

YY Inc.  
Form 20-F  
April 26, 2019

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

FORM 20-F

(Mark One)

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(B) OR 12(G) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

OR

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF  
1934**

**For the fiscal year ended December 31, 2018.**

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

OR

..

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

Date of event requiring this shell company report \_\_\_\_\_

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

Commission file number: 001-35729

YY INC.  
(Exact name of Registrant as specified in its charter)

N/A  
(Translation of Registrant's name into English)

Cayman Islands  
(Jurisdiction of incorporation or organization)

Building B-1, North Block of Wanda Plaza, No. 79 Wanbo Er Road,  
Nancun Town, Panyu District  
Guangzhou 511442  
The People's Republic of China  
(Address of principal executive offices)

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Nancun Town, Panyu District  
Guangzhou 511442  
The People's Republic of China  
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

<b>Title of Each Class</b>	<b>Name of Exchange on Which Registered</b>
American depository shares (each representing 20 Class A common shares, par value US\$0.00001 per share) Class A common shares, par value US\$0.00001 per share*	The Nasdaq Stock Market LLC

\* Not for trading, but only in connection with the listing on The Nasdaq Stock Market LLC of the American depositary shares (“ADSs”).

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

None  
(Title of Class)

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

None  
(Title of Class)

Indicate the number of outstanding shares of each of the Issuer’s classes of capital or common stock as of the close of the period covered by the annual report. **981,740,848 Class A common shares, par value US\$0.00001 per share, and 288,182,976 Class B common shares, par value US\$0.00001 per share, were outstanding as of December 31, 2018.**

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

Yes x No

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

Yes  No x

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

Yes  No

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

Yes  No

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

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Emerging growth company

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

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

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

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

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

Item 17  Item 18

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

Yes  No

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

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

Yes  No

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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:

“we,” “us,” “our company,” and “our” refer to YY Inc., a Cayman Islands company, its subsidiaries and consolidated affiliated entities (also referred to as variable interest entities) and the subsidiaries of its consolidated affiliated entities, as the context may require;

“active user” for any period means a registered user account that has logged onto our platforms at least once during such relevant period;

“concurrent users” for any point in time means the total number of YY users that are simultaneously logged onto our platforms at such point in time;

“paying user” for any period means a registered user account that has purchased virtual items or other products and services on our platforms at least once during the relevant period. A paying user is not necessarily a unique user, however, as a unique user may set up multiple paying user accounts on our platforms; thus, the number of paying users referred to in this annual report may be higher than the number of unique users who are purchasing virtual items or other products and services; and

“registered user account” means a user account that has downloaded, registered and logged onto our platforms at least once since registration. We calculate registered user accounts as the cumulative number of user accounts at the end of the relevant period that have logged onto our platforms at least once after registration. Each individual user may have more than one registered user account, and consequently, the number of registered user accounts we present in this annual report may overstate the number of unique individuals who are our registered users.

We present our financial results in RMB. We make no representation that any RMB or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or RMB, as the case may be, at any particular rate, or at all. The PRC government imposes control over its foreign currency reserves in part through direct regulation of the conversion of RMB into foreign exchange and through restrictions on foreign trade. This annual report contains translations of certain foreign currency amounts into U.S. dollars for the convenience of the reader. Unless otherwise stated, all translations of Renminbi into U.S. dollars were made at the rate at RMB6.8755 to US\$1.00, the exchange rate as set forth in the H.10 statistical release of the Board of Governors of the Federal Reserve System in effect as of December 31, 2018.



FORWARD-LOOKING STATEMENTS

This annual report contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts are forward-looking statements. These forward-looking statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. 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.

You can identify these forward-looking statements by words or phrases such as “may,” “will,” “expect,” “is expected to,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, but are not limited to, statements about:

our growth strategies;

- our ability to retain and increase our user base and expand our product and service offerings;

- our ability to monetize our platforms;

- our future business development, results of operations and financial condition;

· competition from companies in a number of industries, including internet companies that provide online voice and video communications services, social networking services and online games;

- expected changes in our revenues and certain cost or expense items;

- general economic and business condition in China and elsewhere; and

- assumptions underlying or related to any of the foregoing.

You should thoroughly read this annual report and the documents that we refer to herein with the understanding that our actual future results may be materially different from and/or worse than what we expect. Other sections of this annual report, including the Risk Factors and Operating and Financial Review and Prospects sections, 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 we make as predictions of future events. The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

## PART I

### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. Selected Financial Data

The following table presents the selected consolidated financial information for our company. The selected consolidated statements of operations data for the three years ended December 31, 2016, 2017 and 2018 and the consolidated balance sheet data as of December 31, 2017 and 2018 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. Our selected consolidated statements of operation data for the years ended December 31, 2014 and 2015 and our consolidated balance sheet data as of December 31, 2014, 2015 and 2016 have been derived from our consolidated financial statements not included in this annual report. Beginning in 2018, we changed our revenues presentation to live streaming and others (which mainly represent revenues from online games, memberships and other revenues). As a result, we also retrospectively changed the revenue presentation for the years ended December 31, 2014, 2015, 2016 and 2017. Our consolidated financial statements are prepared and presented in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. Our historical results for any period are not necessarily indicative of results to be expected for any future period. You should read the following selected financial information in conjunction with the consolidated financial statements and related notes and the information under “Item 5. Operating and Financial Review and Prospects” included elsewhere in this annual report.

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For the Year Ended December 31,

2014                      2015                      2016                      2017                      2018  
RMB                      RMB                      RMB                      RMB                      RMB                      US\$  
(All amounts in thousands, except share, ADS, per share and per ADS data)

Selected  
Consolidated  
Statements of  
Operations

Data:

Net Revenues<sup>(1)</sup>

Live streaming	2,475,379	4,539,857	7,027,227	10,670,954	14,877,667	2,163,867
Others	1,202,989	1,357,392	1,176,823	923,838	885,890	128,847
Total net revenues	3,678,368	5,897,249	8,204,050	11,594,792	15,763,557	2,292,714
Cost of revenues <sup>(2)</sup>	(1,849,149 )	(3,579,744 )	(5,103,430 )	(7,026,402 )	(10,017,134 )	(1,456,932 )
Gross profit	1,829,219	2,317,505	3,100,620	4,568,390	5,746,423	835,782
Operating expenses: <sup>(2)</sup>						
Research and development expenses	(431,188 )	(548,799 )	(675,230 )	(781,886 )	(1,192,052 )	(173,377 )
Sales and marketing expenses	(102,527 )	(312,870 )	(387,268 )	(691,281 )	(1,149,316 )	(167,161 )
General and administrative expenses	(223,019 )	(358,474 )	(482,437 )	(544,641 )	(883,225 )	(128,460 )
Goodwill impairment	-	(310,124 )	(17,665 )	(2,527 )	-	-
Fair value change of contingent consideration	-	292,471	-	-	-	-
Total operating expenses	(756,734 )	(1,237,796 )	(1,562,600 )	(2,020,335 )	(3,224,593 )	(468,998 )
Gain on deconsolidation and disposal of subsidiaries	-	-	103,960	37,989	-	-
Operating income	1,078,804	1,162,009	1,771,484	2,699,231	2,639,690	383,926
Fair value loss on derivative liabilities	-	-	-	-	(2,285,223 )	(332,372 )
Gain on fair value changes	-	-	-	-	1,689,404	245,714

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of investments						
Income before						
income tax	1,214,480	1,162,512	1,783,811	2,891,178	2,534,471	368,623
expenses						
Net income						
attributable to						
common	1,064,472	1,033,243	1,523,918	2,493,235	1,641,958	238,812
shareholders of						
the Company						
Weighted						
average number						
of ADS used in						
calculating net						
income per						
ADS:						
Basic	57,657,035	56,259,499	56,367,166	59,323,007	64,042,390	64,042,390
Diluted	59,927,174	57,541,558	60,805,566	60,831,887	64,704,470	64,704,470
Net income per						
ADS <sup>(3)</sup>						
Basic	18.46	18.37	27.04	42.03	25.64	3.73
Diluted	17.76	17.96	26.40	41.33	25.38	3.69
Weighted						
average number						
of common						
shares used in						
calculating net						
income per						
common share:						
Basic	1,153,140,699	1,125,189,978	1,127,343,312	1,186,460,144	1,280,847,795	1,280,847,795
Diluted	1,198,543,473	1,150,831,163	1,216,111,329	1,216,637,741	1,294,089,406	1,294,089,406
Net income per						
common						
share <sup>(3)</sup>						
Basic	0.92	0.92	1.35	2.10	1.28	0.19
Diluted	0.89	0.90	1.32	2.07	1.27	0.18

Notes:

(1) From January 1, 2018, revenue presentation has been changed to live streaming and others. We also have retrospectively changed the revenue presentation for the years ended December 31, 2014, 2015, 2016 and 2017.

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

For the Year Ended December 31,  
2014      2015      2016      2017      2018

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	RMB	RMB	RMB	RMB	RMB	US\$
	(in thousands)					
Cost of revenues	18,037	23,963	15,894	42,759	74,339	10,812
Research and development expenses	54,141	70,951	78,816	122,348	225,173	32,750
Sales and marketing expenses	2,807	3,283	3,107	4,417	5,723	832
General and administrative expenses	59,647	87,175	59,469	88,137	342,790	49,857
Total	134,632	185,372	157,286	257,661	648,025	94,251

(3) Each ADS represents 20 Class A common shares.

The following table presents our selected consolidated balance sheet data as of December 31, 2014, 2015, 2016, 2017 and 2018.

	As of December 31,					US\$
	2014 RMB (in thousands)	2015 RMB	2016 RMB	2017 RMB	2018 RMB	
<b>Selected Consolidated Balance Sheet Data:</b>						
Cash and cash equivalents	475,028	928,934	1,579,743	2,617,432	6,004,231	873,279
Short-term deposits	4,214,576	1,894,946	3,751,519	6,000,104	7,326,996	1,065,667
Restricted short-term deposits	-	-	-	1,000,000	-	-
Short-term investments	-	-	-	124,550	979,053	142,397
Goodwill	300,382	151,638	14,300	11,716	11,763	1,711
Total assets*	6,820,519	7,302,754	9,785,792	14,458,719	25,768,045	3,747,805
Convertible bonds (current)**	-	-	2,768,469	-	6,863	998
Total current liabilities	1,090,558	1,384,414	4,690,448	3,145,799	3,853,026	560,399
Convertible bonds (non-current)	2,405,705	2,572,119	-	6,536	-	-
Mezzanine equity	-	61,833	9,272	524,997	418,673	60,893
Class A common shares (US\$0.00001 par value; 10,000,000,000 shares authorized, 706,173,568, 728,227,848, 750,115,028, 945,245,908 and 981,740,848 shares issued and outstanding as of December 31, 2014, 2015, 2016, 2017 and 2018, respectively)	43	43	44	57	59	9
Class B common shares (US\$0.00001 par value; 1,000,000,000 shares authorized, 427,352,696, 369,557,976, 359,557,976, 317,982,976 and 288,182,976 shares issued and outstanding as of December 31, 2014, 2015, 2016, 2017 and 2018, respectively)	30	27	26	23	21	3
Retained earnings	173,963	1,207,168	2,728,736	5,218,110	6,913,469	1,005,522
Total shareholders' equity	3,090,164	3,246,819	5,052,555	10,712,859	21,377,131	3,109,174

Notes:

Effective January 2016, ASU 2015-3 issued by FASB requires entities to present the issuance costs of bonds in the balance sheet as a direct deduction from the related bonds rather than assets. Accordingly, we retrospectively \* reclassified RMB42.3 million and RMB25.3 million of issuance cost of bonds from other non-current assets into convertible bonds as of December 31, 2014 and December 31, 2015, respectively.

\*\* Convertible bonds classified in current liabilities represent convertible senior notes which may be redeemed within one year.

#### B. Capitalization and Indebtedness

Not applicable.

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

Not applicable.

#### D. Risk Factors

An investment in our capital stock involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information included in this annual report, before making an investment decision. If any of the following risks actually occurs, our business, financial condition or results of operations could suffer. In that case, the trading price of our capital stock could decline, and you may lose all or part of your investment.



## Risks Related to Our Business and Industry

Our business is based on a relatively new business model in a relatively new market in which user demand may change or decrease substantially.

Many of the elements of our business are unique, evolving and relatively unproven. The markets for our technology, especially our live streaming technology, and products and services are relatively new and rapidly developing and are subject to significant challenges. Our business plan relies heavily upon increased revenues from our live streaming services and our ability to successfully monetize our user base and products and services, and we may not succeed in any of these respects.

As the online live streaming industry in China is relatively young and untested, there are few proven methods of projecting user demand or available industry standards on which we can rely. Furthermore, some of our current monetization methods are in a relatively preliminary stage. For example, if we fail to properly manage the supply and timing of our in-game virtual items and the appropriate price points for these products and services, our users may be less likely to purchase in-game virtual items from us. For non-game virtual items, we consider industry standards and expected user demand in determining how to most effectively optimize virtual item merchandizing. We cannot assure you that our attempts to monetize our user base and products and services will continue to be successful, profitable or widely accepted, and therefore the future revenue and income potential of our business are difficult to evaluate.

If we fail to effectively manage our growth or implement our business strategies, our business and results of operations may be materially and adversely affected.

We have experienced a period of significant rapid growth and expansion that has placed, and continues to place, significant strain on our management and resources. We cannot assure you that this level of significant growth will be sustainable or achieved at all in the future. We believe that our continued growth will depend on our ability to develop new sources of revenue, increase monetization, attract new users, retain and expand paying users, encourage additional purchases by our paying users, continue developing innovative products, services and technologies in response to user demand, increase brand awareness through marketing and promotional activities, react to changes in user access to and use of the internet, expand into new market segments, integrate new devices, platforms and operating systems, develop new advertising and promotion methods, attract new advertisers and retain existing advertisers and take advantage of any growth in the relevant markets. We cannot assure you that we will achieve any of the above or achieve any of the above in a cost-effective manner.

To manage our growth and maintain profitability, we anticipate that we will need to continue to implement, from time to time, a variety of new and upgraded operational and financial systems, procedures and controls on an as-needed basis. We will also need to further expand, train, manage and motivate our workforce and manage our relationships with users, performers, third party game developers, advertisers media platforms and other business partners. All of these endeavors involve risks and will require substantial management efforts and skills and significant additional expenditures. We cannot assure you that we will be able to effectively manage our growth or implement our future business strategies, and failure to do so may materially and adversely affect our business and results of operations.

We cannot guarantee that we will be able to successfully carry out our overseas expansion strategy. We will face certain risks inherent in doing business internationally, including but not limited to: difficulties in developing, staffing and simultaneously managing a foreign operation as a result of distance, language and cultural differences; challenges in formulating effective local sales and marketing strategies targeting users from various jurisdictions and cultures, who have a diverse range of preferences and demands; challenges in identifying appropriate local business partners and establishing and maintaining good working relationships with them; dependence on local platforms in marketing our international products and services overseas; challenges in selecting suitable geographical regions for international business; political or social unrest or economic instability; compliance with applicable foreign laws and regulations and unexpected changes in laws or regulations; exposure to different tax jurisdictions that may subject us to greater fluctuations in our effective tax rate and potentially adverse tax consequences; and increased costs associated with doing business in foreign jurisdictions.

*We are a relatively young company, and you should consider our prospects in light of the risks and uncertainties which early-stage companies in evolving industries in China with limited operating histories may be exposed to or encounter, including possible volatility in the trading prices of our ADSs.*

We expect that we will continue to incur significant costs and expenses in many aspects of our business, such as sales and marketing expenses to acquire users and raise our brand awareness, as well as research and development costs to update existing services and launch new services and rising bandwidth costs to support our video function, grow our user base and generally expand our business operations. We have been profitable since 2012 and achieved accumulated profitability since 2014, but we may not generate sufficient revenues to offset such costs to achieve or sustain profitability in the future. In addition, we expect to continue to invest heavily in our operations to maintain our current market position, support our anticipated future growth and meet our expanded reporting and compliance obligations as a public company.

Our profitability is also affected by other factors beyond our control. The continued success of our business depends on our ability to identify which services will appeal to our user base and to offer such services on commercially acceptable terms. Our ability to finance our planned expansion also depends in part on our ability to convert active users into paying users and increase the average revenue per paying user, or ARPU, and successfully compete in a very competitive market.

We have a limited operating history. We introduced YY Client in July 2008 and have experienced a high growth rate since then. As a result of our relatively short history, our historical results of operations may not provide a meaningful basis for evaluating our business, financial performance and future prospects. We may not be able to achieve similar growth rates in future periods. Accordingly, you should not rely on our results of operations for any prior periods as an indication of our future performance. We may again incur net losses in the future and you should consider our prospects in light of the risks and uncertainties which early-stage companies in evolving industries in China with limited operating histories such as ours may be exposed to or encounter, including risks associated with being a public company with business operations located mainly in China. See “—Risks Related to Our ADSs—The trading prices of our ADSs are likely to be volatile, which could result in substantial losses to investors.”

Our business is heavily dependent on revenues from live streaming services. If our live streaming revenue declines in the future, our results of operations may be materially and adversely affected.

Historically, a substantial majority of our revenues are from live streaming service, online games, and membership subscription fees. In the year ended December 31, 2018, revenues from live streaming constituted 94.4% of our total net revenue. We expect that our business will continue to be dependent on revenues from live streaming services in the future. Any decline in live streaming revenues may materially and adversely affect our results of operations. See “—The revenue model for each of our live streaming and our membership program may not remain effective, which may

affect our ability to retain existing users and attract new users and materially and adversely affect our business, financial condition and results of operations.”

We may be held liable for information or content displayed on, retrieved from or linked to our platforms, or distributed to our users, and PRC or foreign authorities may impose legal sanctions on us, including, in serious cases, suspending or revoking the licenses necessary to operate our platforms.

Our live streaming platforms enable users to exchange information, generate and distribute content, advertise products and services, conduct business and engage in various other online activities. However, because a majority of the communications on our platforms is conducted in real time, we are unable to verify the sources of all information posted thereon or examine the content generated by users before they are posted. Therefore, it is possible that users may engage in illegal, obscene or incendiary conversations or activities, including the publishing of inappropriate or illegal content that may be deemed unlawful under PRC laws and regulations on our platforms. These issues exist on YY Live App, Huya App, YY Client, YY.com, Huya.com, Duowan.com, 100.com and our other websites and mobile applications, including the products of Bigo Inc., or Bigo, which we recently acquired. If any content on our platforms is deemed illegal, obscene or incendiary, or if appropriate licenses and third party consents have not been obtained, claims may be brought against us for defamation, libel, negligence, copyright, patent or trademark infringement, other unlawful activities or other theories and claims based on the nature and content of the information delivered on or otherwise accessed through our platforms. For example, we have occasionally received fines for certain inappropriate materials placed by third parties on our platforms, and may be subject to similar fines and penalties in the future. In April 2019, Bilin, a mobile instant communication application of ours that contributed an insignificant portion of our total revenues, in accordance with the requirements of the Office of the Cyberspace Affairs Commission, temporarily ceased its services and is rectifying proactively. We also may face liability for copyright or trademark infringement, fraud, and other claims based on the nature and content of the materials that are delivered, shared or otherwise accessed through or published on our platforms. Defending any such actions could be costly and involve significant time and attention of our management and other resources. In addition, if they find that we have not adequately managed the content on our platforms, PRC authorities may impose legal sanctions on us, including, in serious cases, suspending or revoking the licenses necessary to operate our platforms. See “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Information Security and Censorship” and “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Intellectual Property Rights.”

*The revenue model for each of our live streaming and our membership program may not remain effective, which may affect our ability to retain existing users and attract new users and materially and adversely affect our business, financial condition and results of operations.*

We operate our live streaming platforms using a virtual items-based revenue model whereby users can listen to music and access other forms of entertainment, participate in or watch online shows, watch shows that deliver financial news and information, and get access to the live streaming of different game plays for free, and have the option of purchasing in-channel virtual items. We have generated, and expect to continue to generate, a substantial majority of our live streaming revenues using this revenue model. In 2018, revenues from live streaming contributed 94.4% of our total net revenues. Our live streaming business has experienced significant growth in recent years, but we cannot assure you that we will continue to achieve a similar growth rate in the future, as the user demand for this service may change, decrease substantially or dissipate, or we may fail to anticipate and serve user demands effectively.

We may not be able to continue to successfully implement the virtual items-based revenue model for live streaming, as popular performers, channel owners, famous professional game teams and commentators may leave our platforms and we may be unable to attract new talent that can attract users or cause such users to increase the amount of time spent engaging and money spent on purchasing in-channel virtual items on our platforms. In addition, certain content on our live streaming platforms, such as certain online games owned by or licensed to certain gaming companies or publishers, may not continue to be available to our users for live streaming purposes. Failure to keep our users engaged in the live streaming service may result in reducing average revenue per user and the number of paying users, which may adversely affect our financial condition and results of operations.

Furthermore, under our current arrangements with certain popular performers, channel owners, famous professional game teams and commentators, we share with them a portion of the revenues we derive from the sales of in-channel virtual items on our live streaming platform. We also cooperate with popular professional game teams and commentators to make their game plays available on our platforms by paying them fixed sponsorship fees. In the future, the amount we pay to these performers, channel owners famous professional game teams and commentators may increase or we may fail to reach mutually acceptable terms with these parties, which may adversely affect our revenues or cause these parties to leave our platforms. In turn, this may affect the user and revenue growth in this business, which may materially and adversely affect our financial condition and results of operations.

In addition, we have been a pioneer in offering an online concert platform to music performers and YY users. We also continue to focus on the development of professionally-curated user generated content, or PUGC, and professionally generated content, or PGC, as well as introduce more sports content on our platforms. However, if our users decide to access live streaming content provided by our current or future competitors, our business, financial condition and results of operations could be materially and adversely affected.

In our membership program, users pay a flat monthly subscription fee in order to become members, and in exchange, we give them access to various privileges and enhanced features on our channels, including additional video usage, priority entrance to certain live performances, and exclusive rights to access VIP avatars, VIP ring-tones, VIP fonts and VIP emoticons. However, we may not be able to further build or maintain our membership base in the future for various reasons—for example, if we fail to continue to provide innovative products and services that are attractive to members, we may not be able to retain them and our business, financial condition and results of operations could be adversely affected.

Our online education business is a challenging business line, which may continuously require further investment, our profitability may be adversely affected in the future.

Competition in the education market in China is intense. Traditional offline education institutions and practitioners are still the mainstream that appeals to most students. However, online education service providers have grown in number, size and popularity in the recent years, and are getting accepted by more and more students. Many traditional offline education service providers are also trying to start their online business. If we cannot provide services differentiated from these competitors, we may not attract or retain sufficient users and our financial condition and results of operations could be adversely affected. In addition, our online education business is still in developing, which may continuously require further investment, our profitability may be adversely affected in the future.

***We have limited experience in operating financing business, and increasing exposure to credit risks or significant deterioration in the asset quality of our financing business may materially and adversely affect our business, financial condition, and results of operation.***

In 2018, we started to participate in the internet financing sector in China, which contributed insignificant portion of our total net revenues. We have launched several internet financial service products. Operating and expanding in this emerging business sector involves new risks and challenges. Our lack of familiarity with the internet financing sector may make it difficult for us to anticipate the demands and preferences in the market and develop financial service products that meet the requirements and preferences.

Although the overall default rate remained low, the risk of non-payment of loans is inherent in the internet financing business and we are subject to credit risk resulting from defaults in payment for loans by our customers. Credit risks may be exacerbated in micro-credit financing because there will be relatively limited information available about the credit histories of the borrowers. We cannot assure you that our monitoring of credit risk issues and our efforts to mitigate credit risks through our credit assessment and risk management policies are or will be sufficient to result in lower delinquencies. Furthermore, our ability to manage the quality of our loan portfolio and the associated credit risks will have significant impact on the results of operations of our internet finance business. Deterioration in the overall quality of loan portfolio and the increasing exposure to credit risks may occur due to a variety of reasons, including factors beyond our control, such as a slowdown in the growth of the global or Chinese economies or a liquidity or credit crisis in the global or Chinese finance sectors, which may materially and adversely affect our businesses, operations or liquidity of our consumers or their ability to repay or roll over their debt. Any significant deterioration in the asset quality of our internet finance business and significant increase in associated credit risks may materially and adversely affect our business, financial condition and results of operations.

Meanwhile, the regulatory framework for internet financing business is evolving and may remain uncertain for the foreseeable future. China's internet financing industry in general remains at a rather preliminary development stage and

may not develop at the anticipated growth rate. It is possible that the PRC laws and regulations may change in ways that do not favor our development. If that happens, our internet financing business may be adversely affected.

In addition, we used to conduct financing leasing business in 2018. Even though we have ceased the operations of such business for the avoidance of potential risks arising from such business, we may still be exposed to credit risks due to existing lessees' failure to repay the outstanding amount due to us.

We generate a portion of our revenues from online advertising. If we fail to attract more advertisers to our platforms or if advertisers are less willing to advertise with us, our revenues may be adversely affected.

We generated a portion of our revenues from online advertising. Although we have become less dependent upon online advertising revenues due to a shift in the majority of our revenues from online advertising to live streaming service, our revenues still partly depend on the continual development of the online advertising industry in China and advertisers' allocation of budgets to internet advertising. In addition, companies that decide to advertise or promote online may utilize more established methods or channels for online advertising, such as more established Chinese internet portals or search engines, over advertising on our platforms. If the online advertising market size does not increase from current levels, or if we are unable to capture and retain a sufficient share of that market, our ability to maintain or increase our current level of online advertising revenues and our profitability and prospects could be adversely affected.



We offer advertising services substantially through contracts entered into with third party advertising agencies and by way of displaying advertisement on our websites and platforms or providing promotion integrated in the programs, shows or other content offered on our live streaming platforms. We cannot assure you that we will be able to retain existing direct advertisers or advertising agencies or attract new direct advertisers and advertising agencies. Since our arrangements with third party advertising agencies typically involve one-year framework agreements, these advertising arrangements may be easily amended or terminated without incurring liabilities. If we fail to retain existing advertisers and advertising agencies or attract new direct advertisers and direct advertising agencies or any of our current advertising methods or promotion activities becomes less effective, our business, financial condition and results of operations may be adversely affected.

Our business is subject to a variety of PRC and international laws, rules, policies and other obligations regarding data protection. Any losses or unauthorized access to or releases of confidential information and personal data could subject us to significant reputational, financial, legal and operational consequences.

Our business requires us to use and store confidential information, including, among other things, personally identifiable information, or PII, with respect to our users and employees. We are subject to PRC and international laws, as our overseas expansion evolves, relating to the collection, use, retention, security and transfer of PII. In many cases, these laws not only apply to third-party transactions, but also may restrict transfers of PII among us and our international subsidiaries. Several jurisdictions have passed laws in this area, and other jurisdictions are considering imposing additional restrictions. These laws continue to develop and may vary from jurisdiction to jurisdiction. Complying with emerging and changing international requirements may cause us to incur substantial costs or require us to change our business practices. Non-compliance could result in significant penalties or legal liability. Foreign data protection, privacy, and other laws and regulations can impose different obligations or be more restrictive than those in China. Regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning data protection. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. These legislative and regulatory proposals, if adopted, and such interpretations could, in addition to the possibility of fines, result in an order requiring that we change our data practices, which could have an adverse effect on our business and results of operations. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business.

Recent legal developments in Europe have created compliance uncertainty regarding certain transfers of personal data. For example, the General Data Protection Regulation, or GDPR, which came into application in the European Union, or EU, on May 25, 2018, applies to all of our activities conducted from an establishment in the EU or related to products and services that we offer to EU users. The GDPR creates significant new requirements regarding the protection of personal data and significantly increases the financial penalties for noncompliance. However, in the absence of precedence and guidance from EU regulators, the application of GDPR to the provision of internet services remains unsettled, and we may be considered in compliance with GDPR and thus be required to adopt additional measures in the future. If we fail to comply with the requirements stipulated by GDPR in a timely manner, or at all, we may be subject to significant penalties and fines, which may in turn adversely affect our business, reputation,

financial condition and operating results.

In addition to the new requirements imposed by GDPR, the privacy requirements and expectations created in the EU by GDPR are stricter than those in the China. These requirements include rules restricting the flow of data across borders. These restrictions may cause companies to localize data, decline to make use of services provided by our customers in China, and otherwise impact the use of our services. Furthermore, we may also be subject to Information Technology Act 2000 of India, which primarily provided (i) civil liability to compensate for wrongful loss or gain to any person arising from negligence in implementing and maintaining reasonable security practices and procedures with respect to sensitive personal data or information that we possess, deal with or handle in our computer systems, networks, databases and software, and (ii) criminal punishment if, in the course of performing a contract, a service provider discloses personal information without the consent of the person concerned or in breach of a lawful contract and he or she does so with the intention to cause, or knowing he or she is likely to cause, wrongful loss or wrongful gain. See “Item 4. Information on the Company—B. Business Overview—Overseas Regulations—Regulations on Data Privacy and Protection”

We make statements about our use and disclosure of PII through our privacy policy, information provided on our internet platform and press statements. Any failure by us to comply with these public statements or with other domestic or international privacy-related or data protection laws and regulations could result in proceedings against us by governmental entities or others. In addition to reputational impacts, penalties could include ongoing audit requirements and significant legal liability. None of the data security measures can provide absolute security, and losses or unauthorized access to or releases of confidential information, in particular PII, may still occur, which could materially and adversely affect our reputation, financial condition and operating results.

From time to time, concerns may be expressed about whether our products, services, or processes compromise the privacy of users, customers, and others. Concerns about our practices with regard to the collection, use, disclosure, or security of PII or other privacy related matters, even if unfounded, could damage our reputation and adversely affect our operating results. As our overseas expansion evolves, we may, from time to time, be subject to data protection regulations from other jurisdictions, which may impose additional and more stringent requirements.

We have granted employee stock options and other share-based awards in the past and are very likely to continue to do so in the future. We recognize share-based compensation expenses in our consolidated statements of operations in accordance with the relevant rules under U.S. GAAP, which have had and may continue to have a material and adverse effect on our results of operations.

