restricted cash equivalents. The amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company has early adopted this standard.

# 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 February 2017, the FASB issued ASU No. 2017-05, *Other income—Gains and Losses from the Derecognition of Nonfinancial Assets*, which clarifies that a financial asset is within the scope of Subtopic 610-20 if it meets the definition of an in substance nonfinancial asset. The amendments in this update also clarify that nonfinancial assets within the scope of Subtopic 610-20 may include nonfinancial assets transferred within a legal entity to a counterparty. This standard is effective for annual reporting periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. The Company is in the process of evaluating the impact of adoption of this guidance on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement ("ASU 2018-13"), which modifies the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement, including, among other changes, the consideration of costs and benefits when evaluating disclosure requirements. For public companies, the amendments are effective for annual reporting periods beginning after December 15, 2019, including interim periods within those annual periods. Early adoption is permitted. The Company is in the process of evaluating the impact of adoption of this guidance on its consolidated financial statements.

#### 3 Accounts receivable, net

|                                       |         | As of December 31,                                       |         |  |  |
|---------------------------------------|---------|--|---------|--|--|
|                                       | 2017    | 2017         2018           RMB         RMB         US\$ |         |  |  |
|                                       | RMB     |  |         |  |  |
| Accounts receivable                   | 53,056  | 151,219  | 21,994  |  |  |
| Less: allowance for doubtful accounts | (3,462) | (9,308)  | (1,354) |  |  |
| Total accounts receivable, net        | 49,594  | 141,911  | 20,640  |  |  |

The following table presents the movement in the allowance for doubtful accounts:

|                              | As of December 31, |       |       |  |
|------------------------------|--------------------|-------|-------|--|
|                              | 2017               | 2018  |       |  |
|                              | RMB                | RMB   | US\$  |  |
| Balance at beginning of year | 1,035              | 3,462 | 504   |  |
| Provisions                   | 2,427              | 6,389 | 929   |  |
| Write-offs                   | _                  | (543) | (79)  |  |
| Balance at end of year       | 3,462              | 9,308 | 1,354 |  |

## 4 Prepayment and other current assets

Prepayment and other current assets consist of the following:

|   |        | As of December 31, |        |  |      |  |
|---|--------|--------------------|--------|--|------|--|
|   | 2017   | 2017 2018          |        |  | 2018 |  |
|   | RMB    | RMB                | US\$   |  |      |  |
| Prepaid media cost                        | 19,610 | 54,937             | 7,990  |  |      |  |
| Prepaid service fee                       | 1,762  | 6,804              | 989    |  |      |  |
| Others                                    | 12,856 | 18,837             | 2,740  |  |      |  |
| Total prepayment and other current assets | 34,228 | 80,578             | 11,719 |  |      |  |

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

## 5 Property and equipment, net

Property and equipment consist of the following:

|                                   | As of December 31,     |          |         |  |
|-----------------------------------|------------------------|----------|---------|--|
|                                   | 2017 2018<br>RMB RMB U |          |         |  |
|                                   |                        |          | US\$    |  |
| Office furniture and equipment    | 2,647                  | 4,920    | 716     |  |
| Computer equipment and servers    | 63,326                 | 111,274  | 16,184  |  |
| Leasehold improvements            | 789                    | 7,256    | 1,055   |  |
| Less: Accumulated depreciation    | (13,739)               | (30,576) | (4,447) |  |
| Total property and equipment, net | 53,023                 | 92,874   | 13,508  |  |

No impairment charges were recognized on fixed assets for the year ended December 31, 2016, 2017 and 2018, respectively.

Depreciation expense recognized for the years ended December 31, 2016, 2017 and 2018 were RMB3,433, RMB8,805 and RMB18,084 (US\$2,630), respectively.

## 6 Intangible assets

Intangible assets consist of the following:

|                                | As of December 31, |       |      |  |
|--------------------------------|--------------------|-------|------|--|
|                                | 2017 2018          |       |      |  |
|                                | RMB RMB            |       | US\$ |  |
| Computer software and systems  | 319                | 1,874 | 273  |  |
| Less: Accumulated amortization | (36)               | (343) | (50) |  |
| Total intangible assets, net   | 283                | 1,531 | 223  |  |

No impairment charges were recognized on intangible assets for the years ended December 31, 2016, 2017 and 2018, respectively.

Amortization expense of intangible assets were RMB nil, RMB35 and RMB307 (US\$45), for the years ended December 31, 2016, 2017 and 2018 respectively.

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, 2019 | 749 | 109  |
| 2020                                  | 464 | 67   |
| 2021                                  | 318 | 47   |
| 2022                                  | _   | _    |
| 2023                                  | _   | _    |

No intangible assets with an indefinite useful life as of December 31, 2017 and 2018.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

## 7 Long-term investments

As of December 31, 2017 and 2018, long-term investments consisted of the following:

|                         | As of December 31, |        |        |  |
|-------------------------|--------------------|--------|--------|--|
|                         | 2017 2018          |        |        |  |
|                         | RMB                | RMB    | US\$   |  |
| Cost method investments | 10,980             | 79,696 | 11,591 |  |
| Less: Impairment loss   | _                  | _      | _      |  |
| Total                   | 10,980             | 79,696 | 11,591 |  |

In 2018, the Company acquired 5.93% of the share capital of Zhuoxuan, a non-listed company, for RMB5,438 (US\$792). The investment in Zhuoxuan was classified as a cost method investment, as the Company does not have significant influence over Zhuoxuan and because there is no readily determinable fair value.

In 2018, the Company acquired 13.8% of the share capital of Mengxiang, a non-listed company, for RMB21,512 (US\$3,134). The investment in Mengxiang was classified as a cost method investment, as the Company does not have significant influence over Mengxiang and because there is no readily determinable fair value.

In 2018, the Company acquired 10.0% of the share capital of Qianhai, a non-listed company, for RMB40,000 (US\$5,828). The investment in Qianhai was classified as a cost method investment, as the Company does not have significant influence over Qianhai and because there is no readily determinable fair value.

In 2016, the Company has acquired a call option to purchase preferred shares of Skymind in a future financing round for RMB980 (US\$150). In 2018, the Company held 1.19% of the share capital of Skymind with the exercise of call option and RMB1,716 (US\$250). The investment in Skymind was classified as a cost method investment, as the Company does not have significant influence over Skymind and because there is no readily determinable fair value.

In 2017, the Company acquired 6.25% of the share capital of Shuwei, a non-listed company, for RMB10,000 (US\$1,457), and the Company's ownership of share in Shuwei decrease to 4.27% in 2018 due to Shuwei's subsequent rounds of financing. The investment in Shuwei was classified as a cost method investment, as the Company does not have significant influence over Shuwei and because there is no readily determinable fair value.

There were no impairment indicators for the cost method investment and no impairment losses for the three years ended December 31, 2016, 2017 and 2018.

## 8 Deferred revenue and customer deposits

Deferred revenue and customer deposits consist of the following:

|  |        | As of December 31,      |       |  |  |
|--|--------|-------------------------|-------|--|--|
|  | 2017   | 2017 2018<br>RMB RMB US |       |  |  |
|  | RMB    |                         |       |  |  |
| Deferred revenue                                       | 28,921 | 33,067                  | 4,809 |  |  |
| Customer deposits                                      | 20,636 | 26,416                  | 3,842 |  |  |
| Total deferred revenue and customer deposits — current | 49,557 | 59,483                  | 8,651 |  |  |
| Deferred revenue — non-current                         | 330    | 10,265                  | 1,493 |  |  |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 8 Deferred revenue and customer deposits (continued)

Roll-forward of customers deposits:

|  | Year      | Year ended December 31, |          |  |  |
|--|-----------|-------------------------|----------|--|--|
|  | 2017      | 2017 2018               |          |  |  |
|  | RMB       | RMB                     | US\$     |  |  |
| Balance at beginning of year                 | 6,064     | 20,636                  | 3,001    |  |  |
| Cash received from customers during the year | 129,555   | 407,630                 | 59,287   |  |  |
| Revenue recognized during the year           | (112,770) | (397,488)               | (57,812) |  |  |
| Refunds paid during the year                 | (2,213)   | (4,362)                 | (634)    |  |  |
| Balance at end of year                       | 20,636    | 26,416                  | 3,842    |  |  |

#### 9 Accrued liabilities and other current liabilities

Accrued liabilities and other current liabilities consist of the following:

|   | As of December 31, |           |        |  |
|---|--------------------|-----------|--------|--|
|   | 2017               | 2017 2018 |        |  |
|   | RMB                | RMB       | US\$   |  |
| Accrued payroll and welfare payables                    | 38,704             | 51,607    | 7,506  |  |
| Other taxes and surcharge                               | 2,676              | 11,277    | 1,640  |  |
| Service fees  | 560                | 11,130    | 1,619  |  |
| Acquisition of fixed assets                             | 9,731              | 104       | 15     |  |
| Others  | 968                | 2,548     | 371    |  |
| Total accrued liabilities and other current liabilities | 52,639             | 76,666    | 11,151 |  |

## 10 Contingently redeemable convertible preferred shares

Series A contingently redeemable convertible preferred shares ("Series A preferred shares")

On November 18, 2014, the Company issued Series A-1 contingently redeemable convertible preferred shares ("Series A-1 preferred shares") of 5,187,780 and 367,780 to IDG-Accel China Growth Fund III L.P and IDG-Accel China III Investors L.P, respectively, at US\$0.36 per share for a total consideration of US\$2,000.