We have granted share-based compensation awards, including share options, restricted shares and restricted share units, to various employees, key personnel and other non-employees to incentivize performance and align their interests with ours. Under our 2009 employee equity incentive scheme, or the 2009 Scheme, we are authorized to grant options or restricted shares to purchase a maximum of 120,020,001 common shares. Under our 2011 share incentive plan, or the 2011 Plan, we are authorized to grant options, restricted shares or restricted share units to purchase a maximum of 43,000,000 common shares, plus an annual increase of 20,000,000 common shares on the first day of each fiscal year, beginning from 2013, or such smaller number of Class A common shares as determined by our board of directors. As of April 15, 2019, options to purchase 10,934,300 common shares, 41,179,601 restricted shares and 37,392,578 restricted share units were outstanding under the 2009 Scheme and the 2011 Plan. In addition, our subsidiary, HUYA Inc. (NYSE: HUYA) adopted its 2017 share incentive plan, or HUYA Amended and Restated 2017 Plan, in July 2017, which was amended and restated in March 2018. Under this HUYA Amended and Restated 2017 Plan, HUYA Inc. is authorized to grant options, restricted shares and restricted share units to purchase or receive a maximum of 28,394,117 HUYA Inc.'s class A ordinary shares. As of April 15, 2019, options to purchase 16,896,555 HUYA Inc.'s class A ordinary shares and 4,267,885 HUYA Inc.'s restricted share units were outstanding. As a result of these grants and potential future grants, we had incurred in the past and expect to continue to incur significant share-based compensation expenses in the future. The amount of these expenses is based on the fair value of the share-based awards. We account for compensation costs for certain share-based compensation awards granted in the past using a graded-vesting method and recognize expenses in our consolidated statements of operations in accordance with the relevant rules under U.S. GAAP. The expenses associated with share-based compensation materially increased our net losses or reduced our net income in the past, and may reduce our net income in the future. In addition, any additional securities issued under share-based compensation schemes will dilute the ownership interests of our shareholders, including holders of our ADSs. However, if we limit the scope of the share-based compensation

schemes, we may not be able to attract or retain key personnel who expect to be compensated by options, restricted shares or restricted share units.

The number of mobile active users we have may fluctuate and we may fail to attract more paying users, which may materially and adversely affect our revenues growth, results of operations and financial condition.

The number of our mobile average monthly active users increased by 18.1% to 90.4 million for the three months ended December 31, 2018, compared to 76.5 million for the three months ended December 31, 2017. However, the number of our mobile monthly active users may substantially fluctuate from time to time. If we are unable to attract new users and retain them as active users and convert non-paying active users into paying users, our revenues may fail to grow and our results of operations and financial condition may suffer.

We may not be able to keep our users highly engaged, which may reduce our monetization opportunities and materially and adversely affect our revenues, profitability and prospects.

Our success depends on our ability to maintain and grow our user base and keep our users highly engaged. In order to attract and retain users and remain competitive, we must continue to innovate our products and services, implement new technologies and functionalities and improve the features of our platforms in order to entice users to use our products and services more frequently and for longer durations.

The internet industry is characterized by constant changes, including rapid technological evolution, continual shifts in customer demands, frequent introductions of new products and services and constant emergence of new industry standards and practices. Thus our success will depend, in part, on our ability to respond to these changes on a cost-effective and timely basis; failure to do so may cause our user base to shrink and user engagement level to decline and our results of operations would be materially and adversely affected. For example, our plan to more broadly support mobile-live broadcasting across our live streaming platform and retain the ability to offer high quality delivery of voice and video data may cause us to incur significant additional costs and may not succeed.

Due to the intensified competitions among live streaming platforms, users may leave us for competitors' platforms more quickly than in other online sectors. A decrease in the number of active YY users may reduce the diversity and vibrancy of our platforms' online ecosystem and affect our user-generated channels, which may in turn reduce our monetization opportunities and have a material and adverse effect on our business, financial condition and results of operations.

We cannot assure you that our platforms will continue to be sufficiently popular with our users to offset the costs incurred to operate and expand it. User satisfaction is particularly difficult to predict as internet users in China may not be familiar with the concept of a live streaming platform such as ours which enable users to interact in live online group activities through voice, text and video. We have historically relied on word of mouth referrals to increase user awareness of our products and services and to expand our user base. If we decide to engage in more conventional advertising or marketing campaigns, our sales and marketing expenses will increase, which could have an adverse effect on our results of operations. Failure to maintain or grow our user base in a cost-effective manner, or at all, and keep our users highly engaged would materially and negatively affect our results of operations.

We face competition in several major aspects of our business. If we fail to compete effectively, we may lose users and advertisers which could materially and adversely affect our business, financial condition and results of operations.

We face competition in several major aspects of our business, particularly from companies that provide live streaming services and online games. Some of our competitors may have longer operating histories and significantly greater financial, technical and marketing resources than we do, and in turn may have an advantage in attracting and retaining users and advertisers. In addition, competitors in some areas of our business may have significantly larger user bases and more established brand names than we do and may be able to more effectively leverage their user bases and brand names to provide live streaming, internet communication, online games and other products and services, and thereby increase their respective market shares. We may also face potential competition from global live streaming service providers that seek to enter the China market, whether independently or through the formation of alliances with, or acquisition of, PRC domestic internet companies.

In relation to our live streaming business, our competitors primarily include Momo, Tencent Music Entertainment, Kuaishou, Douyin, Huoshan, DouyuTV and other live streaming platforms in China, and other short-form video and live streaming platforms in overseas such as TikTok and Live.me. We also compete for online advertising revenues with other internet companies that sell online advertising services in China.

If we are not able to effectively compete in any of our lines of business, our overall user base and level of user engagement may decrease, which could reduce our paying users or make us less attractive to advertisers. We may be required to spend additional resources to further increase our brand recognition and promote our products and services, and such additional spending could adversely affect our profitability. Furthermore, if we are involved in disputes with any of our competitors that result in negative publicity to us, such disputes, regardless of their veracity or outcome, may harm our reputation or brand image and in turn lead to reduced number of users and advertisers. Any legal proceedings or measures we take in response to such disputes may be expensive, time-consuming and disruptive to our operations and divert our management's attention.

Our competitors may unilaterally decide to adopt a wide range of measures targeted at us, including possibly designing their products to negatively impact our operations, such as sending virus-like programs to attack elements of our platforms. Some competitors may also make their applications incompatible with ours, effectively requiring users to either stop using our competitors' products or uninstall our products, leading to a reduction in our number of users. For example, in a widely publicized dispute between two of the largest companies providing user-end software in China, one of the companies announced that it would disable its own software on computers that had installed its rival's products. As a result, a significant number of users stopped using products from either or both of these companies. Due to the large number of internet users that were affected, the Ministry of Industry and Information Technology of China, or the MIIT, ordered the parties to ensure the compatibility of the relevant products. Similar events may occur in the future between our competitors and us, which may reduce our market share, negatively affect our brand and reputation, and materially and adversely affect our business, financial condition and results of operations.

Spammers and malicious applications may affect user experience, which could reduce our ability to attract users and advertisers and materially and adversely affect our business, financial condition and results of operations.

Spammers may use YY to send targeted and untargeted spam messages to users, which may affect user experience. As a result, our users may use our products and services less or stop using them altogether. In spamming activities, spammers typically create multiple user accounts for the purpose of sending spam messages. Although we attempt to identify and delete accounts created for spamming purposes, we may not be able to effectively eliminate all spam messages from our platforms in a timely fashion. Any spamming activities could have a material and adverse effect on our business, financial condition and results of operations.

We use third party services and technologies in connection with our business, and any disruption to the provision of these services and technologies to us could result in adverse publicity and a slowdown in the growth of our users, which could materially and adversely affect our business, financial condition and results of operations.

Our business depends upon services provided by, and relationships with, third parties. If we are unable to retain or attract popular talents such as performers, channel managers, professional game players, commentators and hosts for our live streaming platform or if these talents cannot draw fans or participants, our results of operations may be adversely affected. Also, if channel owners are unable to reach or maintain mutually satisfactory cooperation arrangements with the performers on their channels on our live streaming platform, we may lose popular performers and our business and operations may be adversely affected. Furthermore, if we are unable to obtain or retain rights to host popular online games or popular in-game virtual items, or if we are required to share a bigger portion of our revenues with third party game developers, we could be required to devote greater resources and time to obtain hosting rights for new games and applications from other parties, and our results of operations may be impacted. In addition, some third party software we use in our operations are currently publicly available without charge. If the owner of any such software decides to charge users or no longer makes the software publicly available, we may need to incur significant cost to license the software, find replacement software or develop it on our own. If we are unable to find or develop replacement software at a reasonable cost, or at all, our business and operations may be adversely affected.

Some of the services offered by us run on a complex network of servers located in and maintained by third party data centers throughout China and our overall network relies on broadband connections provided by third party operators. We expect this dependence on third parties to continue. The networks maintained and services provided by such third parties are vulnerable to damage or interruption, which could impact our results of operations. See “—System failure, interruptions and downtime can result in adverse publicity for our products and result in net revenue losses, a slowdown in the growth of our registered user accounts and a decrease in the number of our active users. If any of these system disruptions occurs, our business, financial condition and results of operations may be materially and adversely affected.”



Furthermore, we generate substantially all of our online advertising revenues through agreements entered into with various third party advertising agencies that represent advertisers. We do not have long-term cooperation agreements or exclusive arrangements with these agencies and they may elect to direct business opportunities to other advertising service providers. If we fail to retain and enhance our business relationships with these third party advertising agencies, we may suffer from a loss of advertisers and our business and results of operations may be materially and adversely affected.

In addition, we sell a significant portion of our products and services through third party online payment systems. If any of these third party online payment systems suffer from security breaches, users may lose confidence in such payment systems and refrain from purchasing our virtual items online, in which case our results of operations would be negatively impacted. See “—The security of operations of, and fees charged by, third party online payment platforms may have a material adverse effect on our business and results of 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, 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.

System failure, interruptions and downtime can result in adverse publicity for our products and result in net revenue losses, a slowdown in the growth of our registered user accounts and a decrease in the number of our active users. If any of these system disruptions occurs, our business, financial condition and results of operations may be materially and adversely affected.

Although we seek to reduce the possibility of disruptions or other outages, our services may be disrupted by problems with our own technology and system, such as malfunctions in our software or other facilities and network overload. Our systems may be vulnerable to damage or interruption from telecommunication failures, power loss, computer attacks or viruses, earthquakes, floods, fires, terrorist attacks and similar events. We have experienced system failures. Those responsible were subsequently found guilty and penalized by the PRC courts and we have subsequently updated our system to make it more difficult for similar attacks to succeed in the future, but we cannot assure you that there will be no similar failures in the future. Parts of our system are not fully redundant, and our disaster recovery planning is not sufficient for all eventualities. Despite any precaution we may take, the occurrence of a natural disaster or other unanticipated problems at our hosting facilities could result in lengthy interruptions in the availability of our products and services. Any interruption in the ability of our users to use our products and services could reduce our future revenues, harm our future profits, subject us to regulatory scrutiny and lead users to seek alternative forms of online social interactions.

Our servers that process user payments experience some downtime on a regular basis, which may negatively affect our brand and user perception of the reliability of our systems. Any scheduled or unscheduled interruption in the ability of users to use our payment systems could result in an immediate, and possibly substantial, loss of revenues.

Almost all internet access in China is maintained through state-owned telecommunication operators under the control and supervision of the MIIT, and we use a limited number of telecommunication service providers to provide us with data communications capacity through local telecommunications lines and internet data centers to host our servers. Internet data centers in China are generally owned by telecommunication service providers with their own broadband networks and are leased to various customers through third party agents. These third party agents negotiate the terms of the leases, enter into lease agreements with end customers, handle customer interactions and manage the data centers on behalf of the data center owners. In the past, we signed data center lease agreements with multiple third party agents. With the expansion of our business, we may be required to purchase more bandwidth and upgrade our technology and infrastructure to keep up with the increasing traffic on our websites and increasing user levels on our platforms overall. We cannot assure you that the telecommunications providers whose networks we lease or the third party agents that operate our data centers would be able to accommodate all of our requests for more bandwidth or upgraded infrastructure or network, or that the internet infrastructure and the fixed telecommunications networks in China will be able to support the demands associated with the continued growth in our internet usage.

Our users may use our products or services for critical transactions and communications, especially business communications. As a result, any system failures could result in damage to such users' businesses. These users could seek significant compensation from us for their losses. Even if unsuccessful, this type of claim would likely be time consuming and costly for us to address.

We have limited control over the prices of the services provided by telecommunication service providers and may have limited access to alternative networks or services. If the prices we pay for telecommunications and internet services rise significantly, our results of operations may be materially and adversely affected. Furthermore, if internet access fees or other charges to internet users increase, our user traffic may decline and our business may be harmed.

The respective number of our registered user accounts, active users and paying users may overstate the number of unique individuals who register to use our products and services, log on to our platforms, purchase virtual items or other products and services on our platforms or access Duowan.com, respectively, and may therefore lead to an inaccurate interpretation of our average revenue per paying user metric and of our business operations by our management and by investors, and may affect advertisers' decisions on the amount spent on advertising with us.

Pursuant to the Provisions on Administration over the Internet User Public Account Information Services, which was promulgated by the State Internet Information Office on September 7, 2017 and became effective on October 8, 2017, we have required all of our users who publish information via our platform to provide the identity information and mobile phone number, but users who do not publish or release information via our platform are not required or obligated to undergo real-name verification under the current valid regulation. Therefore we cannot and do not track all the number of unique paying users. Instead, we track the number of registered user accounts, active users and paying users. We calculate certain operating metrics in the following ways: (a) the number of registered user accounts is the cumulative number of user accounts at the end of the relevant period that have logged onto our platforms at least once after registration, (b) the number of active users is the cumulative number of user accounts at the end of the relevant period that have signed onto our platforms at least once during the relevant period, and (c) the number of paying users is the cumulative number of registered user accounts that have purchased virtual items or other products and services on our platforms at least once during the relevant period. The actual number of unique individual users, however, is likely to be lower than that of registered user accounts, active users and paying users, potentially significantly, for three primary reasons. First, each individual user may register more than once and therefore have more than one account, and sign onto each of these accounts during a given period. For example, a user may (a) create separate accounts for community and personal use and log onto each account at different times for different activities or (b) if he or she lost his or her original username or password, he or she can simply register again and create an additional account. Second, we experience irregular registration activities such as the creation of a significant number of improper user accounts by a limited number of individuals, which may be in violation of our policies, including for the purpose of clogging our network or posting spam to our channels. We believe that some of these accounts may also be created for specific purposes such as to increase the number of votes for certain performers in various contests, but the number of registered user accounts, paying users and active users do not exclude user accounts created for such purposes. We have limited ability to validate or confirm the accuracy of information provided during the user registration process to ascertain whether a new user account created was actually created by an existing user who is registering duplicative accounts. Thus, the respective number of our registered user accounts, active users and paying

users may overstate the number of unique individuals who register on our platforms, sign onto our platforms, purchase virtual items or other products and services on our platforms and access Duowan.com, respectively which may lead to an inaccurate interpretation of our average revenue per paying user metric.

In addition, we may be unable to track whether we are successfully converting registered users or active users into paying users since we do not track the number of unique individuals or operate our platforms on a real-name basis. If the growth in the number of our registered user accounts, active users or paying users is lower than the actual growth in the number of unique individual registered, active or paying users, our user engagement level, sales and our business may not grow as quickly as we expect, and advertisers may reduce the amount spent on advertising with us, which may harm our business, financial condition and results of operations. In addition, such overstatement may cause inaccurate evaluation of our business operations by our management and by investors, which may also materially and adversely affect our business and results of operations.

If we are unable to continue to successfully capture and retain the growing number of users that access internet services through mobile devices or successfully monetize mobile users, our business, financial condition and results of operations may be materially and adversely affected.

An increasing number of users are accessing our platforms through mobile devices, and we consider the rise of mobile-based business to be a general trend. We have been taking measures to expand our success from PC-based products and services to the mobile platform. In 2010, we introduced Mobile YY, our music and entertainment mobile application. In the second half of 2016, along with our transition into a live streaming platform, we rebrand Mobile YY into YY Live APP, a mobile application for our YY Live platform. We also have introduced Huya APP, a mobile application for our Huya platform. In addition, we have launched several other mobile applications over the years, including, among others, Hago for casual game-oriented social network platform. Our mobile applications in aggregate, have contributed 64.0% of the total revenue generated from our live streaming services in the fourth quarter of 2018, compared to 53.4% in the same period of 2017. We have also developed numerous mobile applications for other parts of our business. An important element of our strategy is to continue to develop and enhance mobile applications to capture a greater share of the growing number of mobile users.

Nevertheless, since the user experience and user habits on mobile devices are significantly different from those on PCs, there can be no assurance that we can succeed in adapting our products and services to the expectation of mobile users. If we are unable to attract and retain the increasing number of mobile users, or if we are slower than our competitors in developing attractive services adaptable for mobile devices, we may fail to capture a significant share of an increasingly important portion of the market or may lose existing users. In addition, even if we are able to retain the increasing number of mobile users, we may not be able to successfully monetize them in the future. For example, because of the inherent limitations of mobile devices, such as a smaller display screen space as compared to PCs, we may not be able to provide as many kinds of virtual items on our mobile applications as we can on YY Client, which may limit the monetization potential of mobile users.

Furthermore, as new mobile devices and operating systems are continually being released, it is difficult to predict the problems we may encounter in developing and updating versions of our products and services for use on these devices and operating systems, and we have devoted, and expect to continue to devote, significant resources to create, support and maintain these services. Devices providing access to our products and services are not manufactured and sold by us, and we cannot assure you that companies manufacturing or selling these devices would always ensure that their devices perform reliably and are maximally compatible with our systems. Any faulty connection between these devices and our products and services may result in consumer dissatisfaction with us, which could damage our brand and have a material and adverse effect on our financial results. In addition, the lower resolution, functionality and memory associated with some mobile devices make the use of our products and services through such devices more difficult and the versions of our products and services we develop for these devices may fail to attract users. Manufacturers or distributors may establish unique technical standards for their devices and, as a result, our mobile applications may not work or be viewable on these devices. Meanwhile, new social platforms or services may emerge which are specifically created to function on mobile operating systems, whereas our platforms were originally designed to be accessed from PCs. Such new entrants may operate more effectively on mobile devices than our mobile applications do.

Due to the increasing importance of mobile-based business, any of the above may have a material adverse effect on our business, financial condition and results of operations.

The development of mobile technology and applications as a substitute for PC-based technology and applications may adversely affect our existing business, and in turn our revenues and financial performance.

In recent years, the development of mobile technology and application, such as increased speed and stability of mobile network and enhancement of mobile devices, allows performers, content providers and other users to broadcast simply with a mobile device instead of relying on PC-based or other more complicated devices. Due to the portability and affordability of mobile devices, mobile live streaming is more diversified and spontaneous as compared to online live streaming on PC-based platforms. We believe that such innovation brings opportunities as well as challenges for our business.

Although we believe that our mobile application has some unique features and is competitive in the market, the industry is new and we expect the competition to be intensive. Since mobile live streaming is more diversified and spontaneous, our experience in content organization and interaction on PC platforms may not satisfy the mobile users, we may hence fail to attract or retain such mobile users.

Although we believe that users, including performers, are unlikely to entirely migrate to mobile applications and cease to use YY through PCs and that most of our mobile users also access our platforms through PCs, we cannot assure you that the increasing usage of mobile application will not cause our users to cease accessing our platforms from PCs. If a significant number of users migrate to mobile applications as a substitute for accessing our platforms through PCs, or even turn to use mobile applications developed by our competitors, our business, results of operations and financial condition would be negatively affected.

Concerns about collection and use of personal data could damage our reputation and deter current and potential users from using our products and services, which could lead to lower revenues.

Concerns about our practices with regard to the collection, use or disclosure of personal information or other privacy-related matters, even if unfounded, could damage our reputation and operating results. We apply strict management and protection for any information provided by users and, under our privacy policy, without our users' prior consent, we will not provide any of our users' personal information to any unrelated third party. While we strive to comply with our privacy guidelines as well as all applicable data protection laws and regulations, any failure or perceived failure to comply may result in proceedings or actions against us by government entities or others, and could damage our reputation. User and regulatory attitudes towards privacy are evolving, and future regulatory or user concerns about the extent to which personal information is used or shared with advertisers or others may adversely affect our ability to share certain data with advertisers, which may limit certain methods of targeted advertising. Concerns about the security of personal data could also lead to a decline in general internet usage, which could lead to lower registered, active or paying user numbers on our platforms. See “—Risks Related to Our Corporate Structure and Our Industry—We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet business and companies.” A significant reduction in registered, active or paying user numbers could lead to lower revenues, which could have a material and adverse effect on our business, financial condition and results of operations.

The security of operations of, and fees charged by, third party online payment platforms may have a material adverse effect on our business and results of operations.

Currently, we sell almost all of our products and services to our users through third party online payment systems. We expect that an increasing amount of our sales will be conducted over the internet as a result of the growing use of online payment systems. In all these online payment transactions, secured transmission of confidential information

such as customers' credit card numbers and personal information over public networks is essential to maintain consumer confidence.

We do not have control over the security measures of our third party online payment vendors, and security breaches of the online payment systems that we use could expose us to litigation and possible liability for failing to secure confidential customer information and could, among other things, damage our reputation and the perceived security of all of the online payment systems that we use. If a well-publicized internet or mobile network security breach were to occur, users concerned about the security of their online financial transactions may become reluctant to purchase our virtual items even if the publicized breach did not involve payment systems or methods used by us. In addition, there may be billing software errors that would damage customer confidence in these online payment systems. If any of the above were to occur and damage our reputation or the perceived security of the online payment systems we use, we may lose paying users and users may be discouraged from purchasing our services, which may have a material adverse effect on our business.



In addition, there are currently only a limited number of third party online payment systems in China. If any of these major payment systems decides to cease to provide services to us, or significantly increase the percentage they charge us for using their payment systems for our virtual items and other services, our results of operations may be materially and adversely affected.

Our core values of focusing on user experience and satisfaction first and acting for the long-term may conflict with the short-term operating results of our business, and also negatively impact our relationships with advertisers or other third parties.

One of our core values is to focus on user experience and satisfaction, which we believe is essential to our success and serves the best, long-term interests of our company and our shareholders. Therefore, we have made, and may make in the future, significant investments or changes in strategy that we think will benefit our users, even if our decision negatively impacts our operating results in the short term. For example, in order to provide users of YY Client with uninterrupted entertainment options, we do not place significant advertising on YY Client. While this decision adversely affects our operating results in the short-term, we believe it enables us to provide higher quality user experience on YY Client, which will help us expand and maintain our current large user base and create better monetizing potential in the long term. In addition, this philosophy of putting our users first may also negatively impact our relationships with advertisers or other third parties, and may not result in the long-term benefits that we expect, in which case the success of our business and operating results could be harmed.

We have limited experience in international markets. If we fail to meet the challenges presented by our increasingly globalized operations, our business, financial condition and results of operations may be materially and adversely affected.

We completed our acquisition of Bigo in March 2019, which made it our wholly-owned subsidiary. Bigo's business has international presence primarily in Southeast Asia, Middle East and South Asia. We have limited experience in international markets and we expect to enter into and expand our operations in international markets, leverage Bigo's existing products and operations. Global expansion is a key growth strategy for us, which exposes us to a number of risks, including:

- compliance with applicable foreign laws and regulations, including but not limited to internet content provider licenses, internet content requirements, foreign exchange controls, cash repatriation restrictions, intellectual property protection rules and data privacy requirements;

- challenges in identifying appropriate local business partners and establishing and maintaining good working relationships with them. Our business partners primarily include popular talents and their agencies, third parties that

promote our platform and applications and third parties that provide us technology support;

challenges in formulating effective marketing strategies targeting users from various jurisdictions and cultures, who have a diverse range of preferences and demands;

- challenges in attracting users to generate appealing content on our overseas platforms, such as Bigo Live;

- local competition;

- challenges in meeting local advertiser demands as well as online marketing practices and conventions;

- differences in user and advertiser reception and perception of Bigo's applications internationally;

- local employment laws and practices;

- fluctuations in currency exchange rates;

exposure to different tax jurisdictions that may subject us to greater fluctuations in our effective tax rate and assessments in multiple jurisdictions on various tax-related assertions, including transfer pricing adjustments and permanent establishment; and

increased costs associated with doing business in foreign jurisdictions.

Our business, financial condition and results of operations may be materially and adversely affected by these and other risks associated with our increasingly globalized operations.

***We face risks and uncertainties to comply with the laws, regulations and rules in various aspects in overseas jurisdictions. Failure to comply with such applicable laws, regulations and rules may subject our overseas operation to strict scrutiny by local authorities, which in turn may materially and adversely affect our globalized operations.***

As we expand our operations in additional emerging markets and regions, we may have to adapt our business models or operations to the local markets due to various legal requirements and market conditions. Our international operations and expansion efforts may result in increased costs and are subject to a various of risks, including content control from local authorities, uncertain enforcement of intellectual property rights and infringements and the complexity of compliance with foreign laws and regulations. Compliance with applicable foreign laws and regulations related to matters that are central to our business, including those related to live streaming services, content restrictions, data privacy, virtual items, anti-corruption laws, anti-money laundry and minors protection, increases the costs and risk exposure of doing business in foreign jurisdictions. In some cases, compliance with the laws and regulations of one country could violate the laws and regulations of another country. As our globalized operations evolves, we cannot assure you that we are able to fully comply with the legal requirements of each foreign jurisdiction and successfully adapt our business models to local market conditions.

In particular, we are primarily in the live streaming and short-form video business in several overseas markets. We face significant challenges to ensure the content presented on our platform is in compliance with local jurisdictions, the regulatory framework of which could be substantially different from that of China and each other due to the differences in, among others, the legal system, political environment, culture and religion. Such differences may impose more stringent requirements and restrictions to the content we presented and our experience gained from our operations in China may not apply to our overseas operations. In addition, cultural differences may also impose additional challenges to our efforts in content control. Therefore, such different and possibly more stringent regulatory and cultural environments may increase the risk exposure to our daily operations in foreign jurisdictions. We have experienced incidents in the past where our application was temporarily suspended in the foreign markets due to failure of complying with local content restrictions requirements. Such incidents or similar incidents related to our failure to comply with other foreign laws, regulations and rules could materially and adversely affect our business, results of operations, global reputation and global growth efforts. In additional, each of foreign jurisdictions may have different regulatory framework, implementation and enforcement for live streaming or short-form video business,

which may substantially increase our compliance costs to obtain, maintain or renew requisite licenses and permits or fulfil any required administrative procedures.

Trademarks registered, internet search engine keywords purchased and domain names registered by third parties that are similar to our trademarks, brands or websites could cause confusion to our users, divert online customers away from our products and services or harm our reputation.

Competitors and other third parties may purchase (a) trademarks that are similar to our trademarks and (b) keywords that are confusingly similar to our brands or websites in internet search engine advertising programs and in the header and text of the resulting sponsored links or advertisements in order to divert potential customers from us to their websites. Preventing such unauthorized use is inherently difficult. If we are unable to prevent such unauthorized use, competitors and other third parties may continue to drive potential online customers away from our platforms to competing, irrelevant or potentially offensive platforms, which could harm our reputation and cause us to lose revenue.

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 relevant content from our website or seeking license arrangements which may not be available on commercially reasonable terms.

Third party owners or right holders of technology patents, copyrights, trademarks, trade secrets and website content may assert intellectual property infringement or other claims against us. In addition, content generated through our platforms, including real-time content, may also potentially cause disputes regarding content ownership or intellectual property. For example, we could face copyright infringement claims with respect to songs performed live, recorded or made accessible and online games being streamed live, recorded or made accessible on our live streaming platforms.

The validity, enforceability and scope of protection of intellectual property rights in internet-related industries, particularly in China, are uncertain and still evolving. 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. For example, Guangzhou NetEase Computer System Co., Ltd., or NetEase, has initiated a lawsuit against us in Guangzhou in October 2014, claiming the infringement of its rights of reproduction concerning the online game of *Fantasy Westward Journey* in the amount of RMB100 million. In 2017, Guangzhou Intellectual Property Court ordered us to compensate NetEase in an amount of RMB20.0 million. This judgment is not final and has been appealed to the appellate court. Although we believe that the claim is unjustified and commercially motivated, if the final outcome of the proceeding is unfavorable to us, we may suffer considerable damage to our financial position and reputation. Under relevant PRC laws and regulations, online service providers which provide storage space for users to upload works or links to other services or content could be held liable for copyright infringement under various circumstances, including situations where an online service provider knows or should reasonably have known that the relevant content uploaded or linked to on its platform infringes the copyrights of others and the provider realizes economic benefits from such infringement activities. The “knows or should reasonably have known” element would be fulfilled under some statutorily specified circumstances. For example, online service providers are subject to liability if they fail to take necessary measures, such as deletion, blocking or disconnection, after receiving notification from the legal right holders. In particular, there have been cases in China in which the courts have found an online service provider to be liable for the copyrighted content posted by users which were accessible and stored on such provider’s servers. See “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Intellectual Property Rights.”

We have implemented procedures to reduce the likelihood that we may use, develop or make available any content or applications without the proper licenses or necessary third party consents; such procedures include requiring performers, channel owners and users to acknowledge and agree that they would not perform or upload copyrighted content without proper authorization and that they will indemnify us for any relevant copyright infringement claims. However, these procedures may not be effective in preventing unauthorized posting or use of copyrighted content on our platforms or the infringement of other third party rights. Specifically, such acknowledgments and agreements by performers, channel owners and users are not enforceable against third parties who may nevertheless file claims of copyright infringement against us. Furthermore, individual performers or channel owners who generate content that may infringe on copyrights of third parties on our platforms may not be easily traceable, if at all, by a plaintiff who may then choose to file a claim against us, and these individual performers and channel owners may not have

resources to fully indemnify us, if at all, for any such claims. In addition, we have entered into revenue-sharing arrangements in the form of direct or indirect employment agreements with some of the popular singers, performers or channel owners on our platforms, and we cannot assure you that PRC courts will not view these singers, performers or channel owners as our employees or agents, deem us to have control over their activities on our platforms and the content they upload or otherwise make available on our platforms, determine that we have knowingly uploaded such infringing content on our platforms and hold us directly liable for their infringement activities on our platforms. Separately, as our business expands, the cost of carrying out these procedures and obtaining authorization and licenses for the growing content on our platforms may increase, which may potentially have material and adverse effects on our results of operations.

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, by virtue of our ADSs being listed on the Nasdaq Global Select Market, the ability of users to access our platforms in the United States and other jurisdictions, the performance of songs and other content which are subject to copyright and other intellectual property laws of countries outside China, including the United States, the ownership of our ADSs by investors in the United States and other jurisdictions, or the extraterritorial application of foreign law by foreign courts or otherwise. In addition, as a publicly listed company, we may be exposed to increased risk of litigation.

If an infringement claim brought against us in China, the United States or any other jurisdiction is successful, we may be required to pay substantial statutory penalties or other damages and fines, remove relevant content from our platforms or enter into license agreements which may not be available on commercially reasonable terms or at all. Litigation or other claims against us also subject us to adverse publicity which could harm our reputation and affect our ability to attract and retain users, including channel owners, singers and other performers, which could materially and adversely affect the popularity of our platforms and therefore, our business, financial condition, results of operations and prospects may be materially and adversely affected.