On January 21, 2015, the Company issued Series A-2 contingently redeemable convertible preferred shares ("Series A-2 preferred shares") of 1,388,890, 1,388,890, 2,593,890 and 183,890 to Elite Bright International Limited, Mandra iBase Limited, IDG-Accel China Growth Fund III L.P and IDG-Accel China III Investors L.P, respectively, at US\$0.36 per share for a total consideration of US\$2,000.

Series B contingently redeemable convertible preferred shares ("Series B preferred shares")

On May 13, 2015, the Company issued Series B contingently redeemable convertible preferred shares ("Series B preferred shares") of 529,100, 529,100, 494,070, 35,030 and 6,349,210 to Elite Bright International Limited, Mandra iBase Limited, IDG-Accel China Growth Fund III L.P, IDG-Accel China III Investors L.P and Greatest Investments Limited, respectively, at US\$0.95 per share for a total consideration of US\$7,500.

Series C contingently redeemable convertible preferred shares ("Series C preferred shares")

On April 1, 2016, the Company issued Series C-1 contingently redeemable convertible preferred shares ("Series C-1 preferred shares") of 235,160 and 2,116,400 to Greatest Investments Limited and Shenzhen Guohai Chuangxin Investment Management Limited Corporation, respectively, at US\$4.73 for a total consideration of US\$11,111.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 10 Contingently redeemable convertible preferred shares (continued)

On October 31, 2016, the Company issued Series C-2 contingently redeemable convertible preferred shares ("Series C-2 preferred shares") of 634,920, 1,693,120 and 211,640 to Mandra iBase Limited, T.C.L. Industries Holdings (H.K.) Ltd and Genesis Ventures Limited, respectively, at US\$4.73 per share for a total consideration of US\$12,000.

Series D contingently redeemable convertible preferred shares ("Series D preferred shares")

On October 5, 2017, the Company issued Series D contingently redeemable convertible preferred shares of 28,062, 2,441,572 and 3,089,853 to Fidelity Investment Funds. Fidelity China Special Situations PLC and Fidelity Funds, respectively, at US\$5.40 per share for a total consideration of US\$30,000.

### Dividend rights

Each holder of the Series A, B, C, D preferred shares (collectively "Preferred Shares") will be entitled to receive non-cumulative dividends, prior and in preference to holders of common shares, when declared by the Board of Directors. After payment of the preferential dividends relating to the Preferred Shares have been paid in full, each holder of the Preferred Shares will be entitled to receive dividends payable out of any remaining funds that are legally available when declared by the Board of Directors.

For the periods presented, no dividends were declared by the Company's Board of Directors on the Preferred Shares.

## Voting rights

Each holder of the Preferred Shares are entitled to the number of votes equal to the number of common shares into which such Preferred Shares could be converted at the voting date. Preferred shareholders will vote together with common shareholders, and not as a separate class of series, on all matters put before the shareholders.

#### Liquidation preference

In the event of any liquidation, dissolution or winding up of the Company or any deemed liquidation event defined as (i) the liquidation, dissolution or winding-up of the Company, (ii) the acquisition of the Company (whether by a sale of equity, merger or consolidation) in which in excess of 50% of such Company's voting power outstanding before such transaction is transferred; (iii) the change of the control right of any Company; or (iv) the sale, lease, transfer or other disposition of all or substantially all of the assets of any Company or the exclusive licensing of substantially all of the Company's intellectual properties, the assets or surplus funds of the Company available for distribution will be distributed as follows:

The holders of Series D preferred shares are entitled to receive an amount equal to 115% of the Series D Issue Price, plus all declared but unpaid dividend, in preference to any distribution to the holders of the Series C, B and A preferred shares and the common shareholders of the Company.

After the payment to the holders of Series D preferred shares, the holders of Series C preferred shares are entitled to receive an amount equal to 100% of the Issue Price, plus an annual simple return of 10% accrued thereon and plus all declared but unpaid dividend, in preference to any distribution to the holders of the Series B and A preferred shares and the common shareholders of the Company.

After the payment to the holders of Series C preferred shares, the holders of Series B preferred shares are entitled to receive an amount equal to 125% of the Series B Issue Price, plus an annual compounded return of 6% accrued thereon and plus all declared but unpaid dividend, in preference to any distribution to the holders of the Series A preferred shares and the common shareholders of the Company.

After the payment to the holders of Series B preferred shares, the holders of Series A preferred shares are entitled to receive an amount equal to 150% of the Series A Issue Price, plus an annual compounded return of 8% accrued thereon and plus all declared but unpaid dividend, in preference to any distribution to the holders of the common shareholders of the Company.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 10 Contingently redeemable convertible preferred shares (continued)

After payment has been made to the holders of the Preferred Shares in accordance with the above, the remaining assets of the Company available for distribution to shareholders shall be distributed ratably among the holders of common shares and Preferred Shares based on the number of common shares into which such Preferred Shares are convertible.

### Conversion rights

Each holder of the Preferred Share has the right, at the sole discretion of the holder, to convert at any time and from time to time, all or any portion of the Preferred Shares into common shares based on the then-effective Conversion Price.

The initial conversion price is the stated issuance price for each series of Preferred Shares. The initial conversion ratio is on a one for one basis and subject to adjustments in the event that the Company issues additional common shares through options or convertible instruments for a consideration per share received by the Company less than the original respective conversion prices, as the case may be, in effect on the date of and immediately prior to such issue. In such event, the respective conversion price is reduced, concurrently with such issue, to a price as adjusted according to an agreed-upon formula. The above conversion prices are also subject to adjustments on a proportional basis upon other dilution events.

The Company's Series C preferred share agreement contained a "Performance Ratchet" whereby if the Company's PRC GAAP audited revenue was less than (i) RMB80,000 in 2016, or (ii) RMB120,000 in 2017, Weidong Luo and the Company shall compensate the Series C investors in accordance to the specified formula.

In the event of a qualified IPO, each Preferred Share will automatically be converted into common shares.

## Redemption right

If the Company shall at any time after the earlier of (i) January 1, 2020 or (ii) the date that is twelve months after the closing of the IPO, receive a written request from the holders of at least 50% or more of the issued and outstanding Preferred Shares (or common shares issued upon the conversion of the Preferred Shares) or Mandra iBased Limited may request in writing that the Company effect a registration for at least 20% of their Registrable Securities on any internationally recognized exchange that is reasonably acceptable to such requesting Preferred Shares and Common Shareholders using its best efforts.

Furthermore, if the Company qualifies for registration on Form F-3 or Form S-3 (or any comparable form for Registration in a jurisdiction other than the United States), any Preferred Share holder may request the Company to file, in any jurisdiction in which the Company has had a registered underwritten public offering, a Registration Statement on Form F-3 or Form S-3 (or any comparable form for Registration in a jurisdiction other than the United States) using its best efforts.

### Redemption of preferred shares

On April 11, 2018, the Company redeemed the 1,738,720 Series C preferred shares held by T.C.L. Industries Holdings (H.K.) Ltd. for an aggregate price of US\$9,049. The Company accounted for the difference between the fair value of the consideration paid for the repurchase preferred shares and the carrying value of the preferred shares as an increase to the net loss attributable to ordinary shareholders in the statement of comprehensive loss.

## Initial measurement and subsequent accounting for Preferred Shares

The Preferred Shares do not meet the criteria of mandatorily redeemable financial instruments specified in ASC 480-10-S99, and have been classified as mezzanine equity in the consolidated balance sheets as these Preferred Shares are contingently redeemable upon the occurrence of a conditional event (i.e. Deemed Liquidation Event).

The Preferred Shares were initially measured at fair value. Beneficial conversion features exist when the conversion price of the Preferred Shares is lower than the fair value of the common shares at the commitment date, which is the issuance date in the Company's case. When a beneficial conversion feature exists as of the commitment date, its intrinsic value is bifurcated from the carrying value of the Preferred Shares as a contribution to additional paid-in capital. On the respective commitment dates, the most favorable conversion price used to measure the beneficial conversion feature of the Preferred Shares were higher than the fair value per common share and therefore no beneficial conversion feature was recognized. The Company determined the fair value of common shares with the assistance of an independent third party valuation firm.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 10 Contingently redeemable convertible preferred shares (continued)

Based on the Company's 2016 PRC GAAP audited financial statements, the "Performance Ratchet" has not been triggered, Weidong Luo and the Company are not required to compensate the Series C holders.

In determining whether to account for an amendment of equity-classified preferred shares as a modification or extinguishment, the Company considers an amendment that results in a greater than 10% change in fair value based on an analysis similar to ASC 470-50 is an extinguishment. An amendment that does not meet this criterion is a modification. The amendment in the redemption dates of Series A and Series B preferred shares at the issuance of Series C preferred shares and the removal of the revenue target for the Series A, Series B and Series C preferred shares at issuance of Series D preferred shares, resulted in a modification (as the amendment did not result in a greater than 10 percent change in cash flows) with no further accounting impact as the modification did not result in a change in the fair value of the related preferred shares.

The Company has elected to accrete the preferred shares to their redemption value over the contractual period since issuance to the earliest redemption date using the effective interest rate method. The accretion to redemption value including cumulative dividends shall be recorded as a reduction of income available to common shareholders in accordance with ASC 480-10-S99 3A.

The Preferred Shares were converted to common shares immediately upon the completion of the Company's IPO on July 26, 2018.

The movement in the carrying value of the convertible preferred shares is as follows:

| Mezzanine equity                           | Series A | Series B | Series C  | Series D  | Total     |
|--|----------|----------|-----------|-----------|-----------|
|  | RMB      | RMB      | RMB       | RMB       | RMB       |
| Balance as of December 31, 2016            | 26,804   | 52,044   | 141,691   | _         | 220,539   |
| Issuance of Series C preferred shares      | _        | _        | 20,571    | _         | 20,571    |
| Issuance of Series D preferred shares      | _        | _        | _         | 206,359   | 206,359   |
| Issuance cost of Series D preferred shares | _        | _        | _         | (7,223)   | (7,223)   |
| Accretion of Preferred Shares              | 175      | 679      | 6,055     | 19,482    | 26,391    |
| Balance as of December 31, 2017            | 26,979   | 52,723   | 168,317   | 218,618   | 466,637   |
| Accretion of Preferred Shares              | 1,463    | 4,137    | 7,441     | 11,053    | 24,094    |
| Redemption of Preferred Shares             | _        | _        | (57,234)  | _         | (57,234)  |
| Conversion of Preferred Shares             | (28,442) | (56,860) | (118,524) | (229,671) | (433,497) |
| Balance as of December 31, 2018            |          | _        |           | _         |           |
| Balance as of December 31, 2018 (US\$)     |          |          |           |           |           |

#### 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, 2018, 2,420 remains 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, 2018, 3,467,708 shares remain available of grant under the 2017 Plan.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 11 Share-based compensation (continued)

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 and 2017 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.

### Share options

The following table summarizes the share option activity for the year ended December 31, 2018:

| Options Granted to Employees and Directors       | Number of<br>Options | Weighted-<br>Average<br>Exercise<br>Price | Weighted-<br>Average<br>grant-date<br>Fair Value<br>per Option<br>RMB | Weighted Average Remaining Contractual Term (Years) | Aggregate<br>Intrinsic<br>Value<br>RMB |
|--|----------------------|---|---|---|--|
| Outstanding, December 31, 2016                   | 5,472,031            | 2.32                                      | 2.13  | 7.89  | 34,255                                 |
| Granted  | 894,115              | 16.29                                     | 10.34   | _   | _                                      |
| Forfeited  | _                    | _   | _   | _   | _                                      |
| Expired  | _                    | _   | _   | _   | _                                      |
| Exercised  | _                    | _   | _   | _   | _                                      |
| Cancelled  |                      | _   | _   | _   | _                                      |
| Outstanding, December 31, 2017                   | 6,366,146            | 4.33                                      | 3.31  | 7.21  | 95,559                                 |
| Vested and expected to vest at December 31, 2017 | 6,366,146            | 4.33                                      | 3.31  | 7.21  | 95,559                                 |
| Outstanding, December 31, 2017                   | 6,366,146            | 4.33                                      | 3.31  | 7.21  | 95,559                                 |
| Granted  | 1,736,390            | 26.68                                     | 45.72   | _   | _                                      |
| Forfeited  | 55,520               | 26.55                                     | 24.69   | _   | _                                      |
| Expired  | _                    | _   | _   | _   | _                                      |
| Exercised  | _                    | _   | _   | _   | _                                      |
| Cancelled  | 14,558               | 6.56                                      | 1.87  | _   | _                                      |
| Outstanding, December 31, 2018                   | 8,032,458            | 9.04                                      | 12.48   | 7.47  | 507,876                                |
| Vested and expected to vest at December 31, 2018 | 8,032,458            | 9.04                                      | 12.48   | 7.47  | 507,876                                |
| Exercisable at December 31, 2018                 | 5,185,893            | 2.75                                      | 3.09  | 6.73  | 360,505                                |

The aggregate fair value of options vested and recognized as expenses as of December 31, 2016, 2017 and 2018 were RMB2,703, RMB8,275 and RMB24,561 (US\$3,572), respectively.

The aggregate unrecognized share-based compensation expense was RMB64,099 (US\$9,323) as of December 31,2018, which the Company expects to recognize over an estimated weighted-average period of three to four years.

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 binominal 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 th 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 stock-based compensation expense using the accelerated recognition method over the requisite service period, which is generally subject to graded vesting.

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 11 Share-based compensation (continued)

The following table presents assumptions used to estimate the fair values of share options granted for the year ended December 31, 2017 and 2018:

|                                      | 2016            | 2017            | 2018            |
|--------------------------------------|-----------------|-----------------|-----------------|
| Risk-free interest rate              | 1.83% - 1.84%   | 2.27% - 2.41%   | 2.27% - 2.93%   |
| Dividend yield                       | 0%              | 0%              | 0%              |
| Expected volatility                  | 47.33% - 47.60% | 46.33% - 47.15% | 45.30% - 46.10% |
| Weighted average expected volatility | 47.44%          | 46.66%          | 45.98%          |
| Expected exercise multiple           | 2.5             | 2.5             | 2.5             |

- (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.

### 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, 2018 was stated below:

| Restricted Share Units Granted to Employees and Directors | Number of<br>Share Units | Weighted-<br>Average<br>Exercise<br>Price | Weighted-<br>Average<br>grant-date<br>Fair Value<br>per Option<br>RMB | Weighted<br>Average<br>Remaining<br>Contractual<br>Term (Years) | Aggregate Intrinsic Value RMB |
|---|--------------------------|---|---|---|-------------------------------|
| Outstanding, December 31, 2017                            |                          |   |   |   |                               |
| Granted   | 12,550                   |   | 54.69   | 9.68  | 907                           |
| Forfeited   | _                        | _   | _   | _   | _                             |
| Expired   | _                        | _   | _   | _   | _                             |
| Exercised   | _                        | _   | _   | _   | _                             |
| Cancelled   | _                        | _   | _   | _   | _                             |
| Outstanding, December 31, 2018                            | 12,550                   | _   | 54.69   | 9.68  | 907                           |
| Vested and expected to vest at December 31, 2018          | 12,550                   |   | 54.69   | 9.68  | 907                           |
| Exercisable at December 31, 2018                          |                          |   |   |   |                               |

The weighted average grant-date fair value per share of restricted share units granted for the year ended December 31, 2018 was RMB54.69 (US\$7.95).

As of December 31, 2018, there was RMB447 (US\$68) of unrecognized share-based compensation cost related to restricted shares, which the Company expects to recognize over an estimated weighted-average period of one year.

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 11 Share-based compensation (continued)

Total compensation costs recognized for the year ended December 31, 2017 and 2018 were as follows:

|                            | Year ended December 31, |       |               |       |  |
|----------------------------|-------------------------|-------|---------------|-------|--|
|                            | 2016 2017               |       | 016 2017 2018 |       |  |
|                            | RMB                     | RMB   | RMB           | US\$  |  |
| Research and development   | 664                     | 1,408 | 9,448         | 1,374 |  |
| Sales and marketing        | 189                     | 944   | 3,347         | 487   |  |
| General and administrative | 1,850                   | 5,923 | 11,766        | 1,711 |  |
| Total                      | 2,703                   | 8,275 | 24,561        | 3,572 |  |

#### 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 VIE in the PRC was recognized as a qualified HNTE under the EIT Law by relevant government authorities in 2016. It was entitled to the preferential rate of 15% for 2017 and 2018.

The WFOE in the PRC is subject to the 25% EIT rate.