We may not be able to successfully halt the operations of platforms that aggregate our data as well as data from other companies, including social networks, or “copycat” platforms that have misappropriated our data in the past or may misappropriate our data in the future. Those platforms may also lure away some of our users or advertisers or reduce our market share, causing material and adverse effects on our business operations.

From time to time, third parties have misappropriated our data through scraping our platforms, robots or other means and aggregated this data on their platforms with data from other companies. In addition, “copycat” platforms or client applications have misappropriated data on our platforms, implanted Trojan viruses in user PCs or mobiles to steal user data from YY Client or other mobile applications and attempted to imitate our brand or the functionality of our platforms. When we became aware of such platforms, we employed technological and legal measures in an attempt to halt their operations. However, we may not be able to detect all such platforms in a timely manner and, even if we could, technological and legal measures may be insufficient to stop their operations. In those cases, our available remedies may not be adequate to protect us against such platforms. Regardless of whether we can successfully enforce our rights against these platforms, any measures that we may take could require significant financial or other resources from us. Those platforms may also lure away some of our users or advertisers or reduce our market share, causing material and adverse effects to our business operations.

We may not be able to prevent others from 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 and similar intellectual property as critical to our success, and we rely on trademark and patent law, trade secret protection and confidentiality and license agreements with our employees and others to protect our proprietary rights. As of December 31, 2018, we had registered 504 domain names, including YY.com, Huya.com, Duowan.com, 100.com and Chinaduo.com, 567 software copyrights and other copyrights, 430 patents and 1,339 trademarks and service marks in China and overseas. In addition, as of December 31, 2018, we had filed 1,589 patent applications covering certain of our proprietary technologies and 1,356 trademark applications in China and overseas.

It is often difficult to create and enforce intellectual property rights in China. Patents, trademarks and service marks may also be invalidated, circumvented, or challenged. Trade secrets are difficult to protect, and our trade secrets may be leaked or otherwise become known or be independently discovered by others. Confidentiality agreements may be breached, and we may not have adequate remedies for any breach. Even where adequate, relevant laws exist in China, it may not be possible to obtain swift and equitable enforcement of such laws, or to obtain enforcement of a court judgment or an arbitration award delivered in another jurisdiction, and accordingly, we may not be able to effectively protect our intellectual property rights or enforce agreements in China. Policing any unauthorized use of our intellectual property is difficult and costly and the steps we have taken may be inadequate to prevent the misappropriation of our technologies. Given the potential cost, effort, risks and downsides of obtaining patent protection, in some cases we have not and do not plan to apply for patents or other forms of formal intellectual property protection for certain 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.



As our patents may expire and may not be extended, our patent applications may not be granted and our patent rights may be contested, circumvented, invalidated or limited in scope, our patent rights may not protect us effectively. In particular, we may not be able to prevent others from developing or exploiting competing technologies, which could have a material and adverse effect on our business operations, financial condition and results of operations.

In China, the valid period of utility model patent right or design patent right is ten years and is not extendable. Currently, we have patent applications pending in China, but we cannot assure you that we will be granted patents pursuant to our pending applications. Even if our patent applications succeed and we are issued patents in accordance with them, it is still uncertain whether these patents will be contested, circumvented or invalidated in the future. The rights granted under any issued patents may not provide us with proprietary protection or competitive advantages. Further, the claims under any patents that issue from our patent applications may not be broad enough to prevent others from developing technologies that are similar or that achieve results similar to ours. It is also possible that the intellectual property rights of others will bar us from licensing and from exploiting any patents that issue from our pending applications. Numerous U.S. and foreign issued patents and pending patent applications owned by others exist in the fields in which we have developed and are developing our technology. These patents and patent applications might have priority over our patent applications and could subject our patent applications to invalidation. Finally, in addition to those who may claim priority, any of our existing or pending patents may also be challenged by others on the basis that they are otherwise invalid or unenforceable.

If we fail to maintain and enhance our brands or to effectively promote our products and acquire new users, or if we incur excessive expenses in these efforts, our business, results of operations and prospects may be materially and adversely affected.

We believe that maintaining and enhancing our brands is of significant importance to the success of our business. Well-recognized brands are important to increasing the number of users and the level of engagement of our users and enhancing our attractiveness to advertisers. Since we operate in a highly competitive market, brand maintenance and enhancement directly affect our ability to maintain our market position.

Although we have developed YY mostly through word of mouth referrals, as we expand, we may conduct various marketing and brand promotion activities using various methods to continue promoting our brands. We cannot assure you, however, that these activities will be successful or that we will be able to achieve the brand promotion effect we expect. In addition, any negative publicity in relation to our products or services, regardless of its veracity, could harm our brands and reputation.

We have sometimes received, and expect to continue to receive, complaints from users regarding the quality of the products and services we offer. Negative publicity or public complaints by users may harm our reputation and affect our ability to attract new users and retain existing users. If our users' complaints are not addressed to their satisfaction,

our reputation and our market position could be significantly harmed, which may materially and adversely affect our business, results of operations and prospects.

We may lose control of our controlling subsidiary, HUYA Inc. which may materially and adversely affect our results of operations.

In March 2018, our controlling subsidiary HUYA Inc. entered into definitive agreements for its series B-2 equity financing with Linen Investment Limited, a wholly owned subsidiary of Tencent Holdings Limited, or Tencent. Pursuant to these agreements, Tencent has a right, exercisable between March 8, 2020 and March 8, 2021, to purchase additional shares in HUYA Inc. to reach 50.1% of HUYA Inc.'s total voting power. If Tencent chooses to exercise such purchase right, we will lose effective control over HUYA Inc. If this happens, we will no longer consolidate the financial results of HUYA Inc. financial results into our financial statements, and our results of operations as shown in our financial statements will be adversely affected. As of the date of this annual report, we still have the majority of voting power in and effective control over HUYA Inc.

Our business depends substantially on the continuing efforts of our executive officers and key employees, and our business operations may be severely disrupted if we lose their services.

Our future success depends substantially on the continued efforts of our executive officers and key employees. If one or more of our executive officers or key employees were unable or unwilling to continue their services with us, we might not be able to replace them easily, in a timely manner, or at all. In addition, our executive officers and key employees hold the equity interests in Beijing Tuda Science and Technology Co., Ltd., or Beijing Tuda, Guangzhou Huaduo Network Technology Co., Ltd., or Guangzhou Huaduo, Guangzhou Bilin Online Information Technology Co., Ltd. (formerly known as Beijing Bilin Online Information Technology Co., Ltd.), or Bilin Online, Guangzhou Huya Information Technology Co., Ltd., or Guangzhou Huya, Guangzhou Sanrenxing 100-Education Technology Co., Ltd., or Sanrenxing, and Guangzhou BaiGuoYuan Network Technology Co., Ltd., or Guangzhou BaiGuoYuan, our PRC consolidated affiliated entities. In particular, Mr. David Xueling Li, our co-founder, chairman and chief executive officer, owns 97.7% of Beijing Tuda's equity interests and 99% of Bilin Online's equity interests. Mr. Li and Beijing Tuda also own 0.5% and 99.0% of Guangzhou Huaduo's equity interests, respectively, which in turn owns 99.01% of Guangzhou Huya's equity interests. Rongjie Dong, CEO of HUYA Inc., owns 0.99% of Guangzhou Huya's equity interests through his wholly owned subsidiary Guangzhou Qinlv Investment Consulting Co., Ltd., or Guangzhou Qinlv. Mr. David Xueling Li, through Guangzhou Huaduo, indirectly owns substantial equity interests in Sanrenxing, and Mr. David Xueling Li owns 99.0% of Guangzhou BaiGuoYuan's equity interests. If any of these executive officers and key employees terminates their services with us, we have the contractual right to appoint designees to hold the PRC consolidated affiliated entities' equity interests. However, our business may be severely disrupted, our financial condition and results of operations may be materially and adversely affected and we may incur additional expenses to recruit, train and retain personnel. If any of our executive officers or key employees joins a competitor or forms a competing company, we may lose customers, know-how and key professionals and staff members. Each of our executive officers and key employees has entered into an employment agreement and a non-compete agreement with us. However, as advised by our PRC counsel, Fangda Partners, certain provisions under the non-compete agreement may not be deemed valid or enforceable under PRC laws. If any dispute arises between our executive officers and key employees and us, we cannot assure you that we would be able to enforce these non-compete agreements in China, where these executive officers reside, in light of uncertainties with China's legal system. See “—Risks Related to Doing Business in China—Uncertainties in the interpretation and enforcement of Chinese laws and regulations could limit the legal protections available to you and us.”

If we are unable to attract, train and retain qualified personnel, our business may be materially and adversely affected.

Our future success depends, to a significant extent, on our ability to attract, train and retain qualified personnel, particularly management, technical and marketing personnel with expertise in the internet industry; inability to do so may materially and adversely affect our business. Since the internet industry is characterized by high demand and intense competition for talent, we cannot assure you that we will be able to attract or retain qualified staff or other highly skilled employees. As our company is relatively young, our ability to train and integrate new employees into our operations may not meet the growing demands of our business which may materially and adversely affect our ability to grow our business and hence our results of operations.

We may be exposed to cyber security risk.

Computer hackers, foreign governments or cyber terrorists may attempt to penetrate our network security and our website. Unauthorized access to our proprietary business information or customer data may be obtained through break-ins, sabotage, breach of our secure network by an unauthorized party, computer viruses, computer denial-of-service attacks, employee theft or misuse, breach of the security of the networks of our third party providers, or other misconduct. Because the techniques used by computer programmers who may attempt to penetrate and sabotage our network security or our website change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. It is also possible that unauthorized access to customer data may be obtained through inadequate use of security controls by customers. We would suffer economic and reputational damages if a technical failure of our systems or a security breach compromises our user data, including identification or contact information, although there has not been any compromise in the past. Any disruption to our computer systems could have a material adverse effect on our on-site operations and ability to retain and attract users.

Our results of operations are subject to substantial quarterly and annual fluctuations due to seasonality.

We experience seasonality in our business, reflecting seasonal fluctuations in internet usage. As a result, comparing our operating results on a period-to-period basis may not be meaningful. For example, online user numbers tend to be lower during school holidays and certain parts of the school year, and advertising revenues tend to be lower during the Chinese New Year season, which negatively affects our cash flow for those periods. We may also experience a reduction in active users in the third quarter of each year because a significant portion of our users are students, and as the new school year begins, student access to computers and the internet are affected. Internet usage and the rate of internet growth may also be expected to decline during the summer school holidays as some students lose regular internet access. Furthermore, the number of paying users of our live streaming platform correlates with the marketing campaigns and promotional activities we conduct which coincide with popular western or Chinese festivals celebrated by young Chinese people, many of which are in the fourth quarter and ending with the Chinese New Year holidays which typically fall in the first quarter.

As a result, our operating results in future quarters or years may fall below the expectations of securities analysts and investors. In such event, the trading price of our ADSs would likely be materially and adversely affected. See “Item 4. Information on the Company—B. Business Overview—Seasonality” for additional details regarding the effects of seasonality on our cash flow, operating performance and financial results.

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

The global macroeconomic environment is facing challenges, including the escalation of the European sovereign debt crisis since 2011, the end of quantitative easing by the U.S. Federal Reserve, the economic slowdown in the Eurozone in 2014 and the expected exit of the United Kingdom from the European Union. The Chinese economy has slowed down since 2012 and such slowdown may continue. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world’s leading economies, including the United States and China. There have been concerns over unrest and terrorist threats in the Middle East, Europe and Africa, which have resulted in volatility in oil and other markets, and over the conflicts involving Ukraine and Syria. There have also been concerns on the relationship among China and other Asian countries, which may result in or intensify potential conflicts in relation to territorial disputes. 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. Recent changes in U.S. trade policies, including new tariffs on imports from China generally, and reactions by a number of markets including China in response to these U.S. actions, may have a material adverse effect on global economic conditions and the stability of global financial markets, and they may significantly reduce global trade and, in particular, trade between China and the United States. Any severe or prolonged slowdown in the global or Chinese economy may materially and adversely affect our business, results of operations and financial condition. In addition, continued turbulence in the international markets may adversely affect our ability to access capital markets to meet liquidity needs.

Future strategic alliances or acquisitions may have a material and adverse effect on our business, reputation and results of operations.

We may enter into strategic alliances, including joint ventures or minority equity investments, with various third parties to further our business purpose from time to time. These alliances could subject us to a number of risks, including risks associated with sharing proprietary information, non-performance by the third party and increased expenses in establishing new strategic alliances, any of which may materially and adversely affect our business. We may have limited ability to monitor or control the actions of these third parties and, to the extent any of these strategic third parties suffers negative publicity or harm to their reputation from events relating to their business, we may also suffer negative publicity or harm to our reputation by virtue of our association with any such third party.

In addition, although we have no current acquisition plans, if appropriate opportunities arise, we may acquire additional assets, products, technologies or businesses that are complementary to our existing business. Past and future acquisitions and the subsequent integration of new assets and businesses into our own require significant attention from our management and could result in a diversion of resources from our existing business, which in turn could have an adverse effect on our business operations. Acquired assets or businesses may not generate the financial results we expect. Acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities, the occurrence of significant goodwill impairment charges, amortization expenses for other intangible assets and exposure to potential unknown liabilities of the acquired business. Moreover, the costs of identifying and consummating acquisitions may be significant. In addition to possible shareholders' approval, we may also have to obtain approvals and licenses from relevant government authorities for the acquisitions and to comply with any applicable PRC laws and regulations, which could result in increased delay and costs.

If we fail to maintain an effective system of internal control over financial reporting, we may be unable to accurately report our financial results or prevent fraud, and investor confidence in our company and the market price of our ADSs may be adversely affected.

The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, adopted rules requiring most public companies to include a management report on such company's internal control over financial reporting in its annual report, which contains management's assessment of the effectiveness of the company's internal control over financial reporting. In addition, when a company meets the SEC's criteria, an independent registered public accounting firm must report on the effectiveness of the company's internal control over financial reporting.

Our management and independent registered public accounting firm have concluded that our internal control over financial reporting was effective as of December 31, 2018. However, we cannot assure you that in the future our management or our independent registered public accounting firm will not identify material weaknesses during the Section 404 of the Sarbanes-Oxley Act audit process or for other reasons. In addition, because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. As a result, if we fail to maintain effective internal control over financial reporting or should we be unable to prevent or detect material misstatements due to error or fraud on a timely basis, investors could lose confidence in the reliability of our financial statements, which in turn could harm our business, results of operations and negatively impact the market price of our ADSs, and harm our reputation. Furthermore, we have incurred and expect to continue to incur considerable costs and to use significant management time and the other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

Unauthorized third party platforms may sell virtual items we offer for free on our platforms, which may affect our revenue-generating opportunities and exert downward pressure on the prices we charge for our virtual items.

We, from time to time, offer virtual items free of charge to attract users or encourage user participation in channels. Some of our users may sell or purchase such free virtual items through unauthorized third party sellers in exchange for real currency. For example, fans of a performer may pay other users to send flowers or gifts the latter have accumulated on our platforms to the performer, in order to show support and raise the popularity ranking of the performer of their choice. These unauthorized transactions are usually arranged on third party platforms which we do not and are unable to track or monitor. Accordingly, these unauthorized purchases and sales from third party sellers may affect our revenue-generating opportunities and may impede our revenue and profit growth by, among other things, reducing the revenues we could have generated and exerting downward pressure on the prices we charge for our virtual items.



We have limited business insurance coverage, so that any uninsured occurrence of business disruption may result in substantial costs to us and the diversion of our resources, which could have an adverse effect on our results of operations and financial condition.

Insurance companies in China currently do not offer as extensive an array of insurance products as insurance companies do in more developed economies. We do not have any business liability or disruption insurance to cover our operations. We have determined that the costs of insuring for these risks and the difficulties associated with acquiring such insurance on commercially reasonable terms make it impractical for us to have such insurance. Any uninsured occurrence may disrupt our business operations, require us to incur substantial costs and divert our resources, which could have an adverse effect on our results of operations and financial condition.

#### Risks Related to Our Corporate Structure and Our Industry

If the PRC government finds that the structure we have adopted for our business operations does not comply with PRC laws and regulations, or if these laws or regulations or interpretations of existing laws or regulations change in the future, we could be subject to severe penalties, including the shutting down of our platforms and our business operations.

Foreign ownership of internet-based businesses is subject to significant restrictions under current PRC laws and regulations. The PRC government regulates internet access, the distribution of online information and the conduct of online commerce through strict business licensing requirements and other government regulations. These laws and regulations also limit foreign ownership in PRC companies that provide internet information distribution services. Specifically, foreign ownership in an internet information provider or other value-added telecommunication service providers may not exceed 50%. In addition, according to the Several Opinions on the Introduction of Foreign Investment in the Cultural Industry promulgated by the Ministry of Culture, or the MOC, the State Administration of Radio, Film and Television, or the SARFT, the General Administration of Press and Publication, or the GAPP, currently known as the State Administration of Press Publication, Radio, Film and Television after combination of SARFT and GAPP, the National Development and Reform Commission and the Ministry of Commerce, or the MOFCOM, in July 2005, foreign investors are prohibited from investing in or operating, among others, any internet cultural operating entities and from engaging in the business of transmitting audio-visual programs through information networks.

We are an exempted company incorporated in the Cayman Islands and our PRC subsidiaries, Guangzhou Huanju Shidai Information Technology Co., Ltd., or Guangzhou Huanju Shidai, Huanju Shidai Technology (Beijing) Co., Ltd., or Beijing Huanju Shidai, Guangzhou Huya Technology Co., Ltd., or Huya Technology, and Guangzhou BaiGuoYuan Information Technology Co., Ltd., or BaiGuoYuan Technology, are each considered a wholly foreign owned enterprise. We conduct our operations in China primarily through a series of contractual arrangements entered

into among our PRC subsidiaries, namely Beijing Huanju Shidai, Huya Technology and BaiGuoYuan Technology, our major PRC consolidated affiliated entities, namely Guangzhou Huaduo, Beijing Tuda, Guangzhou Huya and Guangzhou BaiGuoYuan, and the respective shareholders of Guangzhou Huaduo, Beijing Tuda, Guangzhou Huya and Guangzhou BaiGuoYuan. As a result of these contractual arrangements, we exert control over our major PRC consolidated affiliated entities and consolidate each of their operating results in our financial statements under U.S. GAAP. All of the equity (net assets) or deficit (net liabilities) and net income (loss) of the consolidated affiliated entities are attributed to us. In addition, we conduct the Bilin business, a mobile instant communication application and its related business line, through contractual arrangements among our PRC subsidiary, Bilin Changxiang, our PRC consolidated affiliated entity, Bilin Online, and Bilin Online's shareholder. For a detailed description of these contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party—Contractual Arrangements with Beijing Tuda."

On September 28, 2009, the GAPP, the National Copyright Administration and the National Office of Combating Pornography and Illegal Publications, jointly issued a Notice on Further Strengthening the Administration of Pre-examination and Approval of Online Games and the Examination and Approval of Imported Online Games, or Circular 13. Circular 13 restates that foreign investors are not permitted to invest in online game-operating businesses in China via wholly owned, equity joint venture or cooperative joint venture investments and expressly prohibits foreign investors from gaining control over or participating in domestic online game operators through indirect ways such as establishing other joint venture companies or entering into contractual or technical arrangements such as the variable interest entity structural arrangements we adopted for our consolidated affiliated entities. We are not aware of any companies that have adopted a corporate structure that is the same as or similar to ours having been penalized or terminated under Circular 13 since the effective date of the circular. Furthermore, the enforcement of Circular 13 is still subject to substantial uncertainty, including possible subsequent joint actions by relevant authorities in charge, such as the MOC. The Regulation on Three Provisions stipulates that the MOC is authorized to regulate the online game industry, while the GAPP is authorized to approve the publication of online games before their launch on the internet. The Interpretation on Three Provisions further provides that once an online game is launched on the internet, it will be completely under the regulation of the MOC, and that if an online game is launched on the internet without obtaining prior approval from the GAPP, the MOC, instead of the GAPP, is directly responsible for investigating the game. In the event that we, our PRC subsidiaries or PRC consolidated affiliated entities are found to be in violation of the prohibition under Circular 13, the GAPP, in conjunction with the relevant regulatory authorities in charge, may impose applicable penalties, which in the most serious cases may include suspension or revocation of relevant licenses and registrations. In addition, various media sources have reported that the CSRC prepared a report proposing pre-approval by a competent central government authority of offshore listings by China-based companies with variable interest entity structures, such as ours, that operate in industry sectors subject to foreign investment restrictions. However, it is unclear whether the CSRC officially issued or submitted such a report to a higher level government authority or what any such report provides. Furthermore, on January 19, 2015, the MOFCOM issued a discussion draft of the proposed Foreign Investment Law, which may place restrictions on variable interest entity structures adopted by us. However, the New Foreign Investment Law, which promulgated by the Standing Committee of the National People's Congress on March 15, 2019 and will become effective on January 1, 2020, does not explicitly stipulate the contractual arrangements under the "variable interest equity" structures as a form of foreign investment. Nevertheless, we cannot assure you that there will not be any further changes in the regulatory regime in the future. For more information, please see "—Risks Related to Doing Business in China—Substantial uncertainties exist with respect to the interpretation and implementation of the New Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations."

Based on understanding of current PRC laws, rules and regulations of our PRC legal counsel, Fangda Partners, our current ownership structure for our business operations, the ownership structure of our PRC subsidiaries and our PRC consolidated affiliated entities, the contractual arrangements among our PRC subsidiaries, our PRC consolidated affiliated entities and their shareholders, as described in this annual report on Form 20-F, are in compliance with existing PRC laws, rules and regulations. However, we were further advised by Fangda Partners that there is substantial uncertainty regarding the interpretation and application of current or future PRC laws and regulations and these laws or regulations or interpretations of these laws or regulations may change in the future. Furthermore, the relevant government authorities have broad discretion in interpreting these laws and regulations. Accordingly, we cannot assure you that PRC government authorities will not ultimately take a view contrary to the opinion of our PRC legal counsel.

If our ownership structure, contractual arrangements and businesses of our company, our PRC subsidiaries or our PRC consolidated affiliated entities are found to be in violation of any existing or future PRC laws or regulations, the relevant governmental authorities would have broad discretion in dealing with such violation, including levying fines, confiscating our income or the income of our PRC subsidiaries or PRC consolidated affiliated entities, revoking or suspending the business licenses or operating licenses of our PRC subsidiaries or PRC consolidated affiliated entities, shutting down our servers or blocking our platforms, discontinuing or placing restrictions or onerous conditions on our operations, requiring us to discontinue our operations, requiring us to undergo a costly and disruptive restructuring, restricting or prohibiting our use of proceeds from 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. Any of these actions could cause significant disruption to our business operations and severely damage our reputation, which would in turn materially and adversely affect our business, financial condition and results of operations. In addition, if the imposition of any of these penalties causes us to lose the rights to direct the activities of our PRC consolidated affiliated entities or our right to receive their economic benefits, we would no longer be able to consolidate such entities. Our PRC consolidated affiliated entities contributed substantially all of our consolidated net revenues in the years ended December 31, 2016, 2017 and 2018.

We rely on contractual arrangements with our PRC consolidated affiliated entities and their shareholders for the operation of our business, which may not be as effective as direct ownership. If our PRC consolidated affiliated entities and their shareholders fail to perform their obligations under these contractual arrangements, we may have to resort to litigation to enforce our rights, which may be time-consuming, unpredictable, expensive and damaging to our operations and reputation.

Because of PRC restrictions on foreign ownership of internet-based businesses in China, we depend on contractual arrangements with our PRC consolidated affiliated entities in which we have no ownership interest to conduct our business. These contractual arrangements are intended to provide us with effective control over these entities and allow us to obtain economic benefits from them. Our PRC consolidated affiliated entities are owned directly by Mr. David Xueling Li and certain other shareholders. For additional details on these ownership interests, see “—Risks Related to Our Business—Our business depends substantially on the continuing efforts of our executive officers and key employees, and our business operations may be severely disrupted if we lose their services” and “Item 4. Information on the Company—A. History and Development of the Company.” However, these contractual arrangements may not be as effective in providing control as direct ownership. For example, each of our PRC consolidated affiliated entities and their shareholders could breach their contractual arrangements with us by, among other things, failing to operate our business in an acceptable manner or taking other actions that are detrimental to our interests. If we were the controlling shareholder of these PRC consolidated affiliated entities with direct ownership, we would be able to exercise our rights as shareholders to effect changes to their board of directors, which in turn could implement changes at the management and operational level. However, under the current contractual arrangements, as a legal matter, if our PRC consolidated affiliated entities or their shareholders fail to perform their obligations under these contractual arrangements, we may have to incur substantial costs to enforce such arrangements, and rely on legal remedies under PRC law, including contract remedies, which may not be sufficient or effective. In particular, the contractual arrangements provide that any dispute arising from these arrangements will be submitted to the China International Economic and Trade Arbitration Commission for arbitration in Beijing, the ruling of which will be final and binding. The legal framework and system in China, particularly those relating to arbitration proceedings, is not as developed as other jurisdictions such as the United States. As a result, significant uncertainties relating to the enforcement of legal rights through arbitration, litigation and other legal proceedings remain in China, which could limit our ability to enforce these contractual arrangements and exert effective control over our consolidated affiliated entities. If we are unable to enforce these contractual arrangements, or if we suffer significant delay or other obstacles in the process of enforcing these contractual arrangements, our business and operations could be severely disrupted, which could materially and adversely affect our results of operations and damage our reputation. See “—Risks Related to Doing Business in China—Uncertainties in the interpretation and enforcement of Chinese laws and regulations could limit the legal protections available to you and us.”

Our existing shareholders have substantial influence over our company and their interests may not be aligned with the interests of our other shareholders, which may discourage, delay or prevent a change in control of our company, which could deprive our shareholders of an opportunity to receive a premium for their securities.

As of April 15, 2019, Mr. David Xueling Li, our co-founder, chairman and chief executive officer, and his affiliates, held 75.4% of the total voting power. Mr. David Xueling Li has substantial influence over our business, including

decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could deprive our shareholders of an opportunity to receive a premium for their shares as part of any contemplated sale of our company and may reduce the price of our ADSs. In addition, Mr. Li could violate the terms of his non-compete or employment agreements with us or his legal duties by diverting business opportunities from us, resulting in our loss of corporate opportunities. These actions may take place even if they are opposed by our other shareholders.

Additionally, Mr. Jun Lei, our major shareholder who beneficially owned 7.8% of our outstanding shares as of April 15, 2019, has delegated the voting rights of the shares that he holds in our Company to Mr. Li. Mr. Lei is active in making investments in internet companies in China and currently holds direct and indirect interests in Xiaomi and iSpeak, which competes with certain of our lines of business, and other entities which may have businesses that compete with ours. Xiaomi (HKSE: 01810) is an internet company with smartphones and smart hardware connected by an IoT platform at its core, which has started offering online performance and live broadcasting services recently. iSpeak is owned by Mr. Lei in part through Kingsoft Corporation Limited, which is engaged in the research, development operation and distribution of online games, mobile games, casual game services and internet software. Mr. Lei may, in the future, acquire additional interests in businesses that directly or indirectly compete with some of our lines of business or that are our suppliers or customers. Furthermore, Mr. Lei may pursue acquisitions or make further investments in our industries which may conflict with our interests. For more information regarding the beneficial ownership of our company by our principal shareholders, see “Item 6. Directors, Senior management and Employees—E. Share Ownership.”

We may lose the ability to use and enjoy assets held by our PRC consolidated affiliated entities that are important to the operation of our business if such entities go bankrupt or become subject to a dissolution or liquidation proceeding.

As part of our contractual arrangements with our PRC consolidated affiliated entities, such entities hold certain assets, such as patents for the proprietary technology that are essential to the operations of our platforms and important to the operation of our business. If any one of our PRC consolidated affiliated entities goes bankrupt and all or part of its 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. If any one of PRC consolidated affiliated entities undergoes a voluntary or involuntary liquidation proceeding, the unrelated 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.

Our ability to enforce the equity pledge agreements between us and our PRC variable interest entities' shareholders may be subject to limitations based on PRC laws and regulations.

Pursuant to the equity interest pledge agreements between our wholly owned subsidiaries in China, and the shareholders of our variable interest entities, or VIEs, each shareholders of each variable interest entities agrees to pledge its equity interests in the VIE to our subsidiary to secure the relevant VIE's performance of their obligations under the relevant contractual arrangements. The equity interest pledges of shareholders of VIEs under these equity pledge agreements have been registered with the relevant local branch of the SAMR. The equity interest pledge agreements with each of the VIEs' shareholders provide that the pledged equity interest shall constitute continuing security for any and all of the indebtedness, obligations and liabilities under all of the principal service agreements and the scope of pledge shall not be limited by the amount of the registered capital of that VIE. However, it is possible that a PRC court may take the position that the amount listed on the equity pledge registration forms represents the full amount of the collateral that has been registered and perfected. If this is the case, the obligations that are supposed to be secured in the equity interest pledge agreements in excess of the amount listed on the equity pledge registration forms could be determined by the PRC court as unsecured debt, which takes last priority among creditors.

Our contractual arrangements with our PRC consolidated affiliated entities may result in adverse tax consequences to us.

As a result of our corporate structure and the contractual arrangements among our PRC subsidiaries, our PRC consolidated affiliated entities and their shareholders, we are effectively subject to PRC turnover tax on revenues generated by our subsidiaries from our contractual arrangements with our PRC consolidated affiliated entities. Such tax generally includes the PRC value added tax, or the VAT, along with related surcharges. The applicable turnover tax is determined by the nature of the transaction generating the revenues subject to taxation. The PRC enterprise

income tax law requires every enterprise in China to submit its annual enterprise income tax return together with a report on transactions with its affiliates or related parties to the relevant tax authorities. These transactions may be subject to audit or challenge by the PRC tax authorities within ten years after the taxable year during which the transactions are conducted. We may be subject to adverse tax consequences if the PRC tax authorities were to determine that the contracts between us and our PRC consolidated affiliated entities were not on an arm's length basis and therefore constitute a favorable transfer pricing arrangements. If this occurs, the PRC tax authorities could request that either of our PRC consolidated affiliated entities adjust its taxable income upward for PRC tax purposes. Such a pricing adjustment could adversely affect us by reducing expense deductions recorded by either PRC consolidated affiliated entities and thereby increasing these entities' tax liabilities, which could subject these entities to late payment fees and other penalties for the underpayment of taxes. Our consolidated net income may be materially and adversely affected if our PRC consolidated affiliated entities' tax liabilities increase or if it becomes subject to late payment fees or other penalties.



If our PRC consolidated affiliated entities fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment for internet-based businesses in China, our business, financial condition and results of operations may be materially and adversely affected.

The internet industry in China is highly regulated. See “Item 4. Information on the Company—B. Business Overview—PRC Regulation.” Guangzhou Huaduo, Guangzhou Huya and our other PRC consolidated affiliated entities are required to obtain and maintain applicable licenses or approvals from different regulatory authorities in order to provide their current services. For example, an internet information service provider shall obtain an operating license, or the ICP License, from MIIT or its local counterparts before engaging in any commercial internet information services. An online game operator must also obtain an Internet Culture Operation License from the MOC and an Internet Publishing License from the GAPP to distribute online games, in addition to filing its online games with the GAPP and the MOC. Prior to February 2016, an educational website operator shall obtain approvals from the local education authorities. Each of Guangzhou Huaduo and Guangzhou Huya has obtained a valid ICP License for provision of internet information services, a Radio and Television Program Production and Operating Permit and an Internet Culture Operation License for online games and music products. In addition, Guangzhou Huaduo holds a valid License for Online Transmission of Audio-Visual Programs under the business classification of converging and play-on-demand service for certain kinds of internet audio-visual programs—literary, artistic and entertaining—as prescribed in the newly issued provisional categories. Bigo has obtained a valid ICP License for provision of internet information services, a valid License for Domestic Multi-party Communication Services and is currently in the process of obtaining the License for Online Transmission of Audio-Visual Programs. On October 8, 2011, Guangzhou Huaduo was granted a License for Production and Operation of Radio and TV Programs, covering the production, reproduction and publication of TV dramas, cartoons (excluding production), special subjects, special columns (excluding current political news category) and entertainment programs. On January 1, 2015, Guangzhou Huaduo was granted a License for surveying and mapping, covering online map service. On January 17, 2013 and January 16, 2014, we were granted permission by relevant authorities to provide online education content on edu.YY.com and 100.com, respectively. In the fourth quarter of 2014, we acquired Beijing Huanqiu Xingxue Technology Development Co., Ltd., or Beijing Xingxue, and Beijing Huanqiu Chuangzhi Software Co., Ltd., or Beijing Chuangzhi, which operated Edu24oL.com, an online education website that is an online vocational training and language training platform, and Beijing Xingxue held an ICP License and a Publication Operating License for the operation of Edu24ol.com. In the fourth quarter of 2016, we sold majority equity interests in Beijing Xingxue and cease to consolidate financial results of Beijing Xingxue. In addition, Zhuhai Huanju Entertainment has obtained a valid ICP License for provision of internet information services, an Internet Culture Operation License for online games and music products, and a License for Production and Operation of Radio and TV Programs, covering the production, reproduction and publication of broadcasting plays, TV dramas, cartoons (excluding production), special subjects, special columns (excluding current political news category) and entertainment programs. These licenses or permits are essential to the operation of our business and are generally subject to annual government review. However, we cannot assure you that we can successfully renew these licenses annually or that these licenses are sufficient to conduct all of our present or future business.

As we further develop and expand our video capabilities and functions, we will need to obtain additional qualifications, permits, approvals or licenses. In addition, with respect to specific services offered online, we or the service or content providers may be subject to additional separate qualifications, permits, approvals or licenses. For financial-related content offered on our channels, we are tightening our internal review of the relevant qualifications

of the content providers as instructed by the competent authorities, while complying with other statutory requirements. We cannot assure you that we or the service or content providers will be granted such qualifications, permits, approvals or licenses in a timely manner or at all. Prior to the receipt of such qualifications, permits, approvals or licenses, we may be deemed as being in violation of relevant laws or regulations and be subject to penalties.

As the internet industry in China is still at a relatively early stage of development, new laws and regulations may be adopted from time to time to address new issues that come to the authorities' attention. In the interpretation and implementation of existing and future laws and regulations governing our business activities, considerable uncertainties still exist. 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. In addition, we may be required to obtain additional license or approvals, and we cannot assure you that we will be able to timely obtain or maintain all the required licenses or approvals or make all the necessary filings in the future. If we fail to 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 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.

The shareholders of our PRC variable interest entities may have potential conflicts of interest with us, and if any such conflicts of interest are not resolved in our favor, our business may be materially and adversely affected.

Mr. David Xueling Li and Beijing Tuda, together hold 99.5% of the equity interest in Guangzhou Huaduo and Mr. Li holds 97.7% of the equity interest in Beijing Tuda. Guangzhou Huaduo in turn owns 99.01% of Guangzhou Huya's equity interests, which is our variable interest entity. Rongjie Dong, CEO of HUYA Inc., owns 0.99% of Guangzhou Huya's equity interests through his wholly-owned subsidiary Guangzhou Qinlv. Bilin Online is also our variable interest entity, which was acquired in August 2015 and is currently 99% held by Mr. Li. Mr. Li also owns 99.0% of Guangzhou BaiGuoYuan, and Mr. David Xueling Li, through Guangzhou Huaduo, indirectly owns substantial equity interests in Sanrenxing. Mr. Li is a co-founder and shareholder of our company. The interests of Mr. Li as the controlling shareholder of the VIEs may differ from the interests of our company as a whole, as what is in the best interests of our VIEs may not be in the best interests of our company. We cannot assure you that when conflicts of interest arise, Mr. Li will act in the best interests of our company or that conflicts of interests will be resolved in our favor. In addition, Mr. Li may breach or cause our consolidated variable entities and their respective subsidiaries to breach or refuse to renew the existing contractual arrangements with us. Currently, we do not have existing arrangements to address potential conflicts of interest Mr. Li may encounter in his capacity as a shareholder or director of our VIEs, on the one hand, and as a beneficial owner or director of our company, on the other hand; provided that we could, at all times, exercise our option under the exclusive option agreement with Mr. Li to cause him to transfer all of his equity ownership in our consolidated variable entities to a PRC entity or individual designated by us, and this new shareholder of our consolidated variable entities could then appoint a new director of our consolidated variable entities to replace the existing directors. In addition, if such conflicts of interest arise, our wholly owned PRC subsidiaries, could also, in the capacity of attorney-in-fact for Mr. Li as provided under the relevant powers of attorney, directly appoint a new director of our consolidated variable entities to replace the existing directors. We rely on Mr. Li to comply with the laws of China, which protect contracts and provide that co-founder and chairman owe a duty of loyalty to our company and require him to avoid conflicts of interest and not to take advantage of his position for personal gains. We also rely on Mr. Li to abide by the laws of the Cayman Islands, which provide that directors have a duty of care and a duty of loyalty to act honestly in good faith with a view toward our best interests. However, the legal frameworks of China and the Cayman Islands do not provide guidance on resolving conflicts in the event of a conflict with another corporate governance regime. If we cannot resolve any conflicts of interest or disputes between us and Mr. Li, 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.

Implementation of the new labor laws and regulations in China may adversely affect our business and results of operations.

Pursuant to the labor contract law that took effect in January 2008, its implementation rules that took effect in September 2008 and its amendment that took effect in July 2013, employers are subject to stricter requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employees' probation and unilaterally terminating labor contracts. Due to lack of detailed interpretative rules and uniform implementation practices and broad discretion of the local competent authorities, it is uncertain as to how the labor contract law and its implementation rules will affect our current employment policies and practices. Our employment policies and

practices may violate the labor contract law or its implementation rules, and we may thus be subject to related penalties, fines or legal fees. Compliance with the labor contract law and its implementation rules may increase our operating expenses, in particular our personnel expenses. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the labor contract law and its implementation rules may also limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations. On October 28, 2010, the Standing Committee of the National People's Congress promulgated the PRC Social Insurance Law, or the Social Insurance Law, which became effective on July 1, 2011 and amended on December 29, 2018. According to the Social Insurance Law, employees must participate in pension insurance, work-related injury insurance, medical insurance, unemployment insurance and maternity insurance and the employers must, together with their employees or separately, pay the social insurance premiums for such employees.

We expect our labor costs to increase due to the implementation of these new laws and regulations. As the interpretation and implementation of these new laws and regulations are still evolving, we cannot assure you that our employment practice will at all times be deemed in full compliance with labor-related laws and regulations in China, which may subject us to labor disputes or government investigations. If we are deemed to have violated relevant labor laws and regulations, we could be required to provide additional compensation to our employees and our business, financial condition and results of operations could be materially and adversely affected.

Further, labor disputes, work stoppages or slowdowns at our laboratories, patient service centers or any of our clients or suppliers could significantly disrupt our daily operation or our expansion plans and have a material adverse effect on our business.

Currently there is no law or regulation specifically governing virtual asset property rights and therefore it is not clear what liabilities, if any, online game operators may have for virtual assets.

While playing online games or participating on YY Client activities, players acquire and accumulate some virtual assets, such as special equipment and other accessories. Such virtual assets can be important to online game players and have monetary value and, in some cases, are sold for actual money. In practice, virtual assets can be lost for various reasons, often through unauthorized use of the game account of one user by other users and occasionally through data loss caused by a delay of network service, a network crash or hacking activities. Currently, there is no PRC law or regulation specifically governing virtual asset property rights. As a result, there is uncertainty as to who the legal owner of virtual assets is, whether and how the ownership of virtual assets is protected by law, and whether an operator of online games such as us would have any liability to game players or other interested parties (whether in contract, tort or otherwise) for loss of such virtual assets. Based on recent PRC court judgments, the courts have typically held online game operators liable for losses of virtual assets by game players, and ordered online game operators to return the lost virtual items to game players or pay damages and losses. In case of a loss of virtual assets, we may be sued by our game players or users and held liable for damages, which may negatively affect our reputation and business, financial condition and results of operations.

Compliance with the laws or regulations governing virtual currency may result in us having to obtain additional approvals or licenses or change our current business model.

The issuance and use of “virtual currency” in the PRC has been regulated since 2007 in response to the growth of the online game industry in China. On January 25, 2007, the Ministry of Public Security, the MOC, the MIIT and the GAPP jointly issued a circular regarding online gambling which has implications for the use of virtual currency. To curtail online games that involve online gambling, as well as address concerns that virtual currency could be used for money laundering or illicit trade, the circular (a) prohibits online game operators from charging commissions in the form of virtual currency in relation to winning or losing of games; (b) requires online game operators to impose limits

on use of virtual currency in guessing and betting games; (c) bans the conversion of virtual currency into real currency or property; and (d) prohibits services that enable game players to transfer virtual currency to other players. On June 4, 2009, the MOC and the MOFCOM jointly issued a notice regarding strengthening the administration of online game virtual currency, or the Virtual Currency Notice. The MOC issued the Provisional Administrative Measures of Online Games, or the Online Games Measures, on June 3, 2010 and amended on December 15, 2017, which provides, among other things, that virtual currency issued by online game operators may be only used to exchange its own online game products and services and may not be used to pay for the products and services of other entities. Furthermore, an entity that intends to apply for the permit on the distribution and trading service of virtual currencies should be equipped with sufficient professionals, equipment and workplaces and take necessary management and technical measures to satisfy the needs of business operation. The entity engaging in online game business, including the distribution and trading service of virtual currencies, without approval should be included in the Blacklist of Culture Market and be given a credit-related punishment.

We issue virtual currency and prepaid game tokens to game players on our platforms for them to purchase various items to be used in online games and channels, including music channels. We are in the process of adjusting the content of our platforms but we cannot assure you that our adjustments will be sufficient to comply with the Virtual Currency Notice. Moreover, although we believe we do not offer online game virtual currency transaction services, we cannot assure you that the PRC regulatory authorities will not take a view contrary to ours. For example, certain virtual items we issue to users based on in-game milestones they achieve or time spent playing games are transferable and exchangeable for our virtual currency or the other virtual items we issue to users. If the PRC regulatory authorities deem such transfer or exchange to be a virtual currency transaction, then in addition to being deemed to be engaging in the issuance of virtual currency, we may also be deemed to be providing transaction platform services that enable the trading of such virtual currency. Simultaneously engaging in both of these activities is prohibited under the Virtual Currency Notice. In that event, we may be required to cease either our virtual currency issuance activities or such deemed “transaction service” activities and may be subject to certain penalties, including mandatory corrective measures and fines. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition and results of operations.

In addition, the Virtual Currency Notice prohibits online game operators from setting game features that involve the direct payment of cash or virtual currency by players for the chance to win virtual items or virtual currency based on random selection through a lucky draw, wager or lottery. The notice also prohibits game operators from issuing currency to game players through means other than purchases with legal currency. It is unclear whether these restrictions would apply to certain aspects of our online games. Although we believe that we have rectified and ceased such prohibited activities and have taken adequate measures to prevent any of the above-mentioned prohibited activities, we cannot assure you that the PRC regulatory authorities will not take a view contrary to ours and deem such feature as prohibited by the Virtual Currency Notice, thereby subjecting us to penalties, including mandatory corrective measures and fines. For example, we were previously fined by a local authority in Guangzhou found that our games contained lucky draws. The occurrence of any of the foregoing could materially and adversely affect our business and results of operations.

Non-compliance on the part of third parties with which we conduct business could restrict our ability to maintain or increase our number of users or the level of traffic to our platforms.

Our third party game developers or other business partners may be subject to regulatory penalties or punishments because of their regulatory compliance failures, which may disrupt our business. Although we conduct a rigid review of legal formalities and certifications before entering into contractual relationship with other businesses such as third party game developers and landlords, we cannot be certain whether such third party has or will infringe any third parties’ legal rights or violate any regulatory requirements. We regularly identify irregularities or non-compliance in the business practices of any parties with whom we pursue existing or future cooperation and we cannot assure you that any of these irregularities will be corrected in a prompt and proper manner. The legal liabilities and regulatory actions on our commercial partners may affect our business activities and reputation and in turn, our results of operations. For example, according to PRC regulations, all lease agreements are required to be registered with the local housing authorities. We presently lease properties at 15 different locations for daily operations and certain other properties serving as dormitories and canteens in China, and the landlords of some of these properties are still

completing the registration of their ownership rights or the registration of our leases with the relevant authorities. Failure to complete these required registrations may expose our landlords, lessors and us to potential monetary fines. Some of our lessors have not provided us with appropriate title certificates, which may adversely affect the validity of the leases if the lessors do not have proper title. We cannot assure you that such certificates or registration will be obtained in a timely manner or at all, and in case of failures, we may be subject to monetary fines, have to relocate our offices and suffer economic losses.

In addition, we allow providers of some online services, such as online education and financial services, to establish channels on our platforms. The online service providers and the producers of content on our platforms may be required to meet specific qualifying standards, evidenced by approvals, permits or certificates, and to comply with various requirements when conducting business. We cannot predict if any non-compliance on the part of such commercial partners may cause potential liabilities to us and in turn disrupt our operations.



Intensified government regulation of the internet industry in China could restrict our ability to maintain or increase our user level or the level of user traffic to our platforms.

The PRC government has, in recent years, intensified regulation on various aspects of the internet industry in China. For example, the PRC government adopted more stringent policies to monitor the online game industry due to adverse public reaction to perceived addiction to online games, particularly in children and minors. On April 15, 2007, eight PRC government authorities, including the GAPP, the Ministry of Education, the Ministry of Public Security and the MIIT issued a notice requiring all Chinese online game operators to adopt an “anti-fatigue system” in an effort to curb addiction to online games by minors. To help game operators identify which game players are minors, online game players in China are now required to register their names and identity card numbers before playing an online game, which information was to be submitted to and verified by the National Citizen Identity Information Center, a subordinate public institution of the Ministry of Public Security, as of October 1, 2011. These restrictions could limit our ability to increase our online game business among minors. See “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Anti-fatigue Compliance System and Real-name Registration System.” In order to comply with these anti-fatigue rules, we set up our system so that after three hours of playing our online games, minors only receive half of the virtual items or other in-game benefits they would otherwise earn, and after playing for more than five hours, receive no in-game benefits. Failure to implement these restrictions, if detected by the relevant government agencies, may result in fines and other penalties for us, including the shutting down of our online game operations and license revocation. Furthermore, if these restrictions were expanded to apply to adult game players in the future, our online game business could be materially and adversely affected.

In addition, on February 15, 2007, 14 PRC regulatory authorities jointly promulgated a circular to further strengthen the oversight of internet cafes, one of the primary venues from which our platforms is accessed. In recent years, a large number of unlicensed internet cafes have been closed, and the PRC government has imposed higher capital and facility requirements for the establishment of internet cafes. Governmental authorities may from time to time impose stricter requirements on internet cafes, such as customer age limits and regulated hours of operation. Since a substantial portion of our users access our platforms from internet cafes, any reduction in the number, or slowdown in the growth, of internet cafes in China, or any new regulatory restrictions on their operations, could limit our ability to maintain or increase our revenues.

More stringent governmental regulations such as the ones outlined above may discourage game players from playing our games and have a material effect on our business operations.

#### Risks Related to Doing Business in China

Uncertainties in the interpretation and enforcement of Chinese laws and regulations could limit the legal protections available to you and us.

The PRC legal system is based on written statutes and prior court decisions have limited value as precedents. Each of our PRC subsidiaries is a foreign-invested enterprise and is subject to laws and regulations applicable to foreign-invested enterprises as well as various Chinese laws and regulations generally applicable to companies incorporated in China. However, since these laws and regulations are relatively new and the PRC legal system continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involves uncertainties.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory 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. Furthermore, the PRC legal system is based in part on government policies and internal rules (some of which are not published in a timely manner or at all) that may have retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. Such uncertainties, including uncertainty over the scope and effect of our contractual, property (including intellectual property) and procedural rights, could materially and 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, financial condition and results of operations.

We have substantial business operations 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 and by continued economic growth in China as a whole.

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 Chinese 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 the Chinese 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. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures benefit the overall Chinese economy, but may also have a negative effect on us. The Chinese government has implemented certain measures to control the pace of economic growth. These measures may cause decreased economic activity in China, which could in turn reduce the demand for our products and services and adversely affect our business, financial condition and results of operations.

We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet business and companies.

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 uncertainty. As a result, in certain circumstances it may be difficult to determine what actions or omissions may be deemed to be in violations of applicable laws and regulations. Issues, risks and uncertainties relating to PRC regulation of the internet business include, but are not limited to, the following:

We only have contractual control over our platforms in China. Our PRC consolidated affiliated entities own our platforms due to the restriction of foreign investment in businesses providing value-added telecommunication services in China, including internet content provision services. If any of our PRC consolidated affiliated entities breaches its contractual arrangements with us and no longer remains under our control, this may significantly disrupt our business, subject us to sanctions, compromise enforceability of related contractual arrangements, or have other harmful effects on us.

There are uncertainties relating to the regulation of the internet business in China, including evolving licensing practices and the requirement for real-name registrations. Permits, licenses or operations at some of our subsidiaries and PRC consolidated affiliated entities levels may be subject to challenge, or we may fail to obtain permits or licenses that may be deemed necessary for our operations or we may not be able to obtain or renew certain permits or licenses. See “—Risks Related to Our Corporate Structure and Our Industry—If our PRC consolidated affiliated entities fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment for internet-based businesses in China, our business, financial condition and results of operations may be materially and adversely affected” and “Item 4. Information on the Company—B. Business Overview—PRC Regulation.” In addition, although we currently have a real-name registration system in place for our online games in strict compliance with the relevant PRC regulations, we are currently not required by PRC law to ask users for their real name and personal information when they register for a YY user account. We cannot assure you that PRC regulators would not require us to implement compulsory real-name registration on our platforms in the future. In late 2011, for example, the Beijing municipal government required microbloggers in China to implement real-name registration for all of their registered users. If we were required to implement real-name registration on YY, we may lose large numbers of registered user accounts for various reasons, because users may no longer maintain multiple accounts and users who dislike giving out their private information may cease to use our products and services altogether.

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, or the SCIO, the MIIT 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. We are unable to determine what policies this new agency or any new agencies to be established in the future may have or how they may interpret existing laws, regulations and policies and how they may affect us. Further, new laws, regulations or policies may be promulgated or announced that will regulate internet activities, including online video and online advertising businesses. If these new laws, regulations or policies are promulgated, additional licenses may be required for our operations. If our operations do not comply with these new regulations after they become effective, or if we fail to obtain any licenses required under these new laws and regulations, we could be subject to penalties.

On July 13, 2006, the MIIT issued the Notice of the Ministry of Information Industry on Intensifying the Administration of Foreign Investment in Value-added Telecommunications Services. This notice prohibits domestic telecommunication service providers from leasing, transferring or selling telecommunication business operating licenses to any foreign investor in any form, or providing any resources, sites or facilities to any foreign investor for their illegal operation of a telecommunication business in China. According to this notice, either the holder of a value-added telecommunication business operating license or its shareholders must be the registered holders of the domain names or trademarks used by such license holders in their provision of value-added telecommunication services. The notice also requires each license holder to have the necessary facilities, including servers, for its approved business operations and to maintain such facilities in the regions covered by its license. Currently, all contracts with telecommunication carriers and other service providers to host the servers used in our business were entered into by our PRC consolidated affiliated entities, and such arrangements are in compliance with this notice. Our PRC consolidated affiliated entities also own the related domain names and trademarks, and holds the ICP License necessary to conduct our operations in China.

On June 3, 2010, the MOC promulgated the Provisional Administration Measures of Online Games, or the Online Games Measures, which became effective on August 1, 2010 and subsequently amended on December 15, 2017. The Online Games Measures provide that any entity engaging in online game operation activities shall obtain the Internet Culture Operation License and must meet certain requirements such as minimum registered capital and shall conduct online game operation within the approved business scope. Online game developers are generally involved in the purchase of servers and bandwidth, the control and management of game data, the maintenance of game systems and certain other maintenance tasks in our operation of online games. The Guangzhou branch of the MOC has confirmed that such outsourcing and cooperation activities are not considered conducting online game operation activities, and that online game developers do not have to obtain the Internet Culture Operation License in accordance with the Online Games Measures. However, due to lack of detailed interpretative rules and uniform implementation practices and broad discretion of the local competent authorities, there are still uncertainties on the MOC's interpretation and implementation of these measures. If the MOC determines in the future that such qualifications or requirements apply to the online game developers for their involvement in the online game operations, we may have to terminate our revenue-sharing arrangements with certain unqualified online game developers and may even be subject to various penalties, which may negatively impact our results of operations and financial condition.



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. There are also risks that we may be found to violate the existing or future laws and regulations given the uncertainty and complexity of China's regulation of internet business.

Content posted or displayed on our platforms may be found objectionable by PRC regulatory authorities and may subject us to penalties and other severe consequences.

The PRC government has adopted regulations governing internet access and the distribution of information over the internet. Under these regulations, internet content providers and internet publishers are prohibited from posting or displaying over the internet content that, among other things, violates PRC laws and regulations, impairs the national dignity of China or the public interest, or is obscene, superstitious, fraudulent or defamatory. Internet content providers are also prohibited from displaying content that may be deemed by relevant government authorities as "socially destabilizing" or leaking "state secrets" of the PRC. Furthermore, internet content providers who have broadcasted objectionable contents on one platform may be prohibited from broadcasting on all online live steaming platforms, and such prohibition should be adhered to by all other online streaming platforms. Failure to comply with these requirements may result in the revocation of licenses to provide internet content and other licenses, the closure of the concerned platforms and reputational harm. The operator may also be held liable for such censored information displayed on or linked to their platform. For a detailed discussion, see "Item 4. Information on the Company—B. Business Overview—PRC Regulation."

We allow visitors to our portal websites to upload written materials, images, pictures, and other content on the forums on our websites, and also allow users to share, link to and otherwise access audio, video, games and other content from third parties through our platforms. For a description of how content can be accessed on or through our live streaming platform, and what measures we take to lessen the likelihood that we will be held liable for the nature of such content, see "Item 4. Information on the Company—B. Business Overview—Technology," "Item 4. Information on the Company—B. Business Overview—Intellectual Property," and "—Risks Related to Our Business—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 relevant content from our website or seeking license arrangements which may not be available on commercially reasonable terms."

Since our inception, we have worked closely with relevant government authorities to monitor the content on our platforms and to make the utmost effort in complying with relevant laws and regulations. However, it may not be possible to timely determine in all cases the types of content that could result in our liability as an internet operator, and if any of our internet content is deemed by the PRC government to violate any content restrictions, we would not be able to continue to display such content and could become subject to penalties, including confiscation of income, fines, suspension of business and revocation of required licenses, which could materially and adversely affect our business, financial condition and results of operations. We may also be subject to potential liability for any unlawful

actions of our users or third party service providers on our platforms or for content we distribute that is deemed inappropriate. For example, we have previously been subject to a few warnings and fines in an aggregate amount of RMB0.2 million in 2018 for having inappropriate content on our platforms. Although we corrected these non-compliances and undertook measures to prevent the recurrence of such instances, it may be difficult to determine the type of content or actions that may result in liability to us, and if we are found to be liable, we may be prevented from operating our business in China. Moreover, the costs of compliance with these regulations may continue to increase as a result of more content being uploaded or made available by an increasing number of users and third party partners and developers, which may adversely affect our results of operations. Although we have adopted internal procedures to monitor content uploaded to our website and to remove offending content once we become aware of any potential or alleged violation, we may not be able to identify all the content that may violate relevant laws and regulations or third party intellectual property rights and even if we manage to identify and remove offending content, we may still be held liable for such third-party content. Users may upload content or images containing copyright violations and other illegal content and we may be subject to claims or become involved in litigation proceedings. As a result, our reputation, business and results of operations may be materially and adversely affected.



Advertisements shown on our platforms may subject us to penalties and other administrative actions.

Under PRC advertising laws and regulations, we are obligated to monitor the advertising content shown on our platforms to ensure that such content is true and accurate and in full compliance with applicable laws and regulations. In addition, where a special government review is required for specific types of advertisements prior to internet posting, such as advertisements relating to pharmaceuticals, medical instruments, agrochemicals and veterinary pharmaceuticals, we are obligated to confirm that such review has been performed and approval has been obtained. Violation of these laws and regulations may subject us to penalties, including fines, confiscation of our advertising income, orders to cease dissemination of the advertisements and orders to publish an announcement correcting the misleading information. In circumstances involving serious violations by us, PRC governmental authorities may force us to terminate our advertising operations or revoke our licenses.

While we have made significant efforts to ensure that the advertisements shown on our platforms are in full compliance with applicable PRC laws and regulations, we cannot assure you that all the content contained in such advertisements or offers is true and accurate as required by the advertising laws and regulations, especially given the uncertainty in the interpretation of these PRC laws and regulations. If we are found to be in violation of applicable PRC advertising laws and regulations, we may be subject to penalties and our reputation may be harmed, which may have a material adverse effect on our business, financial condition, results of operations and prospects.

Under the PRC enterprise income tax law, we may be classified as a PRC “resident enterprise,” which could result in unfavorable tax consequences to us and our shareholders and have a material adverse effect on our results of operations and the value of your investment.

Under the PRC enterprise income tax law that became effective on January 1, 2008, an enterprise established outside the PRC with “de facto management bodies” within the PRC is considered a “resident enterprise” for PRC enterprise income tax purposes and is generally subject to a uniform 25% enterprise income tax rate on its worldwide income. On April 22, 2009, the State Administration of Taxation, or the SAT, issued the Notice Regarding the Determination of Chinese-Controlled Overseas Incorporated Enterprises as PRC Tax Resident Enterprise on the Basis of De Facto Management Bodies, or 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. Further to SAT Circular 82, on August 3, 2011, the SAT issued the Administrative Measures of Enterprise Income Tax of Chinese-Controlled Offshore Incorporated Resident Enterprises (Trial), or SAT Bulletin 45, which became effective on September 1, 2011, to provide more guidance on the implementation of SAT Circular 82. SAT Bulletin 45 clarified certain issues in the areas of resident status determination, post-determination administration and competent tax authorities.

According to SAT Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be considered as a PRC tax resident enterprise by virtue of having its “de facto management body” in China and will be subject to PRC enterprise income tax on its worldwide income only if all of the following conditions are met: (a) the senior management and core management departments in charge of its daily operations function have their presence mainly in the PRC; (b) its financial and human resources decisions are subject to determination or approval by persons or bodies in the PRC; (c) its major assets, accounting books, company seals, and minutes and files of its board and shareholders’ meetings are located or kept in the PRC; and (d) more than half of the enterprise’s directors or senior management with voting rights habitually reside in the PRC. SAT Bulletin 45 further clarifies the resident status determination, post-determination administration, as well as competent tax authorities. It also specifies that when provided with a copy of Chinese tax resident determination certificate from a resident Chinese controlled offshore incorporated enterprise, the payer should not withhold 10% income tax when paying the Chinese-sourced dividends, interest, royalties, etc. to the Chinese controlled offshore incorporated enterprise.

Although SAT Circular 82 and SAT Bulletin 45 only apply to offshore incorporated enterprises controlled by PRC enterprises or PRC enterprise group instead of those controlled by PRC individuals or foreigners, the determination criteria set forth therein may reflect SAT’s general position on how the term “de facto management body” could be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises, individuals or foreigners.

We do not meet all of the conditions above; therefore, we believe that we should not be treated as a “resident enterprise” for PRC tax purposes even if the standards for “de facto management body” prescribed in the SAT Circular 82 are applicable to us. For example, our minutes and files of the resolutions of our board of directors and the resolutions of our shareholders are maintained outside the PRC. In addition, we are not aware of any offshore holding companies with a corporate structure similar to ours ever having been deemed to be a PRC “resident enterprise” by the PRC tax authorities.

However, it is possible that the PRC tax authorities may take a different view. If the PRC tax authorities determine that our Cayman Islands holding company is a PRC resident enterprise for PRC enterprise income tax purposes, then our world-wide income could be subject to PRC tax at a rate of 25%, which could materially reduce our net income. In addition, we will also be subject to PRC enterprise income tax reporting obligations.

Although dividends paid by one PRC tax resident to another PRC tax resident should qualify as “tax-exempt income” under the enterprise income tax law, we cannot assure you that dividends by our PRC subsidiaries to our Cayman Islands holding company will not be subject to a 10% withholding tax, as the PRC foreign exchange control authorities, which enforce the withholding tax on dividends, and the PRC tax authorities have not yet issued guidance with respect to the processing of outbound remittances to entities that are treated as resident enterprises for PRC enterprise income tax purposes.

Foreign ADS holders may also be subject to PRC withholding tax on dividends payable by us and gains realized on the sale or other disposition of ADSs or common shares, if such income is sourced from within the PRC. Although our holding company is incorporated in the Cayman Islands, it remains unclear whether dividends received and gains realized by our foreign ADS holders will be regarded as income from sources within the PRC if we are classified as a PRC resident enterprise. Any such tax will reduce the returns on your investment in our ADSs.