The Company's profit/(loss) before income taxes consists of:

|                                |          | As of December 31, |          |          |  |  |
|--------------------------------|----------|--------------------|----------|----------|--|--|
|                                | 2016     | 2017               | 2018     |          |  |  |
|                                | RMB      | RMB                | RMB      | US\$     |  |  |
| Cayman Islands                 | (3,214)  | (10,584)           | 6,622    | 964      |  |  |
| British Virgin Islands         | (4)      | (2)                | (25)     | (4)      |  |  |
| Hong Kong                      | 563      | (34)               | 208      | 30       |  |  |
| China                          | (54,817) | (83,651)           | (72,972) | (10,613) |  |  |
| Total loss before income taxes | (57,472) | (94,271)           | (66,167) | (9,623)  |  |  |

## 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:

|                                    | As of December 31, |       |      |      |  |
|------------------------------------|--------------------|-------|------|------|--|
|                                    | 2016 2017          |       | 2018 |      |  |
|                                    | RMB                | RMB   | RMB  | US\$ |  |
| Current income tax expense         | _                  | _     | (35) | (5)  |  |
| Deferred tax (expense)/benefit     | (3,910)            | 3,980 | 5    | 1    |  |
| Total income tax (expense)/benefit | (3,910)            | 3,980 | (30) | (4)  |  |

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, |          |         |  |
|---|--------------------|----------|---------|--|
|   | 2017               | 2018     |         |  |
|   | RMB                | RMB      | US\$    |  |
| Loss before income tax                                  | (94,271)           | (66,167) | (9,623) |  |
| Income tax expense computed at PRC statutory rate (25%) | (23,569)           | (16,542) | (2,408) |  |
| International tax rate differential                     | 2,650              | (1,668)  | (243)   |  |
| Preferential tax rate                                   | 4,004              | 6,397    | 930     |  |
| Deferred tax items tax rate differential                | (4,951)            | (6,390)  | (929)   |  |
| Research and development super-deduction                | (7,787)            | (21,559) | (3,134) |  |
| Non-deductible expenses                                 | 1,482              | 5,701    | 829     |  |
| Outside basis differences                               | (7,475)            | _        | _       |  |
| Deferred tax expense                                    | <u> </u>           | 4,073    | 592     |  |
| Changes in valuation allowance                          | 31,666             | 30,018   | 4,367   |  |
| Income tax expense/(benefit)                            | (3,980)            | 30       | 4       |  |

# 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

Deferred taxes were measured using the enacted tax rates for the periods in which the temporary differences are expected to be reversed. The tax effects of temporary differences that give rise to the deferred tax balances as of December 31, 2017 and 2018 are as follows:

|                                    | As of December 31, |          |          |  |
|------------------------------------|--------------------|----------|----------|--|
|                                    | 2017 2018          |          |          |  |
|                                    | RMB                | RMB      | US\$     |  |
| Deferred tax assets, net           |                    |          |          |  |
| Provision for doubtful debts       | 866                | 2,463    | 358      |  |
| Accrued expense                    | 231                | 3,737    | 543      |  |
| Net operating loss carry forward   | 54,079             | 78,985   | 11,489   |  |
| Government grant related to assets | 69                 | 54       | 8        |  |
| Fixed assets depreciation          | _                  | 14       | 2        |  |
| Estimated liabilities              | _                  | 10       | 2        |  |
| Valuation allowance                | (55,245)           | (85,263) | (12,401) |  |
| Total deferred tax assets, net     |                    | _        |          |  |
| Deferred tax liabilities           |                    |          |          |  |
| Fixed assets depreciation          | 5                  | _        | _        |  |
| Total deferred tax liabilities     | 5                  | _        | _        |  |

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, 2017 and 2018. 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 RMB54,079 and RMB78,985 (US\$11,489) from its WFOE and the VIE in China, which can be carried forward to offset taxable income. The net operating loss of WOFE and VIE will expire in years 2019 to 2023 and 2019 to 2028 if not utilized, respectively.

The Company did not record any dividend withholding tax, as there were no undistributed earnings arising from the WFOE noted as of December 31, 2017 and 2018.

As of December 31, 2017 and 2018, 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, 2017 and 2018. The Company does not expect the amount of unrecognized tax benefits would increase significantly in the next 12 months. In general, the PRC tax authorities have up to five years to conduct examinations of the tax filings of the Company's PRC subsidiary and the VIE. Accordingly, the PRC tax filings from 2013 through 2018 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.

#### 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 debt issuance costs of the Convertible Notes is US\$1,275. The Company evaluated and determined if there were any 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%.

The principal amount, debt issuance costs and derivative liability as of December 31, 2018 was as follows:

|                               | Foreign currency As of April 17, Charge to profit translation 2018 and loss adjustment As of December 2 |          |        |          | r 31, 2018 |
|-------------------------------|---|----------|--------|----------|------------|
|                               | RMB   | RMB      | RMB    | RMB      | US\$       |
| Principal amount              | 219,699   | _        | 20,513 | 240,212  | 34,937     |
| Issuance costs                | (8,436)   | _        | _      | (8,436)  | (1,227)    |
| Contingent redemption feature | (19,805)  | _        | 4,208  | (15,597) | (2,268)    |
| Convertible notes             | 191,458   |          | 24,721 | 216,179  | 31,442     |
| Derivative liability          | 20,237  | (21,302) | 1,065  | _        | _          |
| Total                         | 211,695   | (21,302) | 25,786 | 216,179  | 31,442     |

As of December 31, 2018, aggregate future principal payments for the Convertible Notes were as follows:

|  | RMB     | US\$   |
|--|---------|--------|
| 1 year (Including 1 year)              | _       |        |
| 1 year to 2 years (Including 2 years)  | _       | _      |
| 2 years to 3 years (Including 3 years) | 240,212 | 35,000 |
| Total                                  | 240,212 | 35,000 |
|  |         |        |

#### 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 and printers in the PRC under non-cancellable operating leases expiring on different dates. Payments under operating leases are expensed on a straight-line basis over the periods of the respective leases.

Total operating lease expenses were RMB3,113, RMB6,081 and RMB12,120 (US\$1,763) for the year ended December 31, 2016, 2017 and 2018, respectively.

As of December 31, 2018, future minimum payments under non-cancellable operating leases were as follows:

|                     | RMB    | US\$  |  |
|---------------------|--------|-------|--|
| 2019                | 13,387 | 1,947 |  |
| 2020                | 10,573 | 1,538 |  |
| 2021                | 4,613  | 671   |  |
| 2022 and thereafter | 4,478  | 651   |  |
| Total               | 33,051 | 4,807 |  |

The Company's operating lease commitments have no renewal options, rent escalation clauses and restrictions or contingent rents.

#### Capital commitments

As of December 31, 2018, future minimum payment under non-cancellable purchase commitment for bandwidth is RMB1,744 (US\$254), which is scheduled to be paid within one year; for consulting service is RMB7,008 (US\$1,019) and RMB271 (US\$39), which is scheduled to be paid within one and two years, respectively.

#### 15 Share capital

On June 27, 2018, the Company's shareholders adopted a resolution to approve the Post-Offering Memorandum and Articles of Association, The Post-Offering Memorandum and Articles of Association provide that, the Company's authorized share capital will be changed into US\$500 divided into 5,000,000,000 shares.

As of December 31, 2017, there were 42,666,670 common shares and 27,867,937 preferred shares.

On April 11, 2018, the Company redeemed the 1,738,720 Series C preferred shares held by T.C.L. Industries Holdings (H.K.) Ltd. for an aggregate price of US\$9,049,000.

On July 26, 2018, the Company completed its IPO on the NASDAQ. The Company offered 9,060,000 ADSs representing 6,040,000 Class A common shares. Upon completion of the IPO, all outstanding 27,867,937 Preferred Shares were converted on a one-for-one basis into 27,867,937 Class A common shares, all 42,666,670 outstanding common shares were converted on a one-for-one basis into 25,666,481 Class A common shares and 17,000,189 Class B common shares, respectively. Holders of Class A common shares and Class B common shares will have the same rights except for voting and conversion rights. In respect of all matters subject to a shareholder vote, each Class A common share is entitled to one vote, and each Class B common share is entitled to ten votes, voting together as one class. 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 any transfer of Class B common shares by a holder thereof to any person or entity that is not an affiliate of such holder, such Class B common shares shall be automatically and immediately converted into the same number of Class A common shares.

Additionally, on August 30, 2018, the underwriters exercised their over-allotment option and issued more 19,708 Class A common shares. And as of December 31, 2018, the Company had repurchased under the Share Repurchase Program an aggregate of 69,455 ADSs, representing 46,303 Class A common shares (notes 12).

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

### 15 Share capital (continued)

On November 20, 2018, the Board of Directors of the Company authorized the Repurchase Plan, pursuant to which the Company was authorized to repurchase its own issued and outstanding American depositary shares ("ADSs") up to an aggregate value of US\$10 million from the open market.

As of December 31, 2018, the Company had repurchased under the Repurchase Plan an aggregate of 69,455 ADSs, representing 46,303 Class A common shares. 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, 2018 there were 59,547,823 and 17,000,189 Class A and Class B ordinary shares outstanding respectively.