Finally, we face uncertainties on the reporting and consequences on private equity financing transactions, private share transfers and share exchange involving the transfer of shares in our company by non-resident investors. According to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises issued by the PRC State Administration of Taxation on December 10, 2009, with retroactive effect from January 1, 2008, or SAT Circular 698, and the Notice on Several Issues Concerning Enterprise Income Tax for Indirect Share Transfer by Non-PRC Resident Enterprises, issued by the PRC State Administration of Taxation on February 3, 2015, or SAT Circular 7, an “indirect transfer” of assets of a PRC resident enterprise, including equity interests in a PRC resident enterprise, by non-PRC resident enterprises may be re-characterized and treated as a direct transfer of PRC taxable properties, if such transaction arrangement lacks reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC enterprise income tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax, and tax filing or withholding obligations may be triggered, depending on the nature of the PRC taxable properties being transferred. According to SAT Circular 7, “PRC taxable properties” include assets of a PRC establishment or place of business, real properties in the PRC, and equity investments in PRC resident enterprises, in respect of which gains from their transfer by a direct

holder, being a non-PRC resident enterprise, would be subject to PRC enterprise income taxes. When determining if there is a “reasonable commercial purpose” of the transaction arrangement, features to be taken into consideration include: whether the main value of the equity interest of the relevant offshore enterprise derives from PRC taxable properties; whether the assets of the relevant offshore enterprise mainly consists of direct or indirect investment in China or if its income mainly derives from China; whether the offshore enterprise and its subsidiaries directly or indirectly holding PRC taxable properties have real commercial nature which is evidenced by their actual function and risk exposure; the duration of existence of the business model and organizational structure; the replicability of the transaction by direct transfer of PRC taxable properties; and the tax situation of such indirect transfer and applicable tax treaties or similar arrangements. In respect of an indirect offshore transfer of assets of a PRC establishment or place of business of a foreign enterprise, the resulting gain is to be included with the annual enterprise filing of the PRC establishment or place of business being transferred, and would consequently be subject to PRC enterprise income tax at a rate of 25%. Where the underlying transfer relates to PRC real properties or to equity investments in a PRC resident enterprise, which is not related to a PRC establishment or place of business of a non-resident enterprise, a PRC enterprise income tax at 10% would apply, subject to available preferential tax treatment under applicable tax treaties or similar arrangements, and the party who is obligated to make the transfer payments has the withholding obligation. Where the payor fails to withhold any or sufficient tax, the transferor shall declare and pay such tax to the competent tax authority by itself within the statutory time limit. Late payment of applicable tax will subject the transferor to default interest. Currently, neither SAT Circular 698 nor SAT Circular 7 applies to the sale of shares by investors through a public stock exchange where such shares were acquired from a transaction through a public stock exchange. In October 2017, SAT issued the Announcement on Issues Relating to Withholding at Source of Income Tax of Non-resident Enterprises, or SAT Circular 37, effective December 2017, superseded the Non-resident Enterprises Measures and SAT Circular 698 as a whole and partially amended some provisions in SAT Circular 7. SAT Circular 37 purports to clarify certain issues by providing the definition of equity transfer income and tax basis, the foreign exchange rate to be used in the calculation of withholding amount, and the date of occurrence of the withholding obligation. Specifically, SAT Circular 37 provides that where the transfer income subject to withholding at source is derived by a non-PRC resident enterprise in instalments, the instalments may first be treated as recovery of costs of previous investments. Upon recovery of all costs, the tax amount to be withheld must then be computed and withheld.

We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing and withholding or tax payment obligations on the transferors and transferees, while our PRC subsidiaries may be requested to assist in the filing. Any PRC tax imposed on a transfer of our shares or any adjustment of such gains would cause us to incur additional costs and may have a negative impact on the value of your investment in our company.

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

The Chinese government has provided various tax incentives to our subsidiaries in China. These incentives include reduced enterprise income tax rates. For example, under the PRC Enterprise Income Tax Law, or the EIT Law, which became effective on January 1, 2008 and subsequently amended on February 24, 2017 and on December 29, 2018, respectively, the statutory enterprise income tax rate is 25%. However, Guangzhou Huaduo, our PRC consolidated affiliated entity in the PRC, renewed its qualification as a high and new technology enterprise, or HNTE, as of December 9, 2016 and, subject to the approval of an annual review by competent tax authorities in Guangdong, would be entitled to enjoy a preferential enterprise income tax rate of 15% for three years, from 2016 through 2018. In addition, Guangzhou Huanju Shidai has been recognized as a software enterprise since 2013, and is therefore entitled to a two-year exemption from enterprise income tax followed by three years at 50% of the standard enterprise income tax rate starting from 2014, the first profit-making year. Furthermore, Guangzhou Huanju Shidai was entitled to a preferential income tax rate of 10% in 2016 due to its “Key Software Enterprise” status designated by the relevant government authorities. Guangzhou Huanju Shidai intends to file with the local tax authority for the preferential tax rate of 10% for a “Key Software Enterprise” in 2017, and will be subject to relevant governmental authorities’ assessment. Huya Technology qualified as a Software Enterprise and enjoyed tax exemption from 2017 to 2018 and will enjoy a 50% reduction in the applicable tax rates for the three-year period commencing January 1, 2019. Guangzhou Huya was approved to be a HNTE in November 2018 and thus is entitled to enjoy a preferential tax rate of 15% for three years commencing January 1, 2018. Guangzhou BaiGuoYuan applied for the HNTE and received approval in December 2016 and thus is entitled to enjoy a preferential tax rate of 15% for the years 2016 through 2018. Guangzhou BaiGuoYuan will need to re-apply for HNTE qualification renewal in 2019. In addition, according to the applicable provisions under Singapore law, corporations that are engaging in new high-value-added projects, expanding or upgrading their operations, or undertaking incremental activities after their pioneer period may apply for their profits to be taxed at a reduced rate of 5%, at minimum, for an initial period of up to ten years. The total tax relief period for each qualifying project or activity is subject to a maximum of 40 years (inclusive of the post-pioneer relief period previously granted, if applicable). Bigo Technology Pte. Ltd., or Bigo Technology, was approved for such preferential tax treatment, enabling it to enjoy the preferential tax rate of 5% with the valid period from 2018 to 2022. Bigo Technology will need to re-apply for such preferential tax treatment in 2023. However, if any of the abovementioned companies fails to maintain its qualification for preferential tax treatments, its applicable enterprise income tax rate may increase to 25% or the applicable standard tax rate, which could materially and adversely affect our financial condition and results of operations.

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

Six PRC regulatory agencies promulgated regulations effective on September 8, 2006, subsequently amended on June 22, 2009, that are commonly referred to as the M&A Rules. See "Item 4. Information on the Company—B. Business Overview—PRC Regulation—New M&A Regulations and Overseas Listings." The M&A Rules establish procedures and requirements that could make some acquisitions of Chinese companies by foreign investors more time-consuming and complex, including requirements in some instances that the MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor takes control of a Chinese 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 on August 3, 2008 and amended on September 18, 2018, are triggered. Moreover, the Anti-Monopoly Law promulgated by the Standing Committee of the National People's Congress on August 30, 2007 which became effective on August 1, 2008 requires that transactions which are deemed concentrations and involve parties with specified turnover thresholds (for example, during the previous fiscal year, (i) the total global turnover of all operators participating in the transaction exceeds RMB10 billion (US\$1.4 billion) and at least two of these operators each had a turnover of more than RMB400 million (US\$57.6 million) within China, or (ii) the total turnover within China of all the operators participating in the concentration exceeded RMB2 billion (US\$0.3 billion) and at least two of these operators each had a turnover of more than RMB400 million (US\$57.6 million) within China) must be cleared by the MOFCOM before they can be completed. In addition, on February 3, 2011, the General Office of the State Council promulgated a Notice on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the Circular No. 6, which officially established a security review system for mergers and acquisitions of domestic enterprises by foreign investors. Under Circular No. 6, a security review is required for mergers and acquisitions by foreign investors having "national defense and security" concerns and mergers and acquisitions by which foreign investors may acquire the "de facto control" of domestic enterprises with "national security" concerns.

In the future, we may grow our business by acquiring complementary businesses. Complying with the requirements of the above-mentioned regulations and other relevant rules to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the MOFCOM or its local counterparts, may delay or inhibit our ability to complete such transactions. It is unclear whether our business would be deemed to be in an industry that raises "national defense and security" or "national security" concerns. However, MOFCOM or other government agencies may publish explanations in the future determining that our business is in an industry subject to the security review, in which case our future acquisitions in the PRC, including those by way of entering into contractual control arrangements with target entities, may be closely scrutinized or prohibited. Our ability to expand our business or maintain or expand our market share through future acquisitions would as such be materially and adversely affected.

PRC regulations relating to offshore investment activities by PRC residents may limit our PRC subsidiaries' ability to increase their registered capital or distribute profits to us or otherwise expose us to liability and penalties under PRC law.

The PRC State Administration of Foreign Exchange, or SAFE, has promulgated regulations, including the Notice on Relevant Issues Relating to Domestic Residents' Investment and Financing and Round-Trip Investment through Special Purpose Vehicles, or SAFE Circular No. 37, effective on July 4, 2014, and its appendixes, that require PRC residents, including PRC institutions and individuals, 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 No. 37 as a "special purpose vehicle." SAFE Circular No. 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from making profit distributions to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in their ability to contribute additional capital into its PRC subsidiary. Further, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for foreign exchange evasion, including (i) the requirement by SAFE to return the foreign exchange remitted overseas within a period specified by SAFE, with a fine of up to 30% of the total amount of foreign exchange remitted overseas and deemed to have been evasive and (ii) in circumstances involving serious violations, a fine of no less than 30% of and up to the total amount of remitted foreign exchange deemed evasive. Furthermore, the persons-in-charge and other persons at our PRC subsidiaries who are held directly liable for the violations may be subject to criminal sanctions.

Our PRC resident shareholders, Mr. David Xueling Li and Jun Lei, had registered with the local SAFE branch. Since there remains uncertainty with respect to the interpretation and implementation of Circular No. 37, and we cannot predict how such SAFE regulations will affect our business operations. For example, our present and prospective PRC subsidiaries' ability to conduct foreign exchange activities, such as the remittance of dividends and foreign currency-denominated borrowings, may be subject to compliance with the SAFE regulations by our PRC resident shareholders. In addition, in some cases, we may have little control over either our present or prospective direct or indirect PRC resident shareholders or the outcome of such registration procedures. A failure by our current or future PRC resident shareholders to comply with the SAFE regulations, including but not limited to any delay in subsequent filings, could subject us to fines or other legal sanctions, restrict our cross-border investment activities, limit our subsidiary's ability to make distributions or pay dividends or affect our ownership structure, which could adversely affect our business and prospects.

On February 15, 2012, SAFE promulgated 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. Under the Stock Option Rules and other relevant rules and regulations, PRC residents who participate in stock incentive plan in an overseas publicly-listed company are required to register with SAFE or its local branches and complete certain other procedures. Participants of a stock incentive plan who are PRC residents must 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 plan on behalf of its participants. Such participants must also retain an overseas entrusted institution to handle matters in connection with their exercise of stock options, the purchase and sale of corresponding stocks or interests and fund transfers. In addition, the PRC agent is required to amend the SAFE registration with respect to the stock incentive plan if there is any material change to the stock incentive plan, the PRC agent or the overseas entrusted institution or other material changes. We and our PRC employees who have been granted stock options, restricted shares and restricted share units are subject to these regulations, and are preparing to complete such SAFE registrations. Failure of our PRC stock option holders, restricted shareholders or restricted share units holders to complete their SAFE registrations may subject these PRC residents to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limited our PRC subsidiaries' ability to distribute dividends to us, or otherwise materially and adversely affect our business.

PRC regulation of direct investment and loans by offshore holding companies to PRC entities may delay or limit us from using the proceeds of public offerings to make additional capital contributions or loans to our PRC subsidiaries.

We are an offshore holding company conducting our operations in China through our PRC subsidiaries and variable interest entities. We may make loans to our PRC subsidiaries and variable interest entities, or we may make additional capital contributions to our PRC subsidiaries.

Any capital contributions or loans that we, as an offshore entity, make to our PRC subsidiaries, including from the proceeds of our public offerings, are subject to PRC regulations. For example, none of our loans to a PRC subsidiary



can exceed the difference between its total amount of investment and its registered capital approved under relevant PRC laws, and the loans must be registered with the local branch of SAFE. Our capital contributions to our PRC subsidiaries must be approved by the MOFCOM or its local counterpart.

In August 2008, SAFE issued the Circular on the Relevant Operating Issues Concerning the Improvement of the Administration of the Payment and Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular 142, regulating the conversion by a foreign-invested enterprise of foreign currency-registered capital into RMB by restricting how the converted RMB may be used. In addition, SAFE promulgated Circular 45 on November 9, 2011 in order to clarify the application of SAFE Circular 142. Under SAFE Circular 142 and Circular 45, the RMB capital converted from foreign currency registered capital of a foreign-invested enterprise may only be used for purposes within the business scope approved by the applicable government authority and may not be used for equity investments within the PRC. In addition, SAFE strengthened its oversight of the flow and use of the RMB capital converted from foreign currency registered capital of foreign-invested enterprises. The use of such RMB capital may not be changed without SAFE's approval, and such RMB capital may not in any case be used to repay RMB loans if the proceeds of such loans have not been used.

Since SAFE Circular 142 has been in place for more than five years, in 2014, SAFE decided to further reform the foreign exchange administration system in order to satisfy and facilitate the business and capital operations of foreign invested enterprises, and issued the Circular on the Relevant Issues Concerning the Launch of Reforming Trial of the Administration Model of the Settlement of Foreign Currency Capital of Foreign-Invested Enterprises in Certain Areas on July 4, 2014, or SAFE Circular 36. SAFE Circular 36 suspends the application of SAFE Circular 142 in certain areas and allows a foreign-invested enterprise registered in such areas to use the RMB capital converted from foreign currency registered capital for equity investments within the scope of business, which will be regarded as the reinvestment of foreign-invested enterprise. On March 30, 2015, SAFE issued the Circular on the Reforming of the Management Method of the Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular 19, took effect on June 1, 2015, and replaced SAFE Circular 142 and SAFE Circular 36. Under SAFE Circular 19, a foreign-invested enterprise, within the scope of business, may also choose to convert its registered capital from foreign currency to RMB on a discretionary basis, and the RMB capital so converted can be used for equity investments within PRC, which will be regarded as the reinvestment of foreign-invested enterprise.

The Notice of the SAFE on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, promulgated by the SAFE and became effective on June 9, 2016 provides that discretionary foreign exchange settlement applies to foreign exchange capital, foreign debt offering proceeds and remitted foreign listing proceeds, and the corresponding RMB capital converted from foreign exchange are not restricted from extending loans to related parties or repaying the inter-company loans (including advances by third parties). On January 26, 2017, SAFE promulgated the Circular on Further Improving Reform of Foreign Exchange Administration and Optimizing Genuineness and Compliance Verification, or Circular 3, which stipulates several capital control measures with respect to the outbound remittance of profit from domestic entities to offshore entities, including (i) under the principle of genuine transaction, banks shall check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities shall hold income to account for previous years' losses before remitting the profits. Moreover, pursuant to Circular 3, domestic entities shall make detailed explanations of the sources of capital and utilization arrangements, and provide board resolutions, contracts and other proof when completing the registration procedures in connection with an outbound investment.

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 registration or obtain the necessary approval on a timely basis, or at all. If we fail to complete the necessary registration or obtain the necessary approval, our ability to make loans or equity contributions to our PRC subsidiaries may be negatively affected, which could adversely affect our PRC subsidiaries' liquidity and their ability to fund their working capital and expansion projects and meet their obligations and commitments.

Our PRC subsidiaries and PRC consolidated affiliated entities are subject to restrictions on paying dividends or making other payments to us, which may restrict our ability to satisfy our liquidity requirements.

We are a holding company incorporated in the Cayman Islands. We rely on dividends from our PRC subsidiaries as well as consulting and other fees paid to us by our PRC consolidated affiliated entities for our cash and financing requirements, such as the funds necessary to pay dividends and other cash distributions to our shareholders, including holders of our ADSs, and service any debt we may incur. Current PRC regulations permit our PRC subsidiaries to pay dividends to us only out of their accumulated after-tax profits upon satisfaction of relevant statutory condition and procedures, if any, determined in accordance with Chinese accounting standards and regulations. In addition, each of our PRC subsidiaries is required to set aside at least 10% of its accumulated profits each year, if any, to fund certain reserve funds until the total amount set aside reaches 50% of its registered capital. As of December 31, 2018, appropriations to statutory reserves amounting to RMB101.7 million were made by fifteen of our PRC consolidated affiliated entities. These reserves are not distributable as cash dividends. Furthermore, if our PRC subsidiaries and PRC consolidated affiliated entities incur debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other payments to us, which may restrict our ability to satisfy our liquidity requirements.

In addition, the EIT Law, and its implementation rules provide that withholding tax rate of 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 RMB 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 RMB to the U.S. dollar, and the RMB 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 RMB and the U.S. dollar remained within a narrow band. Since June 2010, the RMB has fluctuated against the U.S. dollar, at times significantly and unpredictably. On November 30, 2015, the Executive Board of the International Monetary Fund (IMF) completed the regular five-year review of the basket of currencies that make up the Special Drawing Right, or the SDR, and decided that with effect from October 1, 2016, Renminbi is determined to be a freely usable currency and will be included in the SDR basket as a fifth currency, along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In 2018, the Renminbi 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 RMB and the U.S. dollar in the future.

There remains significant international pressure on the Chinese government to adopt a flexible currency policy to allow the Renminbi to appreciate against the U.S. dollar. Significant revaluation of the Renminbi may have a material adverse effect on your investment. Substantially all of our revenues and costs are denominated in Renminbi. Any significant revaluation of Renminbi may materially and adversely affect our revenues, earnings and financial position, and the value of, and any dividends payable on, our ADSs in U.S. dollars. To the extent that we need to convert U.S. dollars into RMB for capital expenditures and working capital and other business purposes, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we would receive from the conversion. Conversely, a significant depreciation of the Renminbi against the U.S. dollar may significantly reduce the U.S. dollar equivalent of our earnings, which in turn could adversely affect the price of our ADSs, and if we decide to convert RMB into U.S. dollars for the purpose of making payments for dividends on our common shares or ADSs, strategic acquisitions or investments or other business purposes, appreciation of the U.S. dollar against the RMB 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. As a result, fluctuations in exchange rates may have a material adverse effect on your investment.

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

The PRC government imposes control 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 existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval by complying with certain procedural requirements. Therefore, our PRC subsidiaries are able to pay dividends in foreign currencies to us without prior approval from SAFE. 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. The PRC government may also 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 our ADSs.

If the custodians or authorized users of controlling non-tangible assets of our company, including our corporate chops and seals, fail to fulfill their responsibilities, or misappropriate or misuse these assets, our business and operations could be materially and adversely affected.

Under PRC law, legal documents for corporate transactions, including contracts such as revenue-sharing contracts with online game developers which are important to our business, are executed using the chops or seals of the signing entity or with the signature of a legal representative whose designation is registered and filed with the relevant branch of the Administration of Industry and Commerce.

Although we usually utilize chops to enter into contracts, the designated legal representatives of each of our PRC subsidiaries and consolidated affiliated entities have the apparent authority to enter into contracts on behalf of such entities without chops and bind such entities. All designated legal representatives of our PRC subsidiaries and consolidated affiliated entities are members of our senior management team who have signed employment agreements with us or our PRC subsidiaries and consolidated affiliated entities under which they agree to abide by various duties they owe to us. In order to maintain the physical security of our chops and chops of our PRC entities, we generally store these items in secured locations accessible only by the authorized personnel in the legal or finance department of each of our subsidiaries and consolidated affiliated entities. Although we monitor such authorized personnel, there is no assurance such procedures will prevent all instances of abuse or negligence. Accordingly, if any of our authorized personnel misuse or misappropriate our corporate chops or seals, we could encounter difficulties in maintaining control over the relevant entities and experience significant disruption to our operations. If a designated legal representative obtains control of the chops in an effort to obtain control over any of our PRC subsidiaries or consolidated affiliated entities, we or our PRC subsidiaries and consolidated affiliated entities would need to pass a new shareholder or board resolution to designate a new legal representative and we would need to take legal action to

seek the return of the chops, apply for new chops with the relevant authorities, or otherwise seek legal redress for the violation of the representative's fiduciary duties to us, which could involve significant time and resources and divert management attention away from our regular business. In addition, the affected entity may not be able to recover corporate assets that are sold or transferred out of our control in the event of such a misappropriation if a transferee relies on the apparent authority of the representative and acts in good faith.

Our auditor, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by Public Company Accounting Oversight Board or PCAOB, and as such, investors may be deprived of the benefits of such inspection.

The 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 PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with applicable professional standards. Because our auditor is located in the Peoples' Republic of China, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, our auditor is currently not inspected by the PCAOB. On May 24, 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the China Securities Regulatory Commission, or the CSRC, and the Ministry of Finance which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations in the United States and China. PCAOB continues to be in discussions with the CSRC and the Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with PCAOB and audit Chinese companies that trade on U.S. exchanges. 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. However, it remains unclear what further actions, if any, the SEC and PCAOB will take to address the problem.

Inspections of other firms that the PCAOB has conducted outside 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 auditor's 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 auditor's 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.

Additional remedial measures could be imposed on certain PRC-based accounting firms, including our independent registered public accounting firm, in administrative proceedings instituted by the SEC, as a result of which our financial statements may be determined to not be in compliance with the requirements of the Exchange Act, if at all.

In December 2012, the SEC brought administrative proceedings against the PRC-based affiliates of the Big Four accounting firms, including our independent registered public accounting firm, alleging that they had violated U.S.



securities laws by failing to provide audit work papers and other documents related to certain other PRC-based companies under investigation by the SEC. On January 22, 2014, an initial administrative law decision was issued, censuring and suspending these accounting firms from practicing before the SEC for a period of six months. The decision was neither final nor legally effective until reviewed and approved by the SEC, and on February 12, 2014, the 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 required the firms to follow detailed procedures to seek to provide the SEC with access to such firms' audit documents via the CSRC. If the firms did not follow these procedures or if there was failure in the process between the SEC and the CSRC, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings. Under the terms of the settlement, the underlying proceeding against the four PRC-based accounting firms was deemed dismissed with prejudice four years after entry of the settlement. The four-year mark occurred on February 6, 2019. While we cannot predict if the SEC will further challenge the four PRC-based accounting firms' compliance with U.S. law in connection with U.S. regulatory requests for audit work papers or if the results of such challenge would result in the SEC imposing penalties such as suspensions.

In the event that the PRC-based affiliates of the Big Four accounting firms become subject to additional legal challenges by the SEC or PCAOB, 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 PRC-based, United States-listed companies and the market price of our ADSs may be adversely affected.

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

Substantial uncertainties exist with respect to the interpretation and implementation of the new Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.

On March 15, 2019, the Standing Committee of the National People's Congress promulgated the Foreign Investment Law, or the New Foreign Investment Law, which will become effective on January 1, 2020, aiming to, upon its enactment, replace the trio of existing laws regulating foreign investment in China, namely, *the Sino-foreign Equity Joint Venture Enterprise Law*, *the Sino-foreign Cooperative Joint Venture Enterprise Law* and *the Wholly Foreign-invested Enterprise Law*, together with their implementation rules and ancillary regulations. The New Foreign Investment Law embodies an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments.

The New Foreign Investment Law stipulates three forms of foreign investment, but does not explicitly stipulate the contractual arrangements under the “variable interest equity” structures as a form of foreign investment. The New Foreign Investment Law further stipulates that foreign investment includes “foreign investors invest in China through any other methods under laws, administrative regulations, or provisions prescribed by the State Council.” Therefore, it is possible that future laws, administrative regulations or provisions of the State Council may stipulate contractual arrangements as a form of foreign investment. Since the New Foreign Investment Law has only been promulgated for a very short period, there remains uncertainties with respect to its interpretation and implementation. Under the New Foreign Investment Law, and if the then implementation rules and ancillary regulations explicitly exclude contractual arrangements as a form of foreign investment, the Contractual Arrangements will not be deemed as a foreign investment, and our Contractual Arrangements as a whole and each of the agreements comprising the Contractual Arrangements will not be materially affected solely by the implementation of the New Foreign Investment Law. Conversely, if contractual arrangements are then incorporated as a form of foreign investment, it may materially impact our corporate governance practice and increase our compliance costs.

#### Risks Related to Our ADSs

The trading prices of our ADSs are likely to be volatile, which could result in substantial losses to investors.

The daily closing trading prices of our ADSs ranged from US\$56.97 to US\$140.39 in 2018. The trading price of our 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, like the performance and fluctuation in the market prices or the underperformance or deteriorating financial results of other similarly situated companies in China that have listed their securities in the United States in recent years. The securities of some of these companies have experienced significant volatility since their initial public offerings, including, in some cases, substantial price declines in the trading prices of

their securities. The trading performances of these Chinese companies' securities after their offerings, including companies in internet and social networking businesses, may affect the attitudes of investors toward Chinese companies listed in the United States, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting or other practices at other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in such practices. Furthermore, the stock market in general has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies like us. These broad market and industry fluctuations may adversely affect the market price of our ADSs.

In addition to market and industry factors, the price and trading volume for our ADSs may be highly volatile due to specific factors, including the following:

- variations in our net revenues, earnings and cash flow;
- announcements of new investments, acquisitions, strategic partnerships, or joint ventures;
- announcements of new services and expansions by us or our competitors;
- changes in financial estimates by securities analysts;
- changes in the number of our registered or active users;
- fluctuations in the number of paying users or other operating metrics;
- failure on our part to realize monetization opportunities as expected;
- 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 competitors or our industry; and
- potential litigation or regulatory proceedings or changes.

Any of these factors may result in large and sudden changes in the volume and price at which our ADSs will trade.

If securities or industry analysts do not publish research or reports about our business, or if they adversely change their recommendations regarding our ADSs, the market price for our ADSs and trading volume could decline.

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

decline.

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

Sales of substantial amounts of our ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of our ADSs and could materially impair our ability to raise capital through equity offerings in the future. Our ADSs are freely tradable by persons other than our affiliates without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act, and shares held by our existing shareholders may also be sold in the public market in the future subject to the restrictions in Rule 144 and Rule 701 under the Securities Act. In addition, common shares subject to our outstanding share-based awards, including options, restricted shares and restricted share units, are eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements, Rules 144 and 701 under the Securities Act. We may also issue additional options in the future which may be exercised for additional common shares and additional restricted shares and restricted share units which may vest. As of April 15, 2019, we had 1,251,175,742 Class A common shares (excluding 45,926,302 outstanding restricted shares and treasury Class A common shares held by entities controlled by us) and 326,509,555 Class B common shares outstanding. We cannot predict what effect, if any, market sales of securities held by our significant shareholders or any other shareholder or the availability of these securities for future sale will have on the market price of our ADSs.

We may be classified as a passive foreign investment company, or PFIC, for United States federal income tax purposes, which could subject United States holders of our ADSs or common shares to significant adverse United States income tax consequences.

We will be classified as a “passive foreign investment company,” or “PFIC” for United States federal income tax purposes for any taxable year, if either (a) 75% or more of our gross income for such year consists of certain types of “passive” income or (b) 50% or more of the average quarterly value of our assets (as determined on the basis of fair market value) during such year produce or are held for the production of passive income. Although the law in this regard is unclear, we treat Guangzhou Huaduo, Beijing Tuda, Bilin Online and Guangzhou Huya as being owned by us for United States federal income tax purposes, not only because we exercise effective control over the operation of such entities but also because we are entitled to substantially all of their economic benefits, and, as a result, we consolidate their operating results in our consolidated financial statements.

No assurance can be given with respect to our PFIC status for the taxable year ended December 31, 2018 or any future taxable year. The determination of whether we are or will become a PFIC is uncertain because it is a fact-intensive inquiry made on an annual basis that depends, in part, on the composition of our income and assets. Fluctuations in the market price of our ADSs may cause us to become a PFIC for the current taxable year or future taxable years. The determination of whether we will be or become a PFIC will also be affected by how, and how quickly, we use our liquid assets. Under circumstances where we determine not to deploy significant amounts of cash for active purposes, our risk of being classified as a PFIC may substantially increase. It is also possible that the Internal Revenue Service may challenge our classification or valuation of our goodwill and other unbooked intangibles, which may result in our company being or, becoming classified as, a PFIC for the current or future taxable years. The determination of whether we will be or become a PFIC will also depend, in part, upon the nature of our income and assets over time, which are subject to change from year to year. There can be no assurance our business plans will not change in a manner that will affect our PFIC status.

If we are classified as a PFIC in any taxable year, a U.S. holder (as defined in “Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations”) may incur significantly increased United States income tax on gain recognized on the sale or other disposition of the ADSs or common shares and on the receipt of distributions on the ADSs or common shares to the extent such gain or distribution is treated as an “excess distribution” under the United States federal income tax rules. Further, if we are classified as a PFIC for any year during which a U.S. holder holds our ADSs or common shares, we generally will continue to be treated as a PFIC for all succeeding years during which such U.S. holder holds our ADSs or common shares. Alternatively, U.S. holders of PFIC shares can sometimes avoid the rules described above by making certain elections, including a “mark-to-market” election or electing to treat a PFIC as a “qualified electing fund.” However, U.S. holders will not be able to make an election to treat us as a “qualified electing fund” because, even if we were to be or become a PFIC, we do not intend to comply with the requirements necessary to permit U.S. holders to make such election. Each U.S. holder is urged to consult its tax advisor concerning the United States federal income tax considerations relating to the ownership and disposition of our ADSs or common shares if we are treated as a PFIC for our current taxable year ending December 31, 2019 or any future taxable year (including the possibility of making a “mark-to-market” election and the unavailability of an election to treat us as a qualified electing fund). For more information see “Item 10. Additional Information—E. Taxation— United

States Federal Income Tax Considerations—Passive Foreign Investment Company Rules.”

Our dual class common share structure with different voting rights 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 ADSs may view as beneficial.

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, voting together as one class on all matters requiring a shareholders' vote. 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 will be automatically and immediately converted into an equal number of Class A common shares.

Due to the disparate voting powers attached to these two classes of common shares, as of April 15, 2019, Mr. David Xueling Li and his respective affiliates, held 75.4% of the total voting power of our company and have considerable influence over all matters requiring a shareholders' vote, 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 Class A common shares and ADSs may view as beneficial.

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

Our 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. For example, 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 common shares, in the form of ADSs or otherwise. Preferred shares could be issued quickly with terms calculated to delay or prevent a change in control of our company or make removal of management more difficult. If our board of directors decides to issue preferred shares, the price of our ADSs may fall and the voting and other rights of the holders of our common shares and ADSs may be materially and adversely affected.

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 with limited liability. Our corporate affairs are governed by our amended and restated memorandum and articles of association, the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary responsibilities 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 responsibilities 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, shareholders of a Cayman Islands company may not have standing to initiate a shareholder derivative action in a federal court of the



United States.

Unlike many jurisdictions in the United States, Cayman Islands law does not generally provide for shareholder appraisal rights on an approved arrangement and reconstruction of a company. This may make it more difficult for you to assess the value of any consideration you may receive in a merger or consolidation or to require that the offeror gives you additional consideration if you believe the consideration offered is insufficient. Moreover, holders of our ADSs are not entitled to appraisal rights under Cayman Islands law. ADS holders that wish to exercise their appraisal or dissentient rights must convert their ADSs into our Class A common shares by surrendering their ADSs to the depositary and paying the ADS depositary fee.

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

Judgments obtained against us by our shareholders may not be enforceable in our home jurisdiction.

We are a Cayman Islands company and all of our assets are located outside of the United States. Substantially all of our current operations are conducted in China. In addition, a significant majority of our current directors and officers are nationals and residents of countries other than the United States and substantially all of their assets 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 United States 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.

There are uncertainties as to whether Cayman Islands courts would:

· recognize or enforce against us or our directors or officers judgments of courts of the United States based on certain civil liability provisions of U.S. securities laws; and

· impose liabilities against us or our directors or officers, in original actions brought in the Cayman Islands, based on certain civil liability provisions of U.S. securities laws that are penal in nature.

There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will generally recognize and enforce a foreign money judgment of a foreign court of competent jurisdiction without reexamination of the merits of the underlying disputes provided that such judgment (i) imposes on the judgment debtor a liability to pay a liquidated sum for which the judgment has been given; (ii) is final; (iii) is not in respect of taxes, a fine or penalty; and (iv) was not obtained in a manner and is not of a kind the enforcement of which is contrary to natural justice or the public policy of the Cayman Islands.

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

## Edgar Filing: YY Inc. - Form 20-F

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

the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K;

the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act;

the sections of the Exchange Act requiring insiders to file public reports of their share ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and

the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we publish our results on a quarterly basis as press releases, distributed pursuant to the rules and regulations of the Nasdaq Global Select Market. Press releases relating to financial results and material events are also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC are less extensive and less timely as compared to that required to be filed with the SEC by United States domestic issuers. As a Cayman Islands company listed on the Nasdaq Global Select Market, we are subject to the Nasdaq Global Select Market corporate governance requirements. However, the Nasdaq Global Select Market permit a foreign private issuer like us to follow certain 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 Global Select Market corporate governance requirements.

We relied on the exemption available to foreign private issuers to the requirement that each member of the compensation committee be an independent director. Currently, the chairman of our compensation committee, Mr. David Xueling Li, is not an independent director. We may also continue to rely on this and other exemptions available to foreign private issuers in the future, and to the extent that we choose to do so in the future, our shareholders may be afforded less protection than they otherwise would under the Nasdaq Global Select Market corporate governance requirements applicable to U.S. domestic issuers. As a result, you may not be afforded the same protections or information, which would be made available to you, were you investing in a United States domestic issuer.

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 your Class A common shares.

As a holder of our ADSs, you will only be able to exercise the voting rights with respect to the underlying Class A common shares in accordance with the provisions of the deposit agreement. Under the deposit agreement, you must vote by giving voting instructions to the depository. Upon receipt of your voting instructions, the depository will vote the underlying Class A common shares in accordance with these instructions. You will not be able to directly exercise your right to vote with respect to the underlying shares unless you withdraw the shares from the depository. Under our second amended and restated memorandum and articles of association, the minimum notice period required for convening a general meeting is at least ten clear days. When a general meeting is convened, you may not receive sufficient advance notice to withdraw the shares underlying your ADSs to allow you to vote with respect to any specific matter. If we ask for your instructions, the depository will notify you of the upcoming vote and will arrange to deliver our voting materials to you. We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depository to vote your shares. In addition, the depository 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 vote and you may have no legal remedy if the shares underlying your ADSs are not voted as you requested.

The depository for our ADSs will give us a discretionary proxy to vote our Class A common shares underlying your ADSs if you do not vote at shareholders' meetings, except in limited circumstances, which could adversely affect your interests.

Under the deposit agreement for the ADSs, if you do not vote, the depository will give us a discretionary proxy to vote our Class A common shares underlying your ADSs at shareholders' meetings unless:

- we have failed to timely provide the depository with notice of meeting and related voting materials;
- we have instructed the depository that we do not wish a discretionary proxy to be given;

- we have informed the depositary that there is substantial opposition as to a matter to be voted on at the meeting;
- a matter to be voted on at the meeting would have a material adverse impact on shareholders; or
- the voting at the meeting is to be made on a show of hands.

The effect of this discretionary proxy is that if you do not vote at shareholders' meetings, you cannot prevent our Class A common shares underlying your ADSs from being voted, except under the circumstances described above. This may make it more difficult for shareholders to influence the management of our company. Holders of our common shares are not subject to this discretionary proxy.

You may not receive dividends or other distributions on our 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 of our ADSs 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 our 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 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, 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, common shares, rights or anything else to holders of ADSs. This means that you may not receive distributions we make on our 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 our ADSs.

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

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

#### ITEM 4.

#### INFORMATION ON THE COMPANY

##### A. History and Development of the Company

We commenced operations in April 2005 with the establishment of Guangzhou Huaduo in China. Guangzhou Huaduo later became one of our PRC consolidated affiliated entities through the contractual arrangements described below.

We established Dokhi Investments Limited in the British Virgin Islands, or BVI, in July 2006 and changed its name to Duowan Limited in September 2006. In August 2006, we established Double Top Limited, which is wholly owned by Dokhi Investments Limited, in Hong Kong and changed its name to Duowan (Hong Kong) Limited in September 2006. In April 2007, we established Guangzhou Duowan Information Technology Co., Ltd., or Guangzhou Duowan, which was wholly owned by Duowan (Hong Kong) Limited. Guangzhou Duowan entered into a series of contractual arrangements with Guangzhou Huaduo and its shareholders, which were subsequently amended solely to reflect updated shareholder equity interests in Guangzhou Huaduo, through which Guangzhou Duowan exercised effective control over the operations of Guangzhou Huaduo.

In November 2007, we established Duowan Entertainment Corporation, or Duowan BVI, in the BVI. In March 2008, we established Huanju Shidai Technology (Beijing) Co., Ltd., formerly known as Duowan Entertainment Information Technology (Beijing) Co., Ltd., or Beijing Huanju Shidai, which is wholly owned by Duowan BVI. Beijing Huanju Shidai purchased all the equity interests in Guangzhou Duowan from Duowan (Hong Kong) Limited in August 2008, and entered into a series of contractual arrangements with Guangzhou Huaduo and its shareholders through which Beijing Huanju Shidai exercises effective control over the operations of Guangzhou Huaduo. Duowan (Hong Kong) Limited was deregistered as a company and ceased to operate in May 2010.

In December 2008, Duowan BVI entered into an agreement with Morningside Technology Investments Limited and two individuals, through which Duowan BVI purchased all the equity interests in NeoTasks Inc. from Morningside Technology Investments Limited.

In March 2009, Beijing Huanju Shidai entered into an agreement with NeoTasks New Age International Media Technology (Beijing) Co., Ltd., or NeoTasks Beijing, through which NeoTasks Beijing was merged into Beijing Huanju Shidai. After the merger and additional capital contribution, Beijing Huanju Shidai became 96.5% held by Duowan BVI, and 3.5% held by NeoTasks Limited (formerly known as Enlight Online Entertainment Limited), a Hong Kong company, which in turn was the shareholder of NeoTasks Beijing before the merger. NeoTasks Limited is 100% owned by NeoTasks Inc., a Cayman Islands company. In August 2009, Guangzhou Duowan was renamed Zhuhai Duowan Information Technology Co., Ltd.

In December 2009, Beijing Huanju Shidai entered into a series of contractual agreements with Beijing Tuda and its shareholders, which were subsequently amended solely to reflect updated shareholder equity interests in Beijing Tuda, through which agreements Beijing Huanju Shidai exercises effective control over the operations of Beijing Tuda.

In December 2010, we established Guangzhou Huanju Shidai, formerly known as Zhuhai Duowan Technology Co., Ltd., which is 100% directly owned by Duowan BVI.

Our current holding company, YY Inc., was incorporated in July 2011 as an exempted company with limited liability in the Cayman Islands. The corporate affairs of YY Inc. are governed by the memorandum and articles of association, the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands and the common law of the Cayman Islands. Through a share exchange on September 6, 2011, the shareholders of Duowan BVI exchanged all of their outstanding common and preferred shares in Duowan BVI for common and preferred shares of YY Inc. on a pro rata basis. No additional consideration was paid in connection with the share exchange. As a result, Duowan BVI became a wholly owned subsidiary of YY Inc.

In the fourth quarter of 2014, Guangzhou Huaduo acquired 100% of the equity interests in both Beijing Huanqiu Xingxue Technology Development Co., Ltd, or Beijing Xingxue, and Beijing Huanqiu Chuangzhi Software Co., Ltd., which operate the online education website Edu24oL.com, an online vocational training and language training platform. In addition, we acquired 100% of the equity interests in both Zhengrenqiang and His Partners Education Technology (Beijing) Co., Ltd., which was later renamed 100-Online Education Technology (Beijing) Co., Ltd., or 100-Online, a company specializing in providing preparation courses for the International English Language Testing System, or IELTS, which is an English language proficiency test, and Beijing Dubooker Culture Communication Co., Ltd., or Dubooker, a language education publisher. In the fourth quarter of 2016, we sold majority equity interests in Beijing Xingxue following which we hold 33.14% of equity interests in Beijing Xingxue. We dissolved Dubooker and 100-Online in October 2016 and January 2017, respectively.



In the first quarter of 2015, Guangzhou Huaduo acquired 70% of the equity interests in Shanghai Beifu Culture Communication Co., Ltd., or Shanghai Beifu, which principally engages in providing e-commerce platform to professional game teams and commentators. In June 2016, we entered into an agreement to dispose of 60% equity interest in Shanghai Beifu, following which we hold 10% equity interest in Shanghai Beifu.

In the first quarter of 2015, Duowan BVI established and became a limited partner holding 93.5% equity interests of, Engage Capital Partners I, L.P., which is a private equity fund registered in the Cayman Islands. In June 2015, as a limited partner holding 93.5% equity interests, Guangzhou Huaduo established Shanghai Yilian Equity Investment Partnership (LP), a private equity fund registered in China. In June 2017, Guangzhou Huaduo established and became a limited partner holding 99% equity interests of Guangzhou Yilian Yixing Equity Investment Partnership (LP), a private equity fund registered in the China.

In May 2015, we established Zhuhai Huanju Interactive Entertainment Technology Co., Ltd., which is 100% directly owned by Guangzhou Huaduo.

In July 2015, we established Guangzhou Huanju Electronic Commerce Co., Ltd., which is 100% directly owned by Guangzhou Huaduo.

In August 2015, Duowan BVI acquired 55.05% of the equity interests in BiLin Information Technology Co., Ltd., or BiLin Cayman, a company incorporated in the Cayman Islands that develops and operates instant voice chatting applications for mobile devices. BiLin Cayman is the sole shareholder of BiLin Information Technology Co., Limited, which is in turn the sole shareholder of Bilin Changxiang. Bilin Changxiang entered into a series of contractual arrangements with Bilin Online, and its shareholders, through which Bilin Changxiang exercises effective control over the operations of Bilin Online. In the first quarter of 2018, we acquired the minority equity interests in BiLin Cayman, and BiLin Cayman became a wholly owned subsidiary of Duowan BVI.

In January 2016, we established Guangzhou Huanju Microfinance Co., Ltd., which aims to engage in financing business as a wholly owned subsidiary of Guangzhou Huaduo.

In April 2016, we established Guangzhou Sanrenxing 100-EducationTechnology Co., Ltd. or Sanrenxing, which entered into a series of VIE agreements and completed its VIE restructure in October 2018. As of the date of this annual report, Sanrenxing is 46.55% directly owned by Guangzhou Huaduo.

In August 2016, we established Guangzhou Huya, which is 100% directly owned by Guangzhou Huaduo. In 2017, Guangzhou Huaduo transferred 0.99% of the equity interest of Guangzhou Huya to Guangzhou Qinlv, which is wholly owned by Mr. Rongjie Dong, the CEO of HUYA Inc. In December 31, 2016, we completed transfer of all assets, including trademarks, domain names, business contracts and tangible assets, relating to our game live streaming business to Guangzhou Huya.

In 2017, we established HUYA Inc., Huya Limited, a wholly owned subsidiary of HUYA Inc. in Hong Kong and Guangzhou Huya Technology Co., Ltd., or Huya Technology, wholly-owned by Huya Limited. In July 2017, Huya Technology, Guangzhou Huya and its shareholders, Guangzhou Huaduo and Guangzhou Qinlv, entered into a series of VIE agreements, through which Huya Technology exercises effective control over the operations of Guangzhou Huya. Guangzhou Huya has obtained the licenses to provide internet-related service in the PRC. On March 8, 2018, we and HUYA Inc., through our respective PRC affiliated entities, entered into a non-compete agreement. Pursuant to this non-compete agreement, we agree not to compete with HUYA Inc. in certain areas of its core business, for a term of four years from the date of this non-compete agreement. Please refer to the exhibit 4.38 for details of the non-compete agreement.

In July 2017, HUYA Inc. issued series A shares to a group of investors for an aggregate amount of US\$75 million. In March 2018, HUYA Inc. issued 64,488,235 shares of Series B-2 redeemable convertible preferred shares at a price of US\$7.16 per share for a cash consideration of US\$461.6 million to Linen Investment Limited, a wholly owned subsidiary of Tencent Holdings Limited. Pursuant to the agreements entered into in this series B-2 financing transaction, Tencent has a right, exercisable between March 8, 2020 and March 8, 2021, to purchase at the then fair market price additional shares to reach 50.10% of the voting powers in HUYA Inc. As part of the Series B-2 financing transaction, Tencent and HUYA Inc., through their respective PRC affiliated entities, entered into a business cooperation agreement, which became effective on March 8, 2018. Pursuant to this business cooperation agreement, the parties agreed to establish strategic cooperation in various aspects regarding game live streaming business and other game related business. In May 2018, HUYA Inc., our majority-controlled subsidiary, successfully completed its initial public offering of 17,250,000 ADSs at a price of US\$12.0 per ADS, including 2,250,000 ADSs offered pursuant to the underwriters' full exercise of their over-allotment options. In April 2019, HUYA Inc. successfully completed a follow-on public offering, issuing 13,600,000 ADSs (or 15,640,000 ADSs if the underwriters exercise their option to purchase additional ADSs in full) at a price of US\$24.00 per ADS. Each HUYA Inc. ADS represents one Class A ordinary share of HUYA Inc. As of the date of this annual report, we hold more than 50% of voting power in HUYA Inc. and consolidate its results.

In May 2018, we established TIEN Direction Inc., which in turn established Hago Singapore Pte. Ltd.

In June 2018, we invested US\$272 million in the Series D round of financing of Bigo as the lead investor. We were then an existing shareholder of Bigo and had become its largest shareholder after the Series D financing. In March 2019, we completed the acquisition of the remaining 68.3% of equity interest in Bigo from the other shareholders of Bigo, including Mr. David Xueling Li, our chairman of the board of directors and chief executive officer. Pursuant to the agreement, we paid US\$343.1 million in cash and issued 38,326,579 Class B common shares to Mr. David Xueling Li and 313,888,496 Class A common shares to Mr. David Xueling Li and other selling shareholders of Bigo. As of the date of this annual report, we hold 100% shares of Bigo and started to consolidate Bigo from the date of the completion of the acquisition.

In March 2019, we entered into a strategic partnership agreement with Shanghai Chuangsi Enterprise Development Co., Ltd., or Shanghai Chuangsi. Under the agreement, we will exchange for certain equity interest of Shanghai Chuangsi by contributing YY segment's online game business into Shanghai Chuangsi. As a result, the financial results of YY segment's online games business will no longer be consolidated upon the completion of the transaction, which is subject to customary closing conditions.

We currently own the domain names of, among others, YY.com, Huya.com, Duowan.com and 100.com.

YY Inc. completed an initial public offering of 7,800,000 ADSs, representing 156,000,000 Class A common shares, in November 2012. On November 21, 2012, our ADSs were listed on The Nasdaq Stock Market under the symbol "YY." In December 2012, in connection with the initial public offering, we also completed the over-allotment offering of an additional 1,170,000 ADSs, representing 23,400,000 Class A common shares.

On August 21, 2017, we completed our registered follow-on public offering and over-allotment to the underwriters. We issued and sold a total of 6,612,500 ADSs in these transactions, representing 132,250,000 Class A common shares. We received the net proceeds of US\$442.2 million, after deducting commissions and offering expenses.

Our principal executive offices locate at Building B-1, North Block of Wanda Plaza, No. 79 Wanbo Er Road, Nancun Town, Panyu District, Guangzhou 511442, the People's Republic of China. Our telephone number at this address is +(86 20) 8212 0000. Our registered office in the Cayman Islands is located at Codan Trust Company (Cayman) Limited of Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KYI-1111, Cayman Islands.

See "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Capital Expenditures" for a discussion of our capital expenditures and divestitures.

## B. Business Overview

### Overview

YY enables users to interact with each other in real-time through online live media, and offers users a uniquely engaging and immersive entertainment experience. We have a large and highly engaged user base. YY Live and Huya together attracted 90.4 million mobile average monthly active users in the fourth quarter of 2018, a 18.1% increase from the same period of 2017. Since the beginning of 2015, we have been operating our game live streaming business under a stand-alone brand, Huya, which includes Huya.com and its corresponding mobile application Huya App. We continue to innovate our products and services to attract younger generation users and to enhance user engagement and consumption on our live streaming social media platform. For example, with our YY Live 7.0, a milestone version of YY Live launched in the third quarter of 2017, we transformed the showcase-focused model of live streaming, where audiences watch the performance of the hosts in a more passive manner, to participant-focused live streaming, where audiences experience personalized interactions with their hosts and feel accompanied by their hosts in talent shows, exploration, sports events or games.

In the third quarter of 2018, we launched Hago, a casual-game-oriented social network platform. Currently Hago not only provides around 50 casual games, but also infuses multiple social features such as live streaming chatrooms, karaoke, and others into the application. As a result, the platform encourages young users to use these features to establish and maintain social connections while enjoying casual games. Currently Hago is available in 33 countries and regions worldwide with a focus on Southeast Asian markets. In the fourth quarter of 2018, Hago consistently topped the charts of the most popular applications on both App Store and Google Play in both Indonesia and Vietnam. Hago had average monthly active users of 20.9 million in the fourth quarter of 2018 and its users spent over one hour on the Hago platform on a daily basis.

In March 2019, Bigo became our wholly-owned subsidiary. Headquartered in Singapore, Bigo owns Bigo Live, a leading global live streaming platform excluding China, Like, a leading short-form video social platform worldwide, and other social communication applications. Bigo has created a video-based online community for global young generation users. It has established footprints with a strong presence in South-Eastern Asia, Southern Asia, the Middle East and America, paving the way for further global expansion.

In addition to our continuous product innovation, the growth of our user base and increasing level of user engagement is also driven by the breadth of entertainment content and activities featured on our platform. We continuously expand our content categories to cover both traditional and popular genres such as music, dancing, talk shows and online games, as well as to feature emerging and long-tail categories such as outdoor, finance, sports and ACG (animations, comics and games). Our platform also features highly engaging activities to attract more users and to better engage them, including, among other, online dating shows and live performer battles. Furthermore, we continued to increase user interaction and explore new monetization opportunities through innovative functionality. For example, in 2017, we embedded into our live showrooms a new functionality, *Happy Contest*, which enables live streaming hosts to connect and compete with each other across different showrooms. In 2018, we continue to roll out innovative functionalities such as Host Battalion, which combines live streaming and casual games with social features in an innovative manner and encourages both users and their hosts to engage in personalized interactions through games.

Proprietary technology is the backbone of our services. We endeavor to enhance the user experience through an AI-based content recommendation technology to accurately and efficiently identify and match live streaming content with users. YY's superior user experience is supported by our highly scalable infrastructure, as well as our proprietary algorithms, software and mobile devices tailored for optimal live broadcasting performance. Our technology enables low latency, low jitter and low loss rates in delivering voice and video data, even with weak internet connection.

We pioneered the prevalent live streaming business model among leading industry players in China today. Our business model optimizes the seamless integration of traffic generation, user engagement and monetization. While the basic use of our platforms is currently free to attract traffic, we monetize our user base mainly through sales of virtual gifts for live streaming. We believe that we will be able to capitalize on our large and highly engaged user base by exploring additional monetization opportunities and diversifying our revenue sources.

We also generate revenues through game token for online games, and our membership program whereby users pay a fixed fee to enjoy certain privileges and regular bonus packages. We primarily generate online advertising revenues from sales of various forms of advertising on our live streaming platforms. In addition, we generated revenues from our online education platform through providing education services.

Our total net revenues were RMB8,204.1 million, RMB11,594.8 million and RMB15,763.6 million (US\$2,292.7 million) in 2016, 2017 and 2018, respectively. We had a net income of RMB1,511.6 million, RMB2,508.4 million and

RMB2,115.7 million (US\$307.7 million) in 2016, 2017 and 2018, respectively.

#### Our Platforms

We currently offer live streaming services primarily through our YY Live platform and Huya platform in China. We also offer global services through Bigo and other products incubated by YY Live and Huya outside of China. YY Live and Huya together attracted 90.4 million mobile average monthly active users in the fourth quarter of 2018, a 18.1% increase from the same period of 2017. Bigo attracted 59.4 million mobile average monthly active users for live streaming and short-form video services in the fourth quarter of 2018.

## YY Live

In June 2016, we revamped our online music and entertainment live streaming services to YY Live. With the increasing popularity of and growing contents in YY Live, it has been transformed into an interactive and comprehensive live streaming social media platform. Users of YY Live may enjoy the live streaming services on YY Live App, YY Live website, or YY Client and stream the content in various channels, including, among others, music and dance show, talk show, outdoor activities, sports, anime and games. In 2018, YY Live also started to offer global services through the new platforms, such as Hago, outside of China.

## Huya

In November 2014, we launched Huya broadcasting, with a focus on livestream of game playthroughs. After years of coverage expansion and user accumulation, Huya broadcasting has become a comprehensive live streaming platform covering online games, console games, mobile games, entertainments, sports and etc. Users of Huya broadcasting may access content on Huya through Huya App, Huya website, or YY Client. In 2018, Huya also started to offer global services through the new platform, such as Nimo TV, outside of China.

## Bigo

Bigo is a global technology company. Headquartered in Singapore, Bigo owns Bigo Live, a leading global live streaming platform focusing on markets outside of China, Like, a leading short-form video social platform worldwide, and other social communication applications. Bigo has created a video-based online community for global young generation users and has established footprints with a strong presence in South-Eastern Asia, Southern Asia, the Middle East and America. Bigo attracted 59.4 million mobile average monthly active users for live streaming and short-form video services in the fourth quarter of 2018.

## Our Products

We offer our services primarily through our YY Live platform and Huya platform in China. We also offer global services through Bigo and other products incubated by YY Live and Huya outside of China. Users of our services could stream the contents on those three platforms through (i) our mobile applications, including, among others, YY Live, Huya, Bigo Live, Like, Hago and other products, (ii) our websites, YY.com, Huya.com, and other PC website and web-based products, and (iii) our PC client, YY Client.



## Mobile Applications

### *YY Live and Huya*

We develop mobile applications to provide a variety of live streaming contents to our users through mobile operating systems and make live streaming services available at finger tips. While we continue to develop and upgrade our platforms, we rebranded Mobile YY, our first and main mobile application, into YY Live App, which primarily provides users access to our live streaming content offered on our YY Live platform. To better accommodate the increasing demands of our users to access more content on our YY Live platform, we developed a number of additional mobile applications, each of which dedicates to a specific type of content or functions. Users can access contents on our YY Live platform through all these mobile applications, and retrieve contents most suitable to individual preferences and interests.

In 2018, we developed a series of new features and functionalities into YY Live to attract younger generation users and to enhance user engagement and consumption on our live streaming social media platform. For example, we developed a new feature called Host Battalion, which combined live streaming and casual games with social features in an innovative manner and encourages both users and their hosts to engage in personalized interactions through games. Meanwhile, we further explored opportunities in the field of casual games to satisfy increasing demand arose out of users' fragmented time.

With the growth of users on our Huya platform, we launched Huya App in 2014, for streaming comprehensive game live streaming contents and other entertainment live streaming contents operated under HUYA Inc. Huya provides comprehensive live streaming content through its mobile application with a primary focus on games as well as other entertainment content. Huya App designs features for both users and broadcasters to create a seamless viewing experience.

We will continue to focus on developing enhanced features for our mobile applications going forward.

### ***Bigo Live***

Bigo Live is a leading global live streaming platform focusing on markets outside of China. Bigo Live allows the users to live stream their specific moments, live talk with other users, make video calls and watch trend video. It also has features like music live house and cross-room PK. Bigo Live has presence in more than 150 countries as of December 31, 2018.

### ***Like***

Like is a leading short form video social platform worldwide. Like originally focused on enabling users to create short form video by utilizing functions such as music and effect filter, cinematic effects (including 4D backgrounds), acting and lip-sync, face stickers and special effects toolkits. In the second half of 2018, Like had been transformed into a world leading short form video social platform, with large volume of user generated short form video content being produced, uploaded, viewed, shared and commented on a daily basis.

### ***Hago***

Hago is a casual game oriented social network application. Currently it not only provides around 50 casual games, but also infuses multiple social features such as live streaming chatrooms, karaoke, and others into the application. As a result, the platform encourages young users to use these features to establish and maintain social connections while enjoying casual games.

### ***Other Social Communication Applications under Bigo***

Other social communication applications under Bigo mainly includes (i) IMO, a chat and instant messaging application with functions including video calls, text messages, photo and video sharing, and others, which was recently acquired by Bigo, and (ii) Hello, a voice communication application which allows users to communicate in group via voice despite their positions.

#### PC Websites

We develop and operate YY.com and Huya.com, two of our major PC websites. In addition, we also operate a series of other PC websites such as 100.com, Duowan.com and etc. Websites enable users to conduct real-time interactions and watch live streaming content through web browsers on both PC and mobile, without requiring any downloads or installations. Websites optimize YY technology for the web, transcending the limitations of operational systems and enabling real-time communications and live streaming on the web by simply clicking on a link.

#### YY Client

One of our core PC products, YY Client, enables users to engage in live streaming online, and we continue to develop and upgrade it to address evolving user needs. YY Client provides access to user-created online social activities groups, which we refer to as channels. YY Client is compatible with most internet-enabled systems, including PCs and mobile interfaces. YY Client is available to download for free from YY.com, Duowan.com and other internet software download centers. YY Client also contains the game center which consists of a game lobby and VIP game access services, enabled users to access various online games without downloading any additional client software.

The first version of YY Client, launched in July 2008, had voice-enabled features that allowed online game players to communicate with large groups of fellow gamers on a real-time basis. Game players typically organize various guilds for players to discuss gaming strategies and communicate with each other in a team setting. Such online guilds, which can consist of up to thousands of players, built their own channels on YY Client to communicate with fellow guild members in real time when playing games online. Gradually, we further developed and tailored YY Client in response to the market need for a platform enabling large groups to gather, meet and socialize in real time online, and turned it into the rich communication social platform that it is today. We introduced live video-enabled channels beginning in late 2011 and have since applied video features to all our channels.

### Contents on Our Platforms

We offer various contents on our live streaming platforms, which cover a broad range of interests and topics. Through our mobile applications, websites and PC clients, users can stream the below contents on our live streaming platforms, YY Live, Huya and Bigo platform.

***Music, Dancing and Talk Shows.*** Users can watch music, dancing and talk shows on our live streaming platforms. Currently, music, dancing and talk shows related content is the largest contributor to our total revenues.

***Game live streaming.*** Users livestream play-throughs of online games in a casual environment or during competitions. Professional game teams and commentators often attract more viewers, who may show support and appreciation by purchasing and giving virtual items to the commentators.

***Dating Shows.*** Users host, participate or live stream dating shows through live video and audio communication, during which the participants and the audience can purchase and give virtual gifts to the host or other participants. The format of our online dating is based on a popular dating TV show in China.

***Outdoor Activities and Sports.*** Users can livestream outdoor activity shows, such as camping, hiking, travel and tourism, as well as professional sports shows such as basketballs, footballs and snookers.

***ACG.*** Users can livestream activities related to the ACG (animations, comics and games) topics and themes. ACG live streaming contents are especially popular among younger generation of users.

***E-commerce.*** Users can browse and purchase non-standard products such as jade or other art crafts through livestream room.

## Branding and Marketing

### Branding Strategy

We consider the branding of our products and services a crucial task. We use YY as the general brand for our company and for our core product. At the same time, we also set up stand-alone brands for those products and services which have good potential in their vertical area. Each of our stand-alone brands, such as YY Live, Huya, Bigo and Hago, has its dedicated branding team to promote the brand in a way most suitable to the related business.

### Marketing Activities

Historically, we have incurred minimal marketing expenses for our platforms and have built a large community of users primarily through viral marketing, with word of mouth referrals and repeat user visits ultimately driven by user experience. Nowadays, we employ a variety of marketing activities to further promote our platforms, including advertising on news and social network media, search engines and web portals, cooperating with application distributors and hardware manufacturers, as well as participating and sponsoring offline exhibitions and industry summits. In 2018, we continued to explore innovative ways to enhance our user acquisition through various marketing activities, such as TV program, online entertainment variety show and drama, and offline channels.

### Seasonality

Our results of operations of various products and services are subject to seasonal fluctuations. However, seasonal fluctuations have not posed material operational and financial challenges to us, as such periods tend to be brief and predictable.

### Competition

We face competition in several major aspects of our business, particularly from companies that provide online live streaming businesses in terms of user traffic and user time spent. Our competitors primarily include Momo, Tencent Music Entertainment, Kuaishou, Douyin, Huoshan, DouyuTV and other live streaming platforms in China, and other short-form video and live streaming platforms in overseas such as TikTok and Live.me.

### Technology and User Privacy Safety

Proprietary technology is the backbone of our services. We endeavor to enhance the user experience through an AI-based content recommendation technology to accurately and efficiently identify and match live streaming content with users. We believe we are an industry leader in providing large-scale quality multi-user voice- and video-enabled online services in China, and we intend to continue to update our technology to maintain this leadership position. YY's superior user experience is supported by our highly scalable infrastructure throughout China, as well as our proprietary algorithms, software and mobile devices tailored for optimal live broadcasting performance. Our technology enables low latency, low jitter and low loss rates in delivering voice and video data, even with weak internet connection.

Meanwhile, we dedicate significant resources to the goal of strengthening our live streaming communities through developing and implementing programs designed to protect user privacy, promote a safe environment, and ensure the security of user data. Specifically, we provide users with adequate notice as to what data are being collected. We undertake to manage and use the data collected in accordance with applicable laws and make reasonable efforts to prevent the unauthorized use, loss or leak of user data. In addition, we use a variety of technologies to protect the data with which we are entrusted and have a team of privacy professionals dedicated to the ongoing review and monitoring of data security practices. For example, we store all user data in encrypted format and strictly limit the number of personnel who can access those servers that store user data. For our external interfaces, we also utilize firewalls to protect against potential attacks or unauthorized access.