Basic and diluted loss per share is calculated as follows:

|                                 | For the year ended December 31, 2016 | For the year ended December 31, 2017 | For the year ended December 31, 2018 |            |            |            |
|---------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|------------|------------|------------|
|                                 | Common shares                        | nmon shares Common shares            | mon shares Class A                   | Class A    |            | s B        |
|                                 | RMB                                  | RMB                                  | RMB                                  | US\$       | RMB        | US\$       |
| Numerator:                      |                                      |                                      |                                      |            |            |            |
| Net loss attributable to        |                                      |                                      |                                      |            |            |            |
| Class A and Class B common      |                                      |                                      |                                      |            |            |            |
| shareholders                    | (61,382)                             | (90,291)                             | (46,606)                             | (6,779)    | (19,591)   | (2,848)    |
| Deduct: Accretion of            |                                      |                                      |                                      |            |            |            |
| redeemable convertible          |                                      |                                      |                                      |            |            |            |
| preferred shares                | (12,427)                             | (26,391)                             | (16,963)                             | (2,467)    | (7,131)    | (1,037)    |
| Net Loss attributable to common |                                      |                                      |                                      |            |            |            |
| shareholders                    | (73,809)                             | (116,682)                            | (63,569)                             | (9,246)    | (26,722)   | (3,885)    |
| Denominator:                    |                                      |                                      |                                      |            |            |            |
| Weighted average number of      |                                      |                                      |                                      |            |            |            |
| shares used in calculating      |                                      |                                      |                                      |            |            |            |
| basic and diluted loss          |                                      |                                      |                                      |            |            |            |
| per share                       | 42,666,670                           | 42,666,670                           | 40,441,999                           | 40,441,999 | 17,000,189 | 17,000,189 |
| Basic and diluted loss          |                                      |                                      |                                      |            |            |            |
| per share                       | (1.73)                               | (2.73)                               | (1.57)                               | (0.23)     | (1.57)     | (0.23)     |
| -                               |                                      |                                      |                                      |            |            |            |

For the years ended December 31, 2016 and 2017, the computation of basic loss per share using the two-class method is not applicable as the Company only had one class of common shares and the Preferred Shares do not have contractual rights and obligations to share in the losses of the Company. For the year ended December 31, 2018, 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 Preferred Shares, share options, restricted share units and convertible notes were excluded from the computation of diluted loss per share for the years ended December 31, 2016, 2017 and 2018 as their effects would be anti-dilutive.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

## 16 Related party transactions

The table below sets forth the major related parties and their relationships with the Company:

| Name of related parties                                | Relationship  |  |  |  |
|--|---|--|--|--|
| KK Mobile Limited                                      | Principal owner of the Company, controlled by                             |  |  |  |
|  | Weidong Luo   |  |  |  |
| Stable View Limited                                    | Shareholder of the Company, controlled by Jiawen                          |  |  |  |
|  | Fang, who is a director of the Company.                                   |  |  |  |
| Focus Axis Limited                                     | Shareholder of the Company, controlled by Xiaodao Wang, who is a director |  |  |  |
|  | of the Company.   |  |  |  |
| Weidong Luo  | Founder, Chief Executive Officer  |  |  |  |
| Fei Chen   | Founder, President  |  |  |  |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | Company that is significantly influenced by Weidong Luo                   |  |  |  |
| Guangzhou Tianlang Network Technology Co., Ltd.        | Company that is significantly influenced by Weidong Luo                   |  |  |  |

Details of related party balances and transactions as of December 31, 2016, 2017 and 2018 are as follows:

# 16.1 Amounts due from related parties

|  |      | As of December 31, |       |      |  |
|--|------|--------------------|-------|------|--|
|  | 2016 | 2017               | 201   | 8    |  |
|  | RMB  | RMB                | RMB   | US\$ |  |
| Focus Axis Limited                                     | 2    | 17                 | _     | _    |  |
| KK Mobile Limited                                      | 26   | 40                 | _     | _    |  |
| Stable View Limited                                    | 2    | 17                 | _     | _    |  |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | 65   | 886                | 1,543 | 224  |  |
| Guangzhou Tianlang Network Technology Co., Ltd.        | _    | 300                | 1,305 | 190  |  |
| President  | _    | _                  | 1,716 | 250  |  |
| Total amounts due from related parties                 | 95   | 1,260              | 4,564 | 664  |  |

# 16.2 Amounts due to related parties

|  | As of December 31, |          |          |          |
|--|--------------------|----------|----------|----------|
|  | 2016               | 2017     | 2018     |          |
|  | RMB                | RMB      | RMB      | US\$     |
| Weidong Luo  | 5,649              | 5,649    | _        | _        |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | 504                | 461      | 8,864    | 1,289    |
| Guangzhou Tianlang Network Technology Co., Ltd.        | 200                | <u> </u> | <u> </u> | <u> </u> |
| Total amounts due to related parties                   | 6,353              | 6,110    | 8,864    | 1,289    |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 16 Related party transactions (continued)

16.3 Transactions with related parties

|  | For the year ended December 31, |       |        |       |
|--|---------------------------------|-------|--------|-------|
|  | 2016 2017                       |       | 2018   | 3     |
|  | RMB                             | RMB   | RMB    | US\$  |
| Services provided to:                                  |                                 |       |        |       |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | 344                             | 2,752 | 1,002  | 142   |
| Guangzhou Tianlang Network Technology Co., Ltd.        |                                 | 755   | 1,542  | 224   |
| Total  | 344                             | 3,507 | 2,544  | 366   |
| Services received from:                                |                                 |       |        |       |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | 360                             | 672   | 20,909 | 3,041 |
| Office premises leased from:                           |                                 |       |        |       |
| Shenzhen Weixunyitong Information Technology Co., Ltd. | 1,193                           | 1,557 | 475    | 69    |
| Marketing expense incurred:                            |                                 |       |        |       |
| Guangzhou Tianlang Network Technology Co., Ltd.        | 943                             | _     | _      | _     |
| Total  | 2,496                           | 2,229 | 21,384 | 3,110 |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 17 Revenues

Revenues consist of the following:

|                               | Year ended December 31, |         |         |         |
|-------------------------------|-------------------------|---------|---------|---------|
|                               | 2016                    | 2017    | 2018    |         |
|                               | RMB                     | RMB     | RMB     | US\$    |
| Developer services            | 23,196                  | 38,795  | 60,106  | 8,742   |
| Data solutions                |                         |         |         |         |
| Targeted Marketing            | 43,149                  | 221,153 | 572,796 | 83,310  |
| Other vertical data solutions | 3,977                   | 24,761  | 81,239  | 11,816  |
| Total data solutions          | 47,126                  | 245,914 | 654,035 | 95,126  |
| Total revenues                | 70,322                  | 284,709 | 714,141 | 103,868 |

#### 18 Fair value measurements

Financial instrument includes convertible notes and their bifurcated embedded redemption feature derivative. The carrying value of the convertible notes is RMB nil and RMB216,179 as of December 31, 2017 and 2018, respectively. The fair value measurement of the convertible notes falls into level 3 of the fair value hierarchy.

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.

The Company carries the convertible notes at face value less unamortized debt discount and issuance costs on its consolidated balance sheets, and presents the fair value for required disclosure purposes only. The Company classified the fair value of convertible notes as Level 3 within the fair value hierarchy due to the lack of observable market data and activity. For further information on the convertible notes see Note 13.

The changes in fair value of the redemption feature derivative liability during fiscal years 2017 and 2018 are shown in the following table.

|   | Fair value measurements   |   |  |        |
|---|---|---|--|--------|
|   | Quoted prices in<br>active market<br>for<br>identical assets<br>(Level 1) | Significant<br>other<br>observable<br>inputs<br>(Level 2) | Significant<br>unobservable<br>inputs<br>(Level 3) | Total  |
| As of December 31, 2017 in RMB          | _   |   |  |        |
| Derivative liability                    |   |   | 20,237   | 20,237 |
| Foreign currency translation adjustment |   |   | 1,065  | 1,065  |
| Charge to profit and loss               | <u> </u>  |   | (21,302)   | 21,302 |
| As of December 31, 2018 in RMB          |   |   |  |        |
| As of December 31, 2018 in USD          |   |   |  |        |

The derivative liability represents the fair value of the embedded redemption feature of convertible notes (Note 13). The Company engaged an independent third-party appraiser to assist with the valuation of the feature. The Company is ultimately responsible for the fair value of the redemption feature of convertible notes recorded in the consolidated financial statements. The Company adopted the binomial model to assess the fair value of such feature as of year-end. The significant unobservable inputs used in the fair value measurement of the redemption feature includes the risk-free rate of return, expected volatility, expected life of the convertible notes and expected ordinary dividend yield.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

#### 19 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 RMB280,922 (US\$44,786) and RMB787,223 (US\$114,497) as of December 31, 2017 and 2018, respectively.

## 20 Subsequent event

On March 4, 2019, the Company entered into a purchase agreement with Shanghai Liehong Information Technology Limited Company to acquire assets and assume liabilities related to the MLINK business with a total consideration of RMB8,000. The Company is in the process of evaluating the estimated fair value of the net assets on the acquisition date under the purchase method of accounting.

#### 21 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 investment" 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.