## Features and Advantages

### AI and algorithms technologies

We continued to upgrade our proprietary AI algorithms and embed AI into our corporate DNA. In 2018, we leveraged our sophisticated machine learning models to enhance the effectiveness of our content tagging. We also implemented our AI-powered visual recognition technology into our content distribution engine so that it can automatically tag and accurately recommend the most relevant live streaming shows to our users. Through those efforts, we were able to create an optimal experience for our users by ensuring that we distribute the live streaming content to the different audience groups. As a result, our average user time spent on YY Live has increased sequentially in the second half of 2018.

### QoS for online multi-media communications

Quality of Service, or QoS, assurance is a key element of any high quality delivery of voice and video data over the internet. For live voice- or video-enabled communications, any data packet loss and jitter, or delay in transmission, is often immediately noticeable to users. We devote significant resources to maintain and develop a creative combination of multiple voice- and voice-over internet protocol, or VOIP, quality assurance mechanisms to minimize data loss and jitter. The mechanisms we employ include but not limited to cloud-based intelligence routing, low-bitrate redundant solution, upstream-forward error correction and adaptive jitter. A special intelligent routing algorithm we designed automatically seeks optimal ways of delivering voice and video data across our cloud-based network, enabling us to provide better QoS even when the QoS levels are lower on certain routes.

We employ computer programs and design and implement a standardized set of measurements to help monitor our service quality. Our system periodically collects, and our team of experts analyzes, data from each of our data centers to evaluate the voice- and video-quality for each user using a systematic standard. We have set up formal procedures to handle different levels of server breakdowns and network-related emergencies, and our team can remotely discover issues and access any server to promptly resolve issues.

### Large, dedicated cloud-based network infrastructure

Our team of experts developed a cloud-based network infrastructure specifically designed to handle multi-party voice- and video-enabled real-time online interactions. We own over 26,000 servers which are hosted in the data centers we lease from third parties throughout the country as of December 31, 2018. Our cloud-based network infrastructure provides quality data delivery and allows multiple users to interact online from anywhere in China with ease and speed.

Our system is designed for scalability and reliability to support growth in our user base. The number of our servers contributes significantly to our fast streaming speed and reliable services, and can be expanded with comparative ease, given the low cost of renting data centers to host additional servers in any high traffic regions in our network. We believe that our current network facilities and broadband capacity provide us with sufficient capacity to carry out our current operations, and can be expanded to meet additional capacity relatively quickly. The amount of bandwidth we lease is continually expanded to reflect increased peak concurrent user numbers.

### Content management and monitoring



Our live streaming platforms and Duowan.com all contain user-generated content, which we are required to monitor for compliance with PRC laws and regulations. A team within our data security department helps in enforcing our internal procedures to ensure that the content in our system is in compliance with applicable laws and regulations. They are aided by a program designed to periodically sweep our platforms and the data being conveyed in our system for sensitive key words or questionable materials. Content that contains certain keywords are automatically filtered by our program and cannot be successfully posted on our platforms. Thus we are able to minimize offending materials on our platforms and to remove such materials promptly after they are discovered. See “Item 3. Key Information—D. Risk Factors—Risks Related to Our Business—We may be held liable for information or content displayed on, retrieved from or linked to our platforms, or distributed to our users, and PRC authorities may impose legal sanctions on us, including, in serious cases, suspending or revoking the licenses necessary to operate our platforms.”

Accumulated experience and data for a proprietary technology platform

Significant time and efforts are required to build and operate an infrastructure such as ours. The technological difficulties which a platform that hosts 10,000 concurrent users faces differ greatly from the difficulties a platform with 100,000 and 1,000,000 concurrent users faces, including many issues to be considered when programming for the platform and planning the infrastructure. Over the years, we have gradually developed an effective system to identify, study and resolve issues that we encounter every day. In addition, our team members have been trained over the years to anticipate and resolve any issues, having gained significant knowledge from building and maintaining our platforms over time.

## Research and Development Team

We believe that our ability to develop internet and mobile online applications and services tailored to respond to the needs of our user base has been a key factor for the success of our business. As of December 31, 2018, our research and development team consisted of 2,197 members. All of our service programs are designed and developed internally, including various interactive technologies. We expect to continue to develop all of our core technologies in-house.

Our research and development team currently works on both back-end and front-end development of our products and services, including (a) the continuous improvement of our core audio and video data processing and streaming technologies, (b) the enhancement of network and server structures, data distribution and transfer technologies to achieve lower latency and reduce interruptions, and (c) the creation of new features and functions to meet the demand of our users in various business lines, including but not limited to PC-desktop, web and mobile applications, channel templates and virtual items.

## Operation and Maintenance Team

As of December 31, 2018, 175 technicians are dedicated to monitoring and maintaining our network infrastructure 24 hours a day, seven days a week. Our operation and maintenance team checks the voice and video data quality received by various users, the quality of users' experience on our platforms and the proper functioning of our server equipment in our network, as well as contacting internet data center hosts to fix any issues located through such checks. Having launched more diversified and complex products and services for an increasing number of users, we raised new challenges to our operation and maintenance team, and rely on them to continue to provide live streaming services and online real-time interactions to our users.

## Intellectual Property

We regard our patents, trademarks, domain names, copyrights, trade secrets, proprietary technologies and similar intellectual property as critical to our success. We seek to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret protection laws in the PRC and other jurisdictions, as well as through confidentiality agreements and procedures with our employees, partners and others. As of December 31, 2018, we had registered 504 domain names, including YY.com, Huya.com, Duowan.com, 100.com and Chinaduo.com, 567 software copyrights and other copyrights, 430 patents and 1,339 trademarks and service marks in China and overseas. In addition, as of December 31, 2018, we had filed 1,589 patent applications covering certain of our proprietary technologies and 1,356 trademark applications in China and overseas. Subsequent to our acquisition of

Bigo, we obtained additional intellectual properties for the operations of Bigo, including 108 domain names, 19 software copyrights, 56 patents and 83 trademarks and service marks in China and overseas as of the date of this annual report. As of the date of this annual report, Bigo had also filed 351 patent applications in China and overseas.

#### PRC Regulation

Certain areas related to the internet, such as telecommunications, internet information services, connections to the international information networks, internet information security and censorship and online game operations, are covered extensively by a number of existing laws and regulations issued by various PRC governmental authorities, including:

- the Ministry of Industry and Information Technology, or the MIIT;

- the Ministry of Culture, or the MOC, which currently known as the Ministry of Culture and Tourism;

- the General Administration of Press and Publication, or the GAPP;

- the State Administration for Radio, Film and Television, or the SARFT;

State Administration of Press, Publication, Radio, Film and Television of the People's Republic of China, or the SAPPRFT;

- the National Copyright Administration, or the NCA;

the State Administration for Industry and Commerce, or the SAIC, which currently known as the State Administration for Market Regulation, or the SAMR;

the State Council Information Office, or the SCIO;

the Ministry of Commerce, or the MOFCOM;

the Bureau of Protection of State Secrets;

the Ministry of Public Security; and

the State Administration of Foreign Exchange, or the SAFE.

As the online social platform and online game industries are still at an early stage of development in China, new laws and regulations may be adopted from time to time to require new licenses and permits in addition to those we currently have. There are substantial uncertainties on the interpretation and implementation of any current and future Chinese laws and regulations, including those applicable to the online social platform and online game industries. See “D. Risk Factors—Risks Related to Doing Business in China—Uncertainties in the interpretation and enforcement of Chinese laws and regulations could limit the legal protections available to you and us.” This section sets forth the most important laws and regulations that govern our current business activities in China and that affect the dividends payment to our shareholders.

#### Regulation on Telecommunications Services and Foreign Ownership Restrictions

Investment activities in China by foreign investors are mainly governed by the Special Administrative Measures (Negative List) for the Access of Foreign Investment, or the Negative List, which was promulgated on June 28, 2018 and became effective on July 28, 2018. The Negative List and the Guidance Catalog of Industries for Foreign Investment (revised in 2017), which was promulgated on June 28, 2017 and became effective on July 28, 2017, divide industries into four categories in terms of foreign investment. Those categories are: “encouraged,” “restricted,” “prohibited” and all industries not listed under one of these categories are deemed to be “permitted.” According to the Negative List, the foreign stake in a value-added telecommunications service (except e-commerce) may not exceed 50%, and foreign investment in the Internet publication services, Internet video and audio program services, Internet cultural business (except music), Internet social networking services, as well as editing, publishing, and production of audiovisual recordings, and electronic publications, shall be prohibited.

The Telecommunications Regulations, which became effective on September 25, 2000 and have been subsequently amended respectively on July 29, 2014 and February 6, 2016, are the core regulations on telecommunications services in China. The 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 Catalog of Telecommunications Business (2015 Amendment), implemented on March 1, 2016 attached to the Telecommunications Regulations, internet information services are deemed a type of value-added telecommunications services. The Telecommunications Regulations require the operators of value-added telecommunications services to obtain value-added telecommunications business operation licenses from MIIT or its provincial delegates prior to the commencement of such services. Under these regulations, if the value-added telecommunications services offered include mobile network information services, the operation license for value-added telecommunications business must include the provision of such services in its covered scope. We currently, through Guangzhou Huaduo, Guangzhou BaiGuoYuan and Guangzhou Huya, our PRC consolidated affiliated entities, hold ICP licenses, a sub-category of the value-added telecommunications business operation license, covering the provision of internet and mobile network information services, issued by the Guangdong branch of the MIIT, which were last updated on June 6, 2018, March 21, 2018 and March 21, 2018, respectively.

The Regulations for the Administration of Foreign-Invested Telecommunications Enterprises, or the FITE Regulations, which took effect on January 1, 2002 and were amended respectively on September 10, 2008 and February 6, 2016, are the key regulations that regulate foreign direct investment in telecommunications companies in China. The FITE Regulations stipulate that the foreign investor of a telecommunications enterprise is prohibited from holding more than 50% of the equity interest in a foreign-invested enterprise that provides value-added telecommunications services, including provision of internet content. Moreover, such foreign investor shall demonstrate a good track record and experience in operating value-added telecommunications services when applying 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 requires that (a) foreign investors can 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 resource, 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 they use in their daily operations; (d) each value-added telecommunications service provider must have the necessary sites and facilities for its approved business operations and maintain such sites and 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, (a) are required to ensure that existing qualified value-added telecommunications service providers will conduct a self-assessment of their compliance with the MIIT Circular 2006 and submit status reports to the MIIT before November 1, 2006; and (b) may revoke the value-added telecommunications business operation licenses of those that fail to comply with the above requirements or 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.

To comply with such foreign ownership restrictions, we operate our online social platform and online game businesses in China through Guangzhou Huaduo, which is owned by several PRC citizens and Beijing Tuda. Beijing Tuda is owned by Mr. David Xueling Li. Guangzhou Huaduo and Beijing Tuda are both controlled by Beijing Huanju Shidai through a series of contractual arrangements. Similarly, we operate our Bilin business through contractual arrangement among Bilin Changxiang, Bilin Online and its shareholder. See “Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements.” Moreover, Guangzhou Huaduo is the registered holder of a majority of the domain names, trademarks and facilities necessary for daily operations in compliance with the MIIT Circular 2006. Based on our PRC legal counsel Fangda Partners’ understanding of the current PRC laws, rules and regulations, our corporate structure complies with all existing PRC laws and 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 (the “ICP license”), from the relevant local authorities before engaging in the providing of any commercial internet information services in China, and the ICP license is subject to annual inspection within the first quarter of the next year according to the Administrative Measures for Telecommunications Business Operating Licensing, which was promulgated by the MIIT on March 5, 2009 and amended on July 3, 2017. 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. Each of Guangzhou Huaduo, Guangzhou BaiGuoYuan and Guangzhou Huya, presently holds the ICP licenses on internet and mobile network information services issued by the Guangdong branch of the MIIT, which were last updated on June 6, 2018, March 21, 2018 and March 21, 2018, respectively.

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.

#### Internet Publication and Cultural Products

The Tentative Measures for Internet Publication Administration, or Internet Publication Measures, were jointly promulgated by the GAPP and the MIIT on June 27, 2002 and became effective on August 1, 2002. The Internet Publication Measures imposed a license requirement for any company that engages in internet publishing, which means any act by an internet information service provider to select, edit and process content or programs and to make such content or programs publicly available on the internet. The provision of online games is deemed an internet publication activity; therefore, an online game operator must (i) obtain an Internet Publishing License so that it can directly offer its online games to the public in the PRC, or (ii) publish its online games through a qualified press entity by entering into an entrustment agreement.

Since the Internet Publication Measures has been in place for more than thirteen years, on February 4, 2016, the SAPPRFT and the MIIT decided to further regulate order in network publication services management, and issued the Measures for Network Publication Service Administration, or Network Publication Measures, which took effect on March 10, 2016 and replaced the Internet Publication Measures. According to the Network Publication Measures, engagement in network publication services must be approved by the competent administrative department for publications and a Network Publication Services Permit must be obtained. Pursuant to the Network Publication Measures, network publication services refer to the use of information networks to provide the public with network publications, and network publications refer to digital works provided to the public through the use of information networks that have characteristics of publication such as editing, creation, or processing. In addition, before online games are published to the public, an application must be put forward with the competent administrative departments for publication, and upon verification and consent, such online games are to be reported to the State Administration of Press, Publication, Radio, Film and Television.

The Rules for the Administration of Electronic Publication, as amended, or the Electronic Publication Rules, was issued by the GAPP on February 21, 2008 and became effective on April 15, 2008. Under the Electronic Publication Rules and other regulations issued by the GAPP, online games are classified as a kind of electronic publication, and publishing of online games is required to be conducted by licensed electronic publishing entities that have been issued standard publication codes. Pursuant to the Electronic Publication Rules, if a PRC company is contractually authorized to publish foreign electronic publications, it must obtain the approval of, and register the copyright license contract with, the GAPP.



We, through Guangzhou Huaduo, obtained an Internet Publishing License for the publication of online games and mobile games, which was last updated in July 2018. For more information on the pre-approval by the GAPP, see “—Regulation on Online Games and Foreign Ownership Restrictions.”

#### Regulation on Online Games and Foreign Ownership Restrictions

On June 3, 2010, the MOC promulgated the Provisional Administration Measures of Online Games, or the Online Game Measures, which came into effect on August 1, 2010 and amended on December 15, 2017. The Online Game Measures governs the research, development and operation of online games and the issuance and trading services of virtual currency. It specifies that the MOC is responsible for the censorship of imported online games and the filing of records of domestic online games. The procedures for the filing of records of domestic online games must be conducted with the MOC within 30 days after the commencement date of the online operation of such online games or the occurrence date of any material alteration of such online games.

All operators of online games, issuers of virtual currencies and providers of virtual currency trading services, or Online Game Business Operators, are required to obtain Internet Culture Operation Licenses. An Internet Culture Operation License is valid for three years and in case of renewal, the renewal application should be submitted 30 days prior to the expiry date of such license. An Online Game Business Operator should request the valid identity certificate of game users for registration, and notify the public 60 days ahead of the termination of any online game operations or the transfer of online game operational rights. Online Game Business Operators are also prohibited from (a) setting compulsory matters in the online games without game users' consent; (b) advertising or promoting the online games that contain prohibited content, such as anything that compromise state security or divulges state secrets; and (c) inducing game users to input legal currencies or virtual currencies to gain online game products or services, by way of random draw or other incidental means. It also states that the state cultural administration authorities will formulate the compulsory clauses of a standard online game service agreement, which have been promulgated on July 29, 2010 and are required to be incorporated into the service agreement entered into between the Online Game Business Operators, with no conflicts with the rest of clauses in such service agreements. Guangzhou Huaduo holds a valid Internet Culture Operation License that was last updated in October 2018.

On July 11, 2008, the General Office of the State Council promulgated the Regulation on Main Functions, Internal Organization and Staffing of the GAPP, or the Regulation on Three Provisions. On September 7, 2009, the Central Organization Establishment Commission issued the corresponding interpretations, or the Interpretations on Three Provisions. The Regulation on Three Provisions and the Interpretation on Three Provisions granted the MOC overall jurisdiction to regulate the online gaming industry, and granted the GAPP the authority to issue approvals for the internet publication of online games. Specifically, (a) the MOC is empowered to administrate online games (other than the pre-examination and approval before internet publication of online games); (b) subject to the MOC's overall administration, GAPP is responsible for the pre-examination and approval of the internet publication of online games; and (c) once an online game is launched, the online game will be only administrated and regulated by the MOC. On July 11, 2013, the General Office of the State Council promulgated the Provisions on the Main Responsibilities, Internal Institutions and Staffing of SAPPRFT, or the Three-Decision Provisions, which reiterates the restrictions stipulated in the Regulation on Three Provisions. On November 7, 2011, Guangzhou Huaduo obtained an Internet Publishing License for the publication of online games and mobile games, which was last updated in July 2018. The online games we currently offer are domestically produced games, and are published by third parties qualified to publish online games.

On September 28, 2009, the GAPP, the NCA and the National Working Group to Eliminate Pornography and Illegal Publications jointly issued the Circular on Consistent Implementation of the Stipulation on the Three Determinations of the State Council and the Relevant Interpretations of the State Commission for Public Sector Reform and the Further Strengthening of the Pre-approval of Online Games and the Approval and Examination of Imported Online Games, or Circular 13. Circular 13 explicitly prohibits foreign investors from directly or indirectly engaging in online game business in China, including through variable interest entity structures, or VIE Structures. Foreign investors are not allowed to indirectly control or participate in PRC operating companies' online game operations, whether (a) by establishing other joint ventures, entering into contractual arrangements or providing technical support for such operating companies; or (b) in a disguised form such as by incorporating or directing user registration, user account management or game card consumption into online game platforms that are ultimately controlled or owned by foreign companies. Circular 13 reiterates that the GAPP is responsible for the examination and approval of the import and publication of online games and states that downloading from the internet is considered a publication activity, which

is subject to approval from the GAPP. Violations of Circular 13 will result in severe penalties.

On May 24, 2016, the SAPPRFT promulgated the Notice on the Administration over Mobile Game Publishing Services, or Notice 44, which became effective on July 1, 2016. The Notice 44 provides that game publishing service entities shall be responsible for examining the contents of their games and applying for game publication numbers. To apply for publication of domestically developed mobile games in the leisure and puzzle category that are not related to political, military, national or religious topics or contents and have no or simple story lines, entities shall submit the required documents to provincial publication administrative departments at least 20 business days prior to the expected date of online publication (public beta). Entities applying for publication of domestically-developed mobile games that are not included in the abovementioned category shall go through stricter procedures, including submitting manager accounts for content review and testing accounts for game anti-indulgence system. Game publishing service entities must set up a specific page to display the information approved by the SAPPRFT, including the copyright owner of the game, publishing service entity, approval number, publication number and others, and shall take charge of examining and recording daily updates of the game. Concerning those mobile games (including pre-installed mobile games) that have been published and operated online before the implementation of Notice 44, other requirements apply to maintain the publication and operation of such games online, and relevant approval procedures would have to be implemented by the game publishing service entities and enterprises in coordination with the provincial publication administrative departments before December 31, 2016 as required by Notice 44. Otherwise, these mobile games shall cease to be published or operated online. On December 1, 2016, the MOC promulgated the Circular of the MOC on Notice on Regulating Online Game Operation and Strengthening Concurrent and Ex-Post Supervision, or Circular 32, which became effective on May 1, 2017. Circular 32 sets requirements in relation to the following aspects of online games: (i) clarifying the scope of online game operation; (ii) regulating services for issuance of virtual props of online games; (iii) strengthening the protection of the rights and interests of online game users; (iv) strengthening the interim and ex-post supervision of online game operation; and (v) seriously investigating and punishing illegal operating activities.

For detailed analysis, see “D. Risk Factors—Risks Related to Our Corporate Structure and Our Industry—We may be adversely affected by the complexity, uncertainties and changes in PRC regulation of internet business and companies.”

#### Regulations Related to Mobile Internet Applications Information Services

The mobile internet applications, or the APPs, are specially regulated by the Administrative Provisions on Mobile Internet Applications Information Services, or the App Provisions, which were promulgated by the Cyberspace Administration of China, or CAC, on June 28, 2016 and became effective on August 1, 2016. The App Provisions set forth the relevant requirements on the APP information service providers. The CAC and local offices of cyberspace administration shall be responsible for the supervision and administration of nationwide and local APP information respectively.

The APP information service providers shall satisfy relevant qualifications required by laws and regulations, carry out the information security management responsibilities strictly and fulfill their obligations in various aspects relating to real-name system, protection of users' information, examination and management of information content, as follows:

(i) shall authenticate the identity information of the registered users including their mobile phone number and other identity information under the principle that mandatory real name registration at the back-office end, and voluntary real-name display at the front-office end; (ii) shall establish and perfect the mechanism for the protection of users' information and follow the principle of legality, rightfulness and necessity, indicate expressly the purpose, method and scope of collection and use and obtain the consent of users while collecting and using users' personal information; (iii) shall establish and perfect the mechanism for the examination and management of information content, and in terms of any information content released that violates laws or regulations, take such measures as warning, restricting the functions, suspending the update and closing the accounts as the case may be, keep relevant records and report the same to relevant competent authorities; (iv) shall safeguard users' right to know and to make choices when users are installing or using such applications, and shall neither start such functions as collecting the information of users' positions, accessing users' contacts, turning on the camera and recording the sound, or any other function irrelevant to the services, nor forcefully install any other irrelevant applications without prior consent or users' when noticed expressly; (v) shall respect and protect the intellectual properties and shall neither produce nor release any application that infringes others' intellectual properties; and (vi) shall record the users' log information and keep the same for 60 days.

#### Anti-fatigue Compliance System and Real-name Registration System

On April 15, 2007, in order to curb addictive online game-playing by minors, eight PRC government authorities, including the GAPP, the Ministry of Education, the Ministry of Public Security and the MIIT, jointly issued a circular requiring the implementation of an anti-fatigue compliance system and a real-name registration system by all PRC online game operators. Under the anti-fatigue compliance system, three hours or less of continuous playing by minors, defined as game players under 18 years of age, is considered to be "healthy," three to five hours is deemed "fatiguing," and five hours or more is deemed "unhealthy." Game operators are required to reduce the value of in-game benefits to a game player by half if it discovers that the amount of time a game player spends online has reached the "fatiguing" level, and to zero in the case of the "unhealthy" level.

To identify whether a game player is a minor and thus subject to the anti-fatigue compliance system, a real-name registration system should be adopted to require online game players to register their real identity information before playing online games. Pursuant to a notice issued by the relevant eight government authorities on July 1, 2011, online game operators must submit the identity information of game players to the National Citizen Identity Information Center, a subordinate public institution of the Ministry of Public Security, for verification as of October 1, 2011. Circular 32 further stipulates that the entity engaging in online games operations shall require online game users to register their real names by using valid identity documents. In addition, pursuant to the Provisions on Administration over the Internet User Public Account Information Services, which was promulgated by the State Internet Information Office on September 7, 2017 and became effective on October 8, 2017, the network platforms providing the services of registration of the Internet user accounts shall conduct real identity verification over the registered users and require providing the identity information and mobile phone number. If a user fails to provide real identity information, the network platforms shall not provide the information release services to such user.

We have developed and implemented an anti-fatigue and compulsory real-name registration system in all our online games, and will cooperate with the National Citizen Identity Information Center to launch the identity verification system upon the issuance of relevant implementing rules. For game players who do not provide verified identity information, we assume that they are minors under 18 years of age. In order to comply with the anti-fatigue rules, we set up our system so that after three hours of playing our online games, minors only receive half of the virtual items or other in-game benefits they would otherwise earn, and after playing for more than five hours, minors would receive no in-game benefits. These restrictions could limit our ability to increase our online games business among minors. Furthermore, if these restrictions were expanded to apply to adult game players in the future, our online games business could be materially and adversely affected. See “D. Risk Factors—Risks Related to Our Corporate Structure and Our Industry—Intensified government regulation of the internet industry in China could restrict our ability to maintain or increase our user level or the level of user traffic to our platforms.”

## Virtual Currency

On January 25, 2007, the Ministry of Public Security, the MOC, the MIIT and the GAPP jointly issued a circular regarding online gambling which has implications for the issuance and use of virtual currency. To curtail online games that involve online gambling while addressing concerns that virtual currency might be used for money laundering or illicit trade, the circular (a) prohibits online game operators from charging commissions in the form of virtual currency in connection with winning or losing of games; (b) requires online game operators to impose limits on use of virtual currency in guessing and betting games; (c) bans the conversion of virtual currency into real currency or property; and (d) prohibits services that enable game players to transfer virtual currency to other players. To comply with the relevant section of the circular that bans the conversion of virtual currency into real currency or property, in relation to online music and entertainment, our virtual currency currently can only be used by users to exchange into virtual items to be used to show support for performers or gain access to privileges and special features in the channels which are services in nature instead of “real currency or property.” Once the virtual currency is exchanged by users for virtual items or the relevant privileged services, the conversion transaction is completed and we immediately cancel the virtual item in our internal system. In the case of virtual items used as gifts to performers, we cancel the virtual items and record corresponding points for the benefit of the performers and the channel owners, which are then used

as basis for the revenue-sharing calculation pursuant to arrangements among us, certain popular performers and channel owners.

In February 2007, 14 PRC regulatory authorities jointly issued a circular to further strengthen the oversight of internet cafes and online games. In accordance with the circular, the People's Bank of China, or PBOC, has the authority to regulate virtual currency, including: (a) setting limits on the aggregate amount of virtual currency that can be issued by online game operators and the amount of virtual currency that can be purchased by an individual; (b) stipulating that virtual currency issued by online game operators can only be used for purchasing virtual products and services within the online games and not for purchasing tangible or physical products; (c) requiring that the price for redemption of virtual currency shall not exceed the respective original purchase price; and (d) banning the trading of virtual currency.

On June 4, 2009, the MOC and the MOFCOM jointly issued a notice to strengthen the administration of online game virtual currency. The Virtual Currency Notice requires businesses that (a) issue online game virtual currency (in the form of prepaid cards and/or pre-payment or prepaid card points), or (b) offer online game virtual currency transaction services to apply for approval from the MOC through its provincial branches within three months after the issuance of the notice. The Virtual Currency Notice prohibits businesses that issue online game virtual currency from providing services that would enable the trading of such virtual currency. Any business that fails to submit the requisite application will be subject to sanctions, including, without limitation, mandatory corrective measures and fines.

Under the Virtual Currency Notice, an online game virtual currency transaction service provider means a business providing platform services relating to trading of online game virtual currency among game users. The Virtual Currency Notice further requires an online game virtual currency transaction service provider to comply with relevant e-commerce regulations issued by the MOFCOM. According to the Guiding Opinions on Online Trading (Interim) issued by the MOFCOM on March 6, 2007, online platform services are trading services provided to online buyers and sellers through a computer information system operated by the service provider.

The Virtual Currency Notice regulates, among others, the amount of virtual currency a business can issue, the retention period of user records, the function of virtual currency and the return of unused virtual currency upon the termination of online services. It prohibits online game operators from distributing virtual items or virtual currency to players based on random selection through lucky draw, wager or lottery which involves cash or virtual currency directly paid by the players. The Virtual Currency Notice bans the issuance of virtual currency by game operators to game players through means other than purchases with legal currency. Any business that does not provide online game virtual currency transaction services is required to adopt technical measures to restrict the transfer of online game virtual currency among accounts of different game players.

In addition, the Online Game Measures further provide that (i) virtual currency may only be used to purchase services and products provided by the online service provider that issues the currency; (ii) the purpose of issuing virtual currency shall not be malicious appropriation of the user's advance payment; (iii) the storage period of online gamers' purchase record shall not be shorter than 180 days; (iv) the types, price and total amount of virtual currency shall be filed with the cultural administration department at the provincial level. The Online Game Measures stipulate that virtual currency service providers may not provide virtual currency transaction services to minors or for online games that fail to obtain the necessary approval or filings, and that such providers should keep transaction records, accounting records and other relevant information for its users for at least 180 days. Circular 32 restates and introduces a series of regulatory requirements governing the online game operation, including clarifications on online game operation and operators, virtual items rules, random-event rules, user protection measures, and reiteration of MOC's approval and filing requirements.

Online Music and Entertainment



On November 20, 2006, the MOC issued Several Suggestions of the MOC on the Development and Administration of Internet Music, or the Suggestions, which became effective on the same date. The Suggestions, among other things, reiterate the requirement for an internet service provider to obtain an Internet Culture Operation License to carry out any business relating to internet music products. In addition, foreign investors are prohibited from operating internet culture businesses. However, the laws and regulations on internet music products are still evolving, and there have not been any provisions clarifying whether music products will be regulated by the Suggestions or how such regulation would be carried out.

On October 23, 2015, the MOC promulgated the Notice on Further Strengthening and Improving the Content Management of Online Music, which stipulated that operating entities shall carry out self-examination in respect of the content management of online music, which shall be regulated by the cultural administration departments in process or afterwards.

Guangzhou Huaduo holds a valid Internet Culture Operation License covering our provision of online music. Most of the music offered on our websites is sung by grassroots performers along with recorded music. If any music provided through our platforms is found to lack necessary filings and/or approvals, we could be requested to cease providing such music or be subject to claims from third parties or penalties from the MOC or its local branches. See “D. Risk Factors—Risks Related to Our Corporate Structure and Our Industry—If our PRC consolidated affiliated entities fail to obtain and maintain the requisite licenses and approvals required under the complex regulatory environment for internet-based businesses in China, our business, financial condition and results of operations may be materially and adversely affected.” Moreover, the unauthorized posting of online music on our platforms by third parties may expose us to the risk of administrative penalties and intellectual property infringement lawsuits. See “D. Risk Factors—Risks Related to Our Business—We may be held liable for information or content displayed on, retrieved from or linked to our platforms, or distributed to our users, and PRC authorities may impose legal sanctions on us, including, in serious cases, suspending or revoking the licenses necessary to operate our platforms” and “PRC Regulation—Intellectual Property Rights—Copyright Law.”

In 2011, the MOC greatly intensified its regulation of the provision of online music products. According to the series of Notices on Clearing Online Music Products that are in Violation of Relevant Regulations promulgated by the MOC since January 7, 2011, entities that provide any of the following will be subject to relevant penalties or sanctions imposed by the MOC: (a) online music products or relevant services without obtaining corresponding qualifications, (b) imported online music products that have not passed the content review of the MOC or (c) domestically developed online music products that have not been filed with the MOC. Thus far, we believe that we have eliminated from our platforms any online music products that may fall into the scope of those prohibited online music products thereunder.