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 21 Condensed financial information of the parent company (continued)

# **Condensed Balance Sheets**

|  | As of December 31, |           |          |  |
|--|--------------------|-----------|----------|--|
|  | 2017               | 2018      | TICC     |  |
| ASSETS:  | RMB                | RMB       | US\$     |  |
| Current assets:  |                    |           |          |  |
| Cash and cash equivalents  | 118,429            | 238,236   | 34,650   |  |
| Due from the entities within the Group   | 6,603              | 7,030     | 1,022    |  |
| Prepayments  | ´ —                | 2,439     | 355      |  |
| Interest receivables   | _                  | 89        | 13       |  |
| Amounts due from related parties   | 28                 | _         | _        |  |
| Other receivables  |                    | 1,717     | 251      |  |
| Total current assets   | 125,060            | 249,511   | 36,291   |  |
| Non-current assets:  |                    |           |          |  |
| Long-term investments  | 126,616            | 590,752   | 85,921   |  |
| Intangible assets  |                    | 93        | 14       |  |
| Total non-current assets   | 126,616            | 590,845   | 85,935   |  |
| Total assets   | 251,676            | 840,356   | 122,226  |  |
| LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS DEFICIT   |                    |           |          |  |
| Current liabilities:   |                    |           |          |  |
| Accrued liabilities and other current liabilities  | 3,072              | 11,542    | 1,679    |  |
| Due to the entities within the Group   | 702                | 710       | 103      |  |
| Amounts due to related parties   | 5,649              | _         | _        |  |
| Total current liabilities  | 9,423              | 12,252    | 1,782    |  |
| Non-current liabilities:   |                    |           |          |  |
| Deferred revenue - non-current   | _                  | 10,265    | 1,493    |  |
| Convertible notes  | _                  | 216,179   | 31,442   |  |
| Total non-current liabilities  |                    | 226,444   | 32,935   |  |
| Total liabilities  | 9,423              | 238,696   | 34,717   |  |
| Mezzanine equity   |                    |           |          |  |
| Series A contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 11,111,120 and nil shares authorized, issued and outstanding as of December 31, 2017 and 2018, respectively)               | 26,979             |           |          |  |
| series B contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 7,936,510 and nil shares authorized, issued  | 20,717             |           |          |  |
| and outstanding as of December 31, 2017 and 2018, respectively)  | 52,723             | _         | _        |  |
| Series C contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 4,999,540 and nil shares authorized, issued and outstanding as of December 31, 2017 and 2018, respectively)                | 168,317            |           |          |  |
| Series D contingently redeemable convertible preferred shares (par value of US\$0.0001 and US\$ nil per share as of December 31, 2017 and 2018; 5,559,487 and nil shares authorized, issued and outstanding as of December 31, 2017 and 2018,                              | 100,517            |           |          |  |
| respectively)  | 218,618            | _         | _        |  |
| Total mezzanine equity   | 466,637            | _         | _        |  |
| Shareholders' deficit  |                    |           |          |  |
| Common shares (par value of US\$0.0001 and nil per share as of December 31, 2017 and 2018; 470,393,343 and 50,000,000 shares authorized as of December 31, 2017 and 2018, 42,666,670 and nil shares issued and outstanding as of December 31, 2017 and 2018, respectively) | 26                 | _         | _        |  |
| Class A common shares (par value of nil and US\$0.0001 per share as of December 31, 2017 and 2018; nil and 4,920,000,000 shares authorized as of December 31, 2017 and 2018, nil and 59,547,823 shares issued  |                    | 25        | _        |  |
| and outstanding as of December 31, 2017 and 2018, respectively)  |                    | 37        | 5        |  |
| Class B common shares (par value of nil and US\$0.0001 per share as of December 31, 2017 and 2018; nil and 30,000,000 shares authorized as of December 31, 2017 and 2018, nil and 17,000,189 shares issued and outstanding as of December 31, 2017 and 2018)               | _                  | 11        | 2        |  |
| Treasury shares (nil and 46,303 class A common shares as of December 31, 2017 and 2018, respectively)  | _                  | (3,165)   | (460)    |  |
| Additional paid-in capital   | 13,689             | 944,500   | 137,372  |  |
| Accumulated deficit  | (234,810)          | (348,123) | (50,632) |  |
| Accumulated other comprehensive loss   | (3,289)            | 8,400     | 1,221    |  |
| Accumulated other completionsive loss  |                    |           |          |  |
| Total shareholders' deficit  | (224,384)          | 601,660   | 87,508   |  |

# NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

(Amounts in thousands of Renminbi ("RMB") and US dollars ("US\$"))

# 21 Condensed financial information of the parent company (continued)

## **Condensed Statements of Comprehensive Loss**

|  | As of December 31, |           |          |          |
|--|--------------------|-----------|----------|----------|
|  | 2016 2017          |           | 2018     |          |
|  | RMB                | RMB       | RMB      | US\$     |
| Revenues   | _                  | _         | _        | _        |
| Cost of Revenues   |                    |           |          |          |
| Gross profit   |                    | <u> </u>  | <u> </u> | <u> </u> |
| Operating expenses   |                    |           |          |          |
| Research and development                                   | _                  | _         | _        | _        |
| Sales and marketing  | _                  | _         | _        | _        |
| General and administrative                                 | (2,302)            | (10,076)  | (11,941) | (1,737)  |
| Share of losses of subsidiaries and the VIE                | (58,167)           | (79,916)  | (72,750) | (10,581) |
| Total operating expenses                                   | (60,469)           | (89,992)  | (84,691) | (12,318) |
| Loss from operations                                       | (60,469)           | (89,992)  | (84,691) | (12,318) |
| Foreign exchange loss, net                                 | (961)              | (339)     | (186)    | (27)     |
| Interest income  | 48                 | 18        | 3,013    | 438      |
| Interest expense   | _                  | _         | (6,599)  | (960)    |
| Other income   |                    | 22        | 22,266   | 3,238    |
| Loss before income taxes                                   | (61,382)           | (90,291)  | (66,197) | (9,629)  |
| Income tax expenses  |                    | <u> </u>  | <u> </u> | <u> </u> |
| Net Loss   | (61,382)           | (90,291)  | (66,197) | (9,629)  |
| Accretion of contingently redeemable convertible preferred | <u> </u>           |           |          |          |
| shares   | (12,427)           | (26,391)  | 44,451   | 6,465    |
| Net loss attributable to common share holders              | (73,809)           | (116,682) | (21,746) | (3,164)  |
| Other comprehensive income (loss)                          |                    | -         |          |          |
| Foreign currency translation adjustments                   | 1,896              | (7,563)   | 29,510   | 4,292    |
| Total other comprehensive income (loss), net of tax        | 1,896              | (7,563)   | 29,510   | 4,292    |
| Comprehensive loss   | (59,486)           | (97,854)  | (36,687) | (5,337)  |

## **Condensed Statements of Cash Flows**

|  | For the year ended December 31, |           |           |          |
|--|---------------------------------|-----------|-----------|----------|
|  | 2016 2017                       |           | 2018      |          |
|  | RMB                             | RMB       | RMB       | US\$     |
| Net cash used in operating activities                | (2,311)                         | (744)     | 16,052    | 2,335    |
| Net cash used in investing activities                | (77,193)                        | (157,412) | (535,995) | (77,957) |
| Net cash from financing activities                   | 134,348                         | 217,446   | 614,884   | 89,431   |
| Effect of exchange rate changes                      | 2,649                           | (7,695)   | 24,866    | 3,617    |
| Net increase in cash and cash equivalents            | 57,493                          | 51,595    | 119,807   | 17,426   |
| Cash and cash equivalents and restricted cash at the |                                 |           |           |          |
| beginning of year                                    | 9,341                           | 66,834    | 118,429   | 17,224   |
| Cash and cash equivalents and restricted cash at     |                                 | _         |           | _        |
| the end of year                                      | 66,834                          | 118,429   | 238,236   | 34,650   |

# List of Subsidiaries and Consolidated Variable Interest Entity of the Registrant

**Subsidiaries** 

**UA Mobile Limited** 

KK Mobile Investment Limited

JPush Information Consultation (Shenzhen) Co., Ltd. (吉浦斯信息咨询(深圳)有限公司)

<u>Place of Incorporation</u>

British Virgin Islands Hong Kong

People's Republic of China

# **Consolidated Variable Interest Entity**

Shenzhen Hexun Huagu Information Technology Co., Ltd. (深圳市和讯华谷信息技术有限公司)

<u>Place of Incorporation</u> People's Republic of China

# FIRST AMENDED AND RESTATED CODE OF BUSINESS CONDUCT AND ETHICS

# (AS ADOPTED BY THE BOARD OF DIRECTORS OF AURORA MOBILE LIMITED ON NOVEMBER 20, 2018)

## I. PURPOSE

This Code of Business Conduct and Ethics (the "Code") contains general guidelines for conducting the business of Aurora Mobile Limited, a Cayman Islands company, and its subsidiaries and affiliates (collectively, the "Company") consistent with the highest standards of business ethics, and is intended to qualify as a "code of ethics" within the meaning of Section 406 of the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder. To the extent this Code requires a higher standard than required by commercial practice or applicable laws, rules or regulations, we adhere to these higher standards.

This **Code** is designed to deter wrongdoing and to promote:

- honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships;
- full, fair, accurate, timely, and understandable disclosure in reports and documents that the **Company** files with, or submits to, the U.S. Securities and Exchange Commission (the "SEC") and in other public communications made by the **Company**;
- compliance with applicable laws, rules and regulations;
- prompt internal reporting of violations of the **Code**; and
- accountability for adherence to the Code.

## II. APPLICABILITY

This **Code** applies to all directors, officers and **employees** of the **Company**, whether they work for the **Company** on a full-time, part-time, consultative or temporary basis (each, an "**employee**" and collectively, the "**employees**"). Certain provisions of the **Code** apply specifically to our chief executive officer, chief financial officer, senior finance officer, controller, senior vice presidents, vice presidents and any other persons who perform similar functions for the **Company** (each, a "**senior officer**," and collectively, the "**senior officers**").

The Board of Directors of the **Company** (the "**Board**") has appointed the Miss Monica Yanhua Sun (**Company**'s General Counsel) as the compliance officer for the **Company** (the "**Compliance Officer**"). If you have any questions regarding the **Code** or would like to report any violation of the **Code**, please email the **Compliance Officer** at sunyh@jiguang.cn.

This **Code** has been adopted by the **Board** and has become effective (the "**Effective Time**") upon the effectiveness of the **Company**'s registration statement on Form F-1 filed by the **Company** with the SEC relating to the **Company**'s initial public offering.

## III. CONFLICTS OF INTEREST

# **Identifying Conflicts of Interest**

A conflict of interest occurs when an **employee**'s private interest interferes, or appears to interfere, in any way with the interests of the **Company** as a whole. An **employee** should actively avoid any private interest that may impact such **employee**'s ability to act in the interests of the **Company** or that may make it difficult to perform the **employee**'s work objectively and effectively. In general, the following should be considered conflicts of interest:

- <u>Competing Business</u>. No **employee** may be employed by a business that competes with the **Company** or deprives it of any business.
- Corporate Opportunity. No employee should use corporate property, information or his/her position with the Company to secure a business opportunity that would otherwise be available to the Company. If an employee discovers a business opportunity that is in the Company's line of business through the use of the Company's property, information or position, the employee must first present the business opportunity to the Company before pursuing the opportunity in his/her individual capacity.

## • Financial Interests.

- (i) No **employee** may have any financial interest (ownership or otherwise), either directly or indirectly through a spouse or other family member, in any other business or entity if such interest adversely affects the **employee**'s performance of duties or responsibilities to the **Company**, or requires the **employee** to devote time to it during such **employee**'s working hours at the **Company**;
- (ii) No **employee** may hold any ownership interest in a privately held **company** that is in competition with the **Company**;
- (iii) An **employee** may hold up to 5% ownership interest in a publicly traded company that is in competition with the **Company**; provided that if the **employee**'s ownership interest in such publicly traded **company** increases to more than 5%, the **employee** must immediately report such ownership to the **Compliance Officer**;
- (iv) No **employee** may hold any ownership interest in a **company** that has a business relationship with the **Company** if such **employee**'s duties at the **Company** include managing or supervising the **Company**'s business relations with that **company**; and
- (v) Notwithstanding the other provisions of this **Code**,

- (a) a director or any family member of such director (collectively, "Director Affiliates") or a senior officer or any family member of such senior officer (collectively, "Officer Affiliates") may continue to hold his/her investment or other financial interest in a business or entity (an "Interested Business") that:
- (1) was made or obtained either (x) before the **Company** invested in or otherwise became interested in such business or entity; or (y) before the director or **senior officer** joined the **Company** (for the avoidance of doubt, regardless of whether the **Company** had or had not already invested in or otherwise become interested in such business or entity at the time the director or **senior officer** joined the **Company**); or
- (2) may in the future be made or obtained by the director or **senior officer**, provided that at the time such investment or other financial interest is made or obtained, the **Company** has not yet invested in or otherwise become interested in such business or entity;

provided that such director or **senior officer** shall disclose such investment or other financial interest to the **Board**:

- (b) an interested director or **senior officer** shall refrain from participating in any discussion among **senior officers** of the **Company** relating to an **Interested Business** and shall not be involved in any proposed transaction between the **Company** and an Interested Business; and
- (c) before any Director Affiliate or Officer Affiliate (i) invests, or otherwise acquires any equity or other financial interest, in a business or entity that is in competition with the **Company**; or (ii) enters into any transaction with the **Company**, the related director or **senior officer** shall obtain prior approval from the Audit Committee of the **Board**.
- <u>Loans or Other Financial Transactions</u>. No **employee** may obtain loans or guarantees of personal obligations from, or enter into any other personal financial transaction with, any **company** that is a material customer, supplier or competitor of the **Company**. This guideline does not prohibit arms-length transactions with recognized banks or other financial institutions.
- Service on Boards and Committees. No employee shall serve on a board of directors or trustees or on a committee of any entity (whether profit or not-for-profit) whose interests could reasonably be expected to conflict with those of the Company. Employees must obtain prior approval from the Board before accepting any such board or committee position. The Company may revisit its approval of any such position at any time to determine whether an employee's service in such position is still appropriate.

The above is in no way a complete list of situations where conflicts of interest may arise. The following questions might serve as a useful guide in assessing a potential conflict of interest situation not specifically addressed above:

- Is the action to be taken legal?
- Is it honest and fair?
- Is it in the best interests of the **Company**?

## Disclosure of Conflicts of Interest

The **Company** requires that **employees** fully disclose any situations that could reasonably be expected to give rise to a conflict of interest. If an **employee** suspects that he/she has a conflict of interest, or a situation that others could reasonably perceive as a conflict of interest, the **employee** must report it immediately to the **Compliance Officer**. Conflicts of interest may only be waived by the **Board**, or the appropriate committee of the **Board**, and will be promptly disclosed to the public to the extent required by law and applicable rules of the applicable stock exchange.

## Family Members and Work

The actions of family members outside the workplace may also give rise to conflicts of interest because they may influence an **employee**'s objectivity in making decisions on behalf of the **Company**. If a member of an **employee**'s family is interested in doing business with the **Company**, the criteria as to whether to enter into or continue the business relationship and the terms and conditions of the relationship must be no less favorable to the **Company** compared with those that would apply to an unrelated party seeking to do business with the **Company** under similar circumstances.

**Employees** should report any situation involving family members that could reasonably be expected to give rise to a conflict of interest to their supervisor or the **Compliance Officer**. For purposes of this **Code**, "family members" or "members of **employee's family**" include an **employee**'s spouse, parents, children and siblings, whether by blood, marriage or adoption or anyone residing in such **employee**'s home.

## IV. GIFTS AND ENTERTAINMENT

The giving and receiving of appropriate gifts may be considered common business practice. Appropriate business gifts and entertainment are welcome courtesies designed to build relationships and understanding among business partners. However, gifts and entertainment should never compromise, or appear to compromise, an **employee**'s ability to make objective and fair business decisions.

It is the responsibility of **employees** to use good judgment in this area. As a general rule, **employees** may give or receive gifts or entertainment to or from customers or suppliers only if the gift or entertainment is in compliance with applicable law, insignificant in amount and not given in consideration or expectation of any action by the recipient. All gifts and entertainment expenses made on behalf of the **Company** must be properly accounted for on expense reports.

All **Employees** are expected to abide by the *Anti-corruption and Business Conduct Policy* of the **Company** and must comply with all instructions received from the **Compliance Officer** 

interpreting such policies. Giving and receiving nominal gifts may be appropriate, provided they are reasonable and customary, do not violate local law, and are, have been or will be approved by the finance department of the **Company**. However, giving or receiving a gift in exchange for an advantage to the **Company** is strictly prohibited. Additionally, gifts of cash or cash equivalent (e.g., gift certificates) are never permissible. Bribes and kickbacks are criminal acts, strictly prohibited by law. An **employee** must not offer, give, solicit or receive any form of bribe or kickback to any person or anywhere in the world, whether in dealings with the government or private sector.

## V. FCPA COMPLIANCE

The U.S. Foreign Corrupt Practices Act ("FCPA") prohibits giving anything of value, directly or indirectly, to officials of foreign governments or foreign political candidates in order to obtain or retain business. A violation of FCPA does not only violate the Company's policy but also constitute a civil or criminal offense under FCPA which the Company is subject to after the Effective Time. No employee shall give or authorize directly or indirectly any illegal payments to government officials of any country. While the FCPA does, in certain limited circumstances, allow nominal "facilitating payments" to be made, any such payment must be discussed with and approved by a senior officer in advance before it can be made.

## VI. PROTECTION AND USE OF COMPANY ASSETS

**Employees** should protect the **Company**'s assets and ensure their efficient use for legitimate business purposes only. Theft, carelessness and waste have a direct impact on the **Company**'s profitability. Any use of the funds or assets of the **Company**, whether for personal gain or not, for any unlawful or improper purpose is strictly prohibited.

To ensure the protection and proper use of the **Company**'s assets, each **employee** should:

- exercise reasonable care to prevent theft, damage or misuse of the **Company**'s assets;
- promptly report any actual or suspected theft, damage or misuse of the Company's assets;
- safeguard all electronic programs, data, communications and written materials from unauthorized access; and
- use the **Company**'s assets only for legitimate business purposes.

Except as approved in advance by the Chief Executive Officer or Chief Financial Officer of the **Company**, the **Company** prohibits political contributions (directly or through trade associations) by any **employee** on behalf of the **Company**. Prohibited political contributions include:

• any contributions of the **Company**'s funds or other assets for political purposes;

- encouraging individual employees to make any such contribution; and
- reimbursing an **employee** for any political contribution.

#### VII. INTELLECTUAL PROPERTY AND CONFIDENTIALITY

**Employees** should abide by the **Company**'s rules and policies in protecting the intellectual property and confidential information, including the following:

- All inventions, creative works, computer software, and technical or trade secrets developed by an **employee** in the course of performing the **employee**'s duties or primarily through the use of the **Company**'s assets or resources while working at the **Company** shall be the property of the **Company**.
- **Employees** should maintain the confidentiality of information entrusted to them by the **Company** or entities with which the **Company** has business relations, except when disclosure is authorized or legally mandated. Confidential information includes all non-public information that might be of use to competitors, or harmful to the **company** or its business associates, if disclosed.
- The Company maintains a strict confidentiality policy. During an employee's term of employment with the Company, the employee shall comply with any and all written or unwritten rules and policies concerning confidentiality and shall fulfill the duties and responsibilities concerning confidentiality applicable to the employee.
- In addition to fulfilling the responsibilities associated with his/her position in the **Company**, an **employee** shall not, without obtaining prior approval from the **Company**, disclose, announce or publish trade secrets or other confidential business information of the **Company**, nor shall an **employee** use such confidential information outside the course of his/her duties to the **Company**.
- Even outside the work environment, an **employee** must maintain vigilance and refrain from disclosing important information regarding the **Company** or its business, business associates or **employees**.
- An **employee**'s duty of confidentiality with respect to the confidential information of the **Company** survives the termination of such **employee**'s employment with the **Company** for any reason until such time as the **Company** discloses such information publicly or the information otherwise becomes available in the public sphere through no fault of the **employee**.
- Upon termination of employment, or at such time as the **Company** requests, an **employee** must return to the **Company** all of its property without exception, including all forms of medium containing confidential information, and may not retain duplicate materials.

## VIII. ACCURACY OF FINANCIAL REPORTS AND OTHER PUBLIC COMMUNICATIONS

Upon the **Effective Time**, the **Company** will be required to report its financial results and other material information about its business to the public and the **SEC**. It is the **Company**'s policy to promptly disclose accurate and complete information regarding its business, financial condition and results of operations. **Employees** must strictly comply with all applicable standards, laws, regulations and policies for accounting and financial reporting of transactions, estimates and forecasts. Inaccurate, incomplete or untimely reporting will not be tolerated and can severely damage the **Company** and result in legal liability.

**Employees** should be on guard for, and promptly report, any possibility of inaccurate or incomplete financial reporting. Particular attention should be paid to:

- Financial results that seem inconsistent with the performance of the underlying business;
- Transactions that do not seem to have an obvious business purpose; and
- Requests to circumvent ordinary review and approval procedures.

The **Company**'s senior financial officers and other **employees** working in the finance department have a special responsibility to ensure that all of the **Company**'s financial disclosures are full, fair, accurate, timely and understandable. Any practice or situation that might undermine this objective should be reported to the **Compliance Officer**.

**Employees** are prohibited from directly or indirectly taking any action to coerce, manipulate, mislead or fraudulently influence the **Company**'s independent auditors for the purpose of rendering the financial statements of the **Company** materially misleading. Prohibited actions include but are not limited to:

- issuing or reissuing a report on the **Company**'s financial statements that is not warranted in the circumstances (due to material violations of U.S. GAAP, generally accepted auditing standards or other professional or regulatory standards);
- not performing audit, review or other procedures required by generally accepted auditing standards or other professional standards;
- not withdrawing an issued report when withdrawal is warranted under the circumstances; or
- not communicating matters required to be communicated to the **Company**'s Audit Committee.

## IX. COMPANY RECORDS

Accurate and reliable records are crucial to the **Company**'s business and form the basis of its earnings statements, financial reports and other disclosures to the public. The **Company**'s

records are a source of essential data that guides business decision-making and strategic planning. **Company** records include, but are not limited to, booking information, payroll, timecards, travel and expense reports, e-mails, accounting and financial data, measurement and performance records, electronic data files and all other records maintained in the ordinary course of business.

All **Company** records must be complete, accurate, reliable, and timely in all material respects. There is never an acceptable reason to make false or misleading entries. Undisclosed or unrecorded funds, payments or receipts are strictly prohibited. An **employee** is responsible for understanding and complying with the **Company**'s recordkeeping policy. An **employee** should contact the **Compliance Officer** if he/she has any questions regarding the recordkeeping policy.

# X. COMPLIANCE WITH LAWS AND REGULATIONS

Each **employee** has an obligation to comply with the laws of the cities, provinces, regions and countries in which the **Company** operates. This includes, without limitation, laws covering commercial bribery and kickbacks, money laundering, patent, copyrights, trademarks and trade secrets, information privacy, insider trading, offering or receiving gratuities, employment harassment, environmental protection, occupational health and safety, false or misleading financial information, misuse of corporate assets and foreign currency exchange activities. **Employees** are expected to understand and comply with all laws, rules and regulations that apply to their positions at the **Company**. If any doubt exists about whether a course of action is lawful, the **employee** should seek advice immediately from the **Compliance Officer**.

## XI. DISCRIMINATION AND HARASSMENT

The **Company** is firmly committed to providing equal opportunity in all aspects of employment and will not tolerate any illegal discrimination or harassment based on race, ethnicity, religion, gender, age, national origin or any other protected class. For further information, **employees** should consult the **Compliance Officer**.

## XII. FAIR DEALING

Each **employee** should endeavor to deal fairly with the **Company**'s customers, suppliers, competitors and **employees**. None should take unfair advantage of anyone through manipulation, concealment, collusion, abuse of privileged information, misrepresentation of material facts, or any other unfair-dealing practice.

## XIII. HEALTH AND SAFETY

The **Company** strives to provide **employees** with a safe and healthy work environment. Each **employee** has responsibility for maintaining a safe and healthy workplace for other **employees** by following environmental, safety and health rules and practices and reporting accidents, injuries and unsafe equipment, practices or conditions. Violence or threats of violence are not permitted.

Each **employee** is expected to perform his/her duty to the **Company** in a safe manner, not under the influence of alcohol, illegal drugs or other controlled substances. The use of illegal drugs or other controlled substances in the workplace is prohibited.

## XIV. VIOLATIONS OF THE CODE

All **employees** have a duty to report any known or suspected violation of this **Code**, including any violation of laws, rules, regulations or policies that apply to the **Company**. Reporting a known or suspected violation of this **Code** by others will not be considered an act of disloyalty, but an action to safeguard the reputation and integrity of the **Company** and its **employees**.

If an **employee** knows of or suspects a violation of this **Code**, it is such **employee**'s responsibility to immediately report the violation to the **Compliance Officer**, who will work with the **employee** to investigate his/her concern. All questions and reports of known or suspected violations of this **Code** will be treated with sensitivity and discretion. The **Compliance Officer** and the **Company** will protect the **employee**'s confidentiality to the extent possible, consistent with the law and the **Company**'s need to investigate the **employee**'s concern.

It is the **Company**'s policy that any **employee** who violates this **Code** will be subject to appropriate discipline, including termination of employment, based upon the facts and circumstances of each particular situation. An **employee**'s conduct, if it does not comply with the law or with this **Code**, can result in serious consequences for both the **employee** and the **Company**.

The **Company** strictly prohibits retaliation against an **employee** who, in good faith, seeks help or reports known or suspected violations. An **employee** inflicting reprisal or retaliation against another **employee** for reporting a known or suspected violation will be subject to disciplinary action, including termination of employment.

# XV. WAIVERS OF THE CODE

Waivers of this **Code** will be granted on a case-by-case basis and only in extraordinary circumstances. Waivers of this **Code** may be made only by the **Board**, or the appropriate committee of the **Board**, and may be promptly disclosed to the public if so required by applicable laws and regulations and rules of the applicable stock exchange.

## XVI. CONCLUSION

This **Code** contains general guidelines for conducting the business of the **Company** consistent with the highest standards of business ethics. If **employees** have any questions about these guidelines, they should contact the **Compliance Officer**. We expect all **employees** to adhere to these standards. Each **employee** is separately responsible for his/her actions. Conduct that violates the law or this **Code** cannot be justified by claiming that it was ordered by a supervisor or someone in higher management positions. If an **employee** engages in conduct prohibited by the law or this **Code**, such **employee** will be deemed to have acted outside the scope of his/her employment. Such conduct will subject the **employee** to disciplinary action, including termination of employment.

\* \* \* \* \* \* \* \* \* \* \* \* \*

## 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)) 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) [intentionally omitted]
- (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 this annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;
- 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 3, 2019

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)) 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) [intentionally omitted]
- (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;
- 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 function):
- (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 3, 2019

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 fiscal year ended December 31, 2018 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 3, 2019

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 fiscal year ended December 31, 2018 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 3, 2019

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 Registration Statement on Form S-8 (File No. 333-228839) pertaining to the 2014 Stock Incentive Plan and the 2017 Stock Incentive Plan of Aurora Mobile Limited of our report dated April 3, 2019, with respect to the consolidated financial statements of Aurora Mobile Limited included in this Annual Report on Form 20-F for the year ended December 31, 2018.

/s/ Ernst & Young Hua Ming LLP

Shenzhen, the People's Republic of China April 3,2019

Date: April 3, 2019

# Aurora Mobile Limited

3/F, Building No. 7, Zhiheng Industrial Park No. 15, Guankou Road 2, Anle Community, Nantou Street, Nanshan District Shenzhen, Guangdong, 518052 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, 2018 (the "Annual Report"), which will be filed with the Securities and Exchange Commission (the "SEC") in the month of April 2019, 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. 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