#### Online Transmission of Audio-Visual Programs

The Administrative Provisions on Private Network and Targeted Publication of Audio-Visual Programs Services, or the Audio-Visual Provisions was promulgated by the SAPPRFT on April 25, 2016 and put into effect on June 1, 2016. The Audio-Visual Provisions applies to the radio and TV program and other audio-visual program services with targeted audience through the targeted transmission channels, such as local area network, virtual private network, Internet and other information networks, and using TV and handheld electronic equipment as terminal recipients. Under the Audio-Visual Provisions, to engage in the transmission and distribution of audio-visual programs, a License for the Online Transmission of Audio-Visual Programs is required. Foreign invested enterprises are not allowed to carry out such business.

In addition, the State Internet Information Office promulgated the Administrative Provisions on Internet Live-Streaming Services, or Internet Live-Streaming Services Provisions, on November 4, 2016, which came into effect on December 1, 2016. According to the Internet Live-Streaming Services Provisions, an Internet live-streaming service provider shall (a) establish a live-streaming content review platform; (b) conduct authentication registration of Internet live-streaming issuers based on their identity certificates, business licenses and organization code certificates, etc.; and (c) enter into a service agreement with Internet live-streaming service users to specify both parties' rights and obligations.

On April 13, 2005, the State Council promulgated the Certain Decisions on the Entry of the Non-state-owned Capital into the Cultural Industry. On July 6, 2005, five PRC governmental authorities, including the MOC, the SARFT, the GAPP, the CSRC and the MOFCOM, jointly adopted the Several Opinions on Canvassing Foreign Investment into the Cultural Sector. According to these regulations, non-state-owned capital and foreign investors are not allowed to engage in the business of transmitting audio-visual programs through information networks.

To further regulate the provision of audio-visual program services to the public via the internet, including through mobile networks, within the territory of the PRC, the SARFT and the MIIT jointly promulgated the Administrative Provisions on Internet Audio-Visual Program Service, or the Audio-Visual Program Provisions, on December 20, 2007, which came into effect on January 31, 2008 and subsequently amended on August 28, 2015. Providers of

internet audio-visual program services are required to obtain a License for Online Transmission of Audio-Visual Programs issued by SARFT, or complete certain registration procedures with SARFT. In general, providers of internet audio-visual program services must be either state-owned or state-controlled entities, and the business to be carried out by such providers must satisfy the overall planning and guidance catalog for internet audio-visual program service determined by SARFT. In a press conference jointly held by SARFT and MIIT to answer questions relating to the Audio-Visual Program Provisions in February 2008, SARFT and MIIT clarified that providers of internet audio-visual program services who engaged in such services prior to the promulgation of the Audio-Visual Program Provisions are eligible to register their business and continue their operation of internet audio-visual program services so long as those providers did not violate the relevant laws and regulations in the past. On May 21, 2008, SARFT issued a Notice on Relevant Issues Concerning Application and Approval of License for the Online Transmission of Audio-Visual Programs, and amended the Notice on August 28, 2015, which further sets out detailed provisions concerning the application and approval process regarding the License for Online Transmission of Audio-Visual Programs. The Notice also states that providers of internet audio-visual program services that engaged in such services prior to the promulgation of the Audio-Visual Program Provisions are eligible to apply for the license so long as their violation of the laws and regulations is minor in scope and can be rectified in a timely manner and they have no records of violation during the last three months prior to the promulgation of the Audio-Visual Program Provisions. Further, on March 31, 2009, SARFT promulgated the Notice on Strengthening the Administration of the Content of Internet Audio-Visual Programs, which reiterates the pre-approval requirements for the audio-visual programs transmitted via the internet, including through mobile networks, where applicable, and prohibits certain types of internet audio-visual programs containing violence, pornography, gambling, terrorism, superstition or other similarly prohibited elements.

The Internet Audio-visual Program Services Categories (Provisional), or the Provisional Categories issued by the SARFT on March 17, 2010 and subsequently revised on March 10, 2017 classified internet audio-visual program services into four categories. In addition, the Notice concerning Strengthening the Administration of the Broadcasting Service on Online Audio-Visual Programs promulgated by the SAPPRFT on September 2, 2016 emphasizes that, unless a specific license is granted, audio-visual programs service provider is forbidden from engaging in online live broadcasting on major political, military, economic, social, cultural and sports events.

Administrative Measures for the Business Activities of Online Performances, or Online Performance Measures, was promulgated by the MOC on December 2, 2016 and became effective on January 1, 2017, regulation that the entity engaging in the operation of online performances shall establish content review system, and be staffed with qualified reviewers for self-censorship. Pursuant to Online Performance Measures, online performances shall not contain any of the following elements:(a) the forms of performance being horrific, cruel, violent or vulgar, devastating the performers' physical and mental health; (b) by taking advantage of bodily defects and demonstrating bodily variation; (c) infringing the legitimate rights and interests of others by means of photo-taking and videotaping in secret; (d) being cruelty to animals; or (e) displaying the online game skills through the online game product which failed to obtain the content review approval issued by cultural administrative departments. Once the online performances in violation of laws are found, the entity engaging in the operation of online performances shall immediately suspends the provision of such performance, and report relevant information to the authorized governmental departments.

Guangzhou Huaduo holds a valid License for Online Transmission of Audio-Visual Programs with the business classification of converging and play-on-demand service for certain kinds of audio-visual programs—literary, artistic and entertaining—as prescribed in the Provisional Categories.

#### Production of Radio and Television Programs

On July 19, 2004, the SARFT issued the Regulations on the Administration of Production of Radio and Television Programs, or the Radio and TV Programs Regulations, which become effective on August 20, 2004 and amended on August 28, 2015. The Radio and TV Programs Regulations require any entity engaging in the production of radio and television programs to obtain a license for such businesses from the SARFT or its provincial branches. Entities with the License for Production and Operation of Radio and TV Programs must conduct their business operations strictly in compliance with the approved scope of production and operations and these entities (except radio and TV stations) must not produce radio and TV programs regarding current political news or similar subjects.

Guangzhou Huaduo holds an effective License for Production and Operation of Radio and TV Programs, covering the production, reproduction and publication of broadcasting plays, TV dramas, cartoons (excluding production), special subjects, special columns (excluding current political news category) and entertainment programs.

Regulation on Advertising Business and Conditions on Foreign Investment

The SAMR is the primary governmental authority regulating advertising activities in China. Regulations that apply to advertising business primarily include:

Advertisement Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress on October 27, 1994 and amended on April 24, 2015 which became effective since September 1, 2015, and on October 26, 2018, respectively;

Administrative Regulations for Advertising, promulgated by the State Council on October 26, 1987 and effective since December 1, 1987.

According to the above regulations, companies that engage in advertising activities must each obtain, from the SAMR or its local branches, a business license which specifically includes operating an advertising business in its business scope. An enterprise engaging in advertising business within the specifications in its business scope does not need to apply for an advertising operation license, provided that such enterprise is not a radio station, television station, newspaper or magazine publisher or any other entity otherwise specified in the relevant laws or administrative regulations. Enterprises conducting advertising activities without such license may be subject to penalties, including fines, confiscation of advertising income and orders to cease advertising operations. The business license of an advertising company is valid for the duration of its existence, unless the license is suspended or revoked due to a violation of any relevant laws or regulations.

PRC advertising laws and regulations set certain content requirements for advertisements in China, including, among other things, prohibitions on false or misleading content, superlative wording, socially destabilizing content or content involving obscenities, superstition, violence, discrimination or infringement of the public interest. Advertisers, advertising agencies, and advertising distributors are required to ensure that the content of the advertisements they prepare or distribute is true and in complete compliance with applicable laws. In providing advertising services, advertising operators and advertising distributors must review the supporting documents provided by advertisers for advertisements and verify that the content of the advertisements complies with applicable PRC laws and regulations. Prior to distributing advertisements that are subject to government censorship and approval, advertising distributors are obligated to verify that such censorship has been performed and approval has been obtained. 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. Where serious violations occur, the SAMR or its local branches may revoke such offenders' licenses or permits for their advertising business operations.

On July 4, 2016, the SAIC issued the Interim Measures for the Administration of Internet Advertising, or the Internet Advertising Measures, which become effective on September 1, 2016. According to the Internet Advertising Measures, Internet Advertising refers to the commercial advertising for direct or indirect marketing goods or services in the form of text, image, audio, video, or others means through websites, webpages, Internet applications, or other Internet media. The Internet Advertising Measures specifically sets out the following requirements: (a) advertisements must be identifiable and marked with the word "advertisement" enabling consumers to distinguish them from non-advertisement information; (b) sponsored search results must be clearly distinguished from organic search results; (c) it is forbidden to send advertisements or advertisement links by email without the recipient's permission or induce Internet users to click on an advertisement in a deceptive manner; and (d) Internet information service providers who do not participate in the business activities of Internet advertising are required to stop publishing illegal advertisement

only if they know or should have known the advertising is illegal.

#### Regulations on Internet Financing Business

We currently offer micro-credit internet financing service. The CBRC and PBOC jointly promulgated the Guidance on the Pilot Programs for Micro-credit Company, or the Micro-credit Company Guidance, on May 4, 2008. According to the Micro-credit Company Guidance, the principal funding sources of the micro-credit company shall either be the capital paid by shareholders, donated capital or the capital borrowed from at most two banking financial institutions. Within the scope prescribed by laws and regulations, the principal amount of the capital borrowed by a micro-credit company from banking financial institutions shall not exceed 50% of its net capital. The aggregate principal amount of loans provided by the micro-credit company to one single borrower shall not exceed 5% of the net capital of the micro-credit company.

The interest rate and term of the capital borrowed by a micro-credit company shall be mutually agreed by the micro-credit company and the banking financial institutions involved through negotiation, and the interest rate shall take the Shanghai inter-bank offered rate as the benchmark, ranging from 0.9 time of the benchmark of the PBOC corresponding interest rate to the upper limit prescribed by the judicial departments. The specific floating range thereof shall be independently determined according to the market-oriented principle.

Pursuant to the Micro-credit Company Guidance, the investors of the micro-credit companies (including the natural persons, legal entities and social organizations) and the natural persons to serve as the directors, supervisors and the senior management of the micro-credit companies cannot have any criminal record or bad credit record. Micro-credit companies shall also be subject to public supervision and shall not illegally raise funds in any form.

In addition to the Micro-credit Company Guidance, many provincial governments, including the Guangdong Province, promulgated local implementation rules on the administration of micro-credit companies. On January 23, 2009, Guangdong Financial Affairs Office issued the Administrative Rules of Guangdong Province on Micro-credit Companies (Trial), or the Guangdong Micro-credit Companies Rules. Pursuant to the Guangdong Micro-credit Companies Rules, to apply for establishment of micro-credit companies, the major promoter (or the largest shareholders) shall meet the following requirements: (a) it shall be a local company with standardized management, good credit record and strong capital, and the company's registered address and domicile shall be in the pilot country-level region or any of its branches is located in the pilot county-level region if the registered address and the domicile of its headquarter is located in the pilot prefecture-level region; (b) it shall have sound corporate governance; and (c) its net assets in the fiscal year prior to the application for establishment shall be no less than RMB50.0 million (no less than RMB20.0 million in the mountainous regions); the asset-liability ratio shall be no more than 70%; it has continuously operated with profits for the latest three consecutive years and the aggregate profits is more than RMB10.0 million (no less than RMB5.0 million in the mountainous regions), and the latest year's net profit shall be more than RMB3.0 million (no less than RMB1.5 million in the mountainous regions).

Pursuant to the Guangdong Micro-credit Companies Rules, a micro-credit company shall not operate the following business: (a) deposits from the public illegally or in disguised form, organize or raise funds in any form; (b) provide loans to shareholders, directors, general managers or related parties of the company; (c) provide guarantee to financial institutions in banking industry; (d) operate business in cross-region; and (e) other business without approval. If a micro-credit company operates business without approval by relevant governments, it shall be punished as unlicensed business operations. And if it engages in illegally raising-funds activities, it will be punished in accordance with relevant laws and regulations.

Intellectual Property Rights

Software Registration



The State Council and the NCA have promulgated various rules and regulations relating to protection of software in China. According to these rules and regulations, software owners, licensees and transferees may register their rights in software with the SCB 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 to be entitled to better protections. For the number of software programs for which we had registered rights as of December 31, 2018, see “Item 4. Information on the Company—B. Business Overview—Intellectual Property.”

## Patents

The National People’s Congress adopted the Patent Law of the People’s Republic of China 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 State Intellectual Property Office 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. For the number of patents we had and the number of patent applications we made as of December 31, 2018, see “Item 4. Information on the Company—B. Business Overview—Intellectual Property.”

## Copyright Law

The Copyright Law of the People's Republic of China, promulgated in 1990 and amended in 2001 and 2010, or the Copyright Law, and its related implementing regulations, promulgated on May 30, 1991, and amended on August 2, 2002, January 8, 2011 and on January 30, 2013, respectively, are the principal laws and regulations governing the copyright related matters. The amended Copyright law covers internet activities, products disseminated over the internet and software products, among the subjects entitled to copyright protections. Registration of copyright is voluntary, and is administrated by the China Copyright Protection Center.

To further clarify some key internet copyright issues, on December 17, 2012, the PRC Supreme People's Court promulgated the Regulation on Several Issues Concerning Applicable Laws on Trial of Civil Disputes over the Infringement of Information Network Transmission Right, or the 2013 Regulation. The 2013 Regulation took effect on January 1, 2013, and replaced the Interpretations on Some Issues Concerning Applicable Laws for Trial of Disputes over Internet Copyright that was initially adopted in 2000 and subsequently amended in 2004 and 2006. Under the 2013 Regulation, where an internet information service provider works in cooperation with others to jointly provide works, performances, audio and video products of which the right holders have information network transmission right, such behavior will constitute joint infringement of third parties' information network transmission right, and the PRC court shall order such internet information service provider to assume joint liability for such infringement. If an internet information service provider can prove that it has only provided network services through automatic access, automatic transmission, data storage space, search functions, links, document sharing technology, etc., and thereby argues that it has not been involved in any alleged joint infringement, the PRC court shall find in favor of such internet information service provider. If an internet information service provider fails to delete, block, disconnect or take other necessary measures, or if it provides technological support or other aid when it knows or should have known of the network user's infringement on the information network transmission right, the PRC court shall find that such aid constitutes contributory infringement. The PRC court shall determine whether an internet information service provider is liable for abetting or contributory infringement according to its findings on the degree of fault of the internet information service provider. The fault of the internet information service provider is determined according to various criteria, including situations where such provider knew or should have known of the network user's infringement against third party's information network transmission right. If an internet information service provider can prove it has adopted fairly reasonable and effective technological measures, and yet still finds it difficult to discover infringement against information network transmission conducted by the network user, the PRC court shall find such provider to be not at fault. Where an internet information service provider promotes popular video and films through setting up a list, directory, index, descriptive paragraph, briefing or other means of recommendation, and the public can download, browse or acquire them through other methods directly from the internet information service provider's webpage, the PRC court may find that such provider knew of the network user's infringement on the information network transmission right of others.

Under the Copyright Law and its implementation rules, anyone infringing upon the copyrights of others is subject to various civil liabilities, which include stopping the infringement, eliminating the damages, apologizing to the copyright owners and compensating the copyright owners for such owners' actual and other losses resulting from such infringement. If the actual loss of the copyright owner is difficult to calculate, the income received by the offender as a

result of the copyright infringement shall be deemed to be the actual loss; or if such income is in itself difficult to calculate, the relevant PRC court may decide the amount of the actual loss up to RMB500,000 for each infringement.

To address the problem of copyright infringement related to content posted or transmitted on the internet, the PRC National Copyright Administration and MIIT jointly promulgated the Measures for Administrative Protection of Copyright Related to Internet on April 29, 2005. These measures, which became effective on May 30, 2005, apply to acts of automatically providing services such as uploading, storing, linking or searching works, audio or video products, or other contents through the internet based on the instructions of internet users who publish contents on the internet, or the Internet Content Providers, without editing, amending or selecting any stored or transmitted content. When imposing administrative penalties upon the act which infringes upon any users' right of communication through information networks, the Measures for Imposing Copyright Administrative Penalties, promulgated in 2009, shall be applied.

Where a copyright holder finds that certain internet content infringes upon its copyright and sends a notice to the relevant internet information service operator, the relevant internet information service operator is required to (i) immediately take measures to remove the relevant contents, and (ii) retain all infringement notices for six months and to record the content, display time and IP addresses or the domain names related to the infringement for 60 days. After any content is removed by an internet information service operator according to the notice of a copyright holder, the content provider may deliver a counter-notice to both the internet information service operator and the copyright holder, stating that the removed content does not infringe upon the copyright of other parties. After the delivery of such counter-notice, the internet information service operator may immediately reinstate the removed contents and shall not bear administrative legal liability for such reinstatement.

An internet information service operator may be subject to cease-and-desist orders and other administrative penalties such as confiscation of illegal income and fines, if it is clearly aware of a copyright infringement through the internet or, although not aware of such infringement, it fails to take measures to remove relevant content upon receipt of the copyright owner's notice of infringement and, as a result, damages public interests. Where there is no evidence to indicate that an internet information service operator is clearly aware of the existence of copyright infringement, or the internet information service operator has taken measures to remove relevant contents upon receipt of the copyright owner's notice, the internet information service provider shall not bear the relevant administrative legal liabilities.

On May 18, 2006, the State Council issued the Protection of the Right of Communication through Information Network, which took effect on July 1, 2006 and amended on January 30, 2013. Under this regulation, an internet information service provider may be exempt from indemnification liabilities under the following circumstances:

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

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

any internet information service provider that provides its users with information memory space for such users to provide the works, performances and audio-visual products to the general public via an informational network are not

required to assume the indemnification liabilities if (a) it clearly indicates that the information memory space is provided to the users and publicizes its own name, contact person and web address; (b) it has not altered the works, performance and audio-visual products that are provided by the users; (c) it is not aware of or has no reason to know that the works, performances and audio-visual products provided by the users infringe upon the copyrights of others; (d) it has not directly derived any economic benefit from the providing of the works, performances and audio-visual products by its users; and (e) after receiving a notice from the copyright holder, it promptly deletes the allegedly infringing works, performances and audio-visual products pursuant to the relevant regulation.

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

We have adopted measures to mitigate copyright infringement risks. For instance, we have established a routine reporting and registration system that is updated on a monthly basis, and we require performers, channel owners and users to acknowledge and agree that (a) they would not perform or upload copyrighted content without proper authorization and (b) that they will indemnify us for any relevant copyright infringement claims in relation to their activities on our platforms.

If, despite these precautions, such procedures fail to effectively prevent unauthorized posting or use of copyrighted content or the infringement of other third party rights on our platforms, and the PRC courts find that certain safe harbor exemptions under PRC laws are not applicable to us because, for instance, a court finds that we knew or should have known about such infringement or that we have directly derived economic benefits from allowing such infringement activities on our platforms, we may be held jointly and severally liable with the performers, channel owners or other infringement parties in lawsuits initiated by the relevant third party copyright holders or authorized users. Moreover, we may be held directly liable for the infringement activities of such performers or channel owners on our platforms, if the PRC courts view them as our employees or agents, deem us to have control over their activities on our platforms and the content they upload or otherwise make available on our platforms, and determine that we have knowingly uploaded such infringing contents on our platforms. See “D. Risk Factors—Risks Related to Our Business—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 relevant content from our website or seeking license arrangements which may not be available on commercially reasonable terms.”

## Domain Name

In September 2002, the CNNIC issued the Implementing Rules for Domain Name Registration setting forth detailed rules for registration of domain names, which was amended on May 29, 2012. On September 1, 2014, the CNNIC issued the Measures on Domain Name Dispute Resolution and relevant implementing rules, pursuant to which the CNNIC can authorize a domain name dispute resolution institution to decide disputes. The Measures for Administration of Domain Names, or the Domain Name Measures, was promulgated by the MIIT on August 24, 2017 and became effective on November 1, 2017. The MIIT is the major regulatory authority responsible for the administration of the PRC Internet domain names. The registration of domain names in PRC is on a “first-apply-first-registration” basis. A domain name applicant will become the domain name holder upon the

completion of the application procedure. For the number of domain names we registered as of December 31, 2018, see “Item 4. Information on the Company—B. Business Overview—Intellectual Property.”

## 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 SAIC (currently known as the Trademark Office of 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. For the number of trademarks we had and trademark applications we had made as of December 31, 2018, see “Item 4. Information on the Company—B. Business Overview—Intellectual Property.”

## Internet Infringement

On December 26, 2009, the Standing Committee of National People's Congress promulgated the Tort Law of the People's Republic of China, or the Tort Law, which became effective on July 1, 2010. Under the 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 Tort Law, civil rights and interests include the personal rights and 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.

## Regulation of Internet Content

The PRC government has promulgated measures relating to internet content through a number of governmental agencies, including the MIIT, the MOC and the GAPP. These measures specifically prohibit internet activities, such as the operation of online games, that result in the publication of any content which is found to contain, among others, propagate obscenity, gambling or violence, instigate crimes, undermine public morality or the cultural traditions of the PRC, or compromise state security or secrets. If an ICP license holder violates these measures, its ICP license may be revoked and its websites may be shut down by the relevant government agencies.

Moreover, pursuant to the Notice on Enhancing the Content Review Work of Online Game Products promulgated by the MOC in 2004, imported online games are subject to content review by the MOC prior to being offered to Chinese internet users.

## Information Security and Censorship

Internet content in China is regulated and restricted from a state security standpoint. Internet companies in China are required to complete security filing procedures and regularly update information security and censorship systems for their websites with local public security bureau. The PRC Law on Preservation of State Secrets, which became effective on October 1, 2010 requires an internet information services providers to discontinue disseminating any



information that may be deemed to be leaked state secrets and to report such incidents in a timely manner to the state security and public security authorities. Failure to do so in a timely and adequate manner may subject the internet information services providers to liability and certain penalties given by the Ministry of State Security, the Ministry of Public Security and/or the MIIT or their respective local branches.

On December 13, 2005, the Ministry of Public Security promulgated Provisions on Technological Measures for Internet Security Protection, or the Internet Protection Measures, which took effect on March 1, 2006. The Internet Protection Measures requires all internet information services operators to take proper measures including anti-virus, data back-up and other related measures, and keep records of certain information about their users (including user registration information, log-in and log-out time, IP address, content and time of posts by users) for at least 60 days and submit the above information as required by laws and regulations.

The National People's Congress, China's national legislative body, enacted the Decisions on the Maintenance of Internet Security on December 28, 2000 and subsequently amended on August 27, 2009, that may subject persons to criminal liabilities in China for any attempt to: (i) gain improper entry to a computer or system of strategic importance; (ii) disseminate politically disruptive information; (iii) leak state secrets; (iv) spread false commercial information or (v) infringe upon intellectual property rights. The Internet Security Law of the People's Republic of China, issued by the Standing Committee of the National People's Congress on November 7, 2016 and became effective on June 1, 2017, further emphasizes the implementation of classified protection with respect to Internet security. According to the Internet Security Law, Internet operators shall fulfill relevant mandatory security protection obligations.

The Administration Measures on the Security Protection of Computer Information Network with Internationally Connections, which was issued by the Ministry of Public Security in December 1997, and amended on January 8, 2011, prohibits using the internet in ways which, among others, result in a leakage of state secrets or a spread of socially destabilizing content. The Ministry of Public Security has supervision and inspection powers in this regard, and relevant local security bureaus may also have jurisdiction. If an ICP license holder violates these measures, the PRC government may revoke its ICP license and shut down its websites.

On December 28, 2012, the Standing Committee of the National People's Congress reiterated relevant rules on the protection of internet information by issuing the Decision on Strengthening the Protection of Network Information, or the 2012 Decision. The 2012 Decision distinctly clarified certain relevant obligations of the internet information service provider. For example, the 2012 Decision specifies that the internet information service provider should take relevant technical measures and other necessary actions to prevent the leakage, damage or loss of each user's personal information collected in the internet information service provider's operation activities, and shall take remedial measures when the leakage, damage or loss of the citizen's personal information occurs or may possibly occur. Once it discovers any transmission or disclosure of information prohibited by the relevant laws and regulations, the internet information service provider shall stop transmission of such information, take measures such as elimination, keeping relevant record, and reporting to relevant authorities.

To comply with the above laws and regulations, we have established an internet information security department to implement measures on information filtering. For example, we have adopted a voice monitor system, and installed on our platforms various alerts on sensitive words or abnormal activities of users, channels or groups. We also have a dedicated team that maintains 24-hour surveillance on the information posted on our platforms, with different categories for monitoring purposes, according to subject and content. We have also established and follow a strict review process and storage system of relevant records which, in combination with various information security measures, have effectively prevented the public dissemination of statutory prohibited information through our websites in the past. We intend to continue to further update our measurements and system and work closely with relevant authorities to avoid any violation of relevant laws and regulations in the future.

Pursuant to the Decision on Strengthening the Protection of Online Information issued by the Standing Committee of the 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 and became effective on September 1, 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. An Internet information service provider must also keep such information strictly confidential, and is further prohibited from divulging, tampering or destroying any such information, or selling or providing such information to other parties. An Internet information service provider is required to take technical and other measures to prevent the collected personal information from any unauthorized disclosure, damage or loss. Any violation of these laws and regulations may subject the Internet information 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 Interpretation of the Supreme People's Court and the Supreme People's Procuratorate on Several Issues regarding Legal Application in Criminal Cases Infringing upon the Personal Information of Citizens, which was issued on May 8, 2017 and took effect on June 1, 2017, the following activities may constitute the crime of infringing upon a citizen's personal information: (i) providing a citizen's personal information to specified persons or releasing a citizen's personal information online or through other methods in violation of relevant national provisions; (ii) providing legitimately collected information relating to a citizen to others without such citizen's consent (unless the information is processed, not traceable to a specific person and not recoverable); (iii) collecting a citizen's personal information in violation of applicable rules and regulations when performing a duty or providing services; or (iv) collecting a citizen's personal information by purchasing, accepting or exchanging such information in violation of applicable rules and regulations.

In addition, according to the General Provisions of the Civil Law of the People's Republic of China promulgated on March 15, 2017, which became effective on October 1, 2017, the personal information of a natural person shall be protected. Any organization or individual needing to obtain the personal information of others shall legally obtain and ensure the security of such information, and shall not illegally collect, use, process, or transmit the personal information of other persons, nor illegally buy, sell, provide, or publish the personal information of other persons.

We require our users to accept a user agreement whereby they agree to provide certain personal information to us. PRC laws and regulations prohibit internet content providers from disclosing any information transmitted by users through their networks to any third parties without their authorization unless otherwise permitted by law. If an internet content provider violates these regulations, the MIIT or its local bureaus may impose penalties and the internet content provider may be liable for damages caused to its users.

#### Regulation of Foreign Currency Exchange and Dividend Distribution

**Foreign Currency Exchange.** The core regulations governing foreign currency exchange in China are the Foreign Exchange Administration Regulations, as amended in August 2008, or the FEA Regulations. Under the FEA Regulations, the Renminbi is freely convertible for current account items, including the distribution of dividends, interest payments, trade- and service-related foreign exchange transactions, but not for capital account items, such as direct investments, loans, repatriation of investments and investments in securities outside of China, unless the prior approval of the SAFE is obtained and prior registration with the SAFE is made. On August 29, 2008, SAFE promulgated Circular 142 to regulate the conversion of foreign currency into Renminbi by a foreign-invested enterprise by restricting the ways in which the converted Renminbi may be used. Circular 142 stipulates that the registered capital of a foreign-invested enterprise that has been settled in Renminbi converted from foreign currencies may only be used for purposes within the business scope approved by the applicable governmental authority and cannot be used for equity investments within the PRC. Meanwhile, the SAFE strengthened its oversight of the flow and use of the registered capital of a foreign-invested enterprise settled in Renminbi converted from foreign currencies. The use of such Renminbi capital may not be changed without the SAFE's approval, and may not in any case be repayment of Renminbi loans if the proceeds of such loans have not been used.

Since SAFE Circular 142 has been in place for more than five years, in 2014, SAFE decided to further reform the foreign exchange administration system in order to satisfy and facilitate the business and capital operations of foreign invested enterprises, and issued the Circular on the Relevant Issues Concerning the Launch of Reforming Trial of the Administration Model of the Settlement of Foreign Currency Capital of Foreign-Invested Enterprises in Certain Areas on July 4, 2014, or SAFE Circular 36. SAFE Circular 36 suspends the application of SAFE Circular 142 in certain areas and allows a foreign-invested enterprise registered in such areas to use the RMB capital converted from foreign currency registered capital for equity investments within the scope of business, which will be regarded as the reinvestment of foreign-invested enterprise. On March 30, 2015, SAFE issued the Circular on the Reforming of the Management Method of the Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular 19, which took effect on June 1, 2015, and replaced SAFE Circular 142 and SAFE Circular 36. Under SAFE

Circular 19, a foreign-invested enterprise, within the scope of business, may also choose to convert its registered capital from foreign currency to RMB on a discretionary basis, and the RMB capital so converted can be used for equity investments within PRC, which will be regarded as the reinvestment of foreign-invested enterprise.

SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, or Circular 16, effective on June 9, 2016. Circular 16 provides that discretionary foreign exchange settlement applies to foreign exchange capital, foreign debt offering proceeds and remitted foreign listing proceeds, and the corresponding RMB capital converted from foreign exchange are not restricted from extending loans to related parties or repaying the inter-company loans (including advances by third parties).

On January 26, 2017, SAFE promulgated the Circular on Further Improving Reform of Foreign Exchange Administration and Optimizing Genuineness and Compliance Verification, or Circular 3, which stipulates several capital control measures with respect to the outbound remittance of profit from domestic entities to offshore entities, including (i) under the principle of genuine transaction, banks shall check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities shall hold income to account for previous years' losses before remitting the profits. Moreover, pursuant to Circular 3, domestic entities shall make detailed explanations of the sources of capital and utilization arrangements, and provide board resolutions, contracts and other proof when completing the registration procedures in connection with an outbound investment.

**Dividend Distribution.** The Foreign Investment Enterprise Law, promulgated in 1986 and amended in 2000 and 2016, and the Administrative Rules under the Foreign Investment Enterprise Law, promulgated in 1990 and amended in 2001 and 2014, are the key regulations governing distribution of dividends of foreign-invested enterprises.

Under these regulations, a wholly foreign-invested enterprise in China, or a WFOE, may pay dividends only out of its accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, a WFOE is required to allocate at least 10% of its accumulated profits each year, if any, to statutory reserve funds unless its reserves have reached 50% of the registered capital of the enterprises. These reserves are not distributable as cash dividends. The proportional ratio for withdrawal of rewards and welfare funds for employees shall be determined at the discretion of the WFOE. Profits of a WFOE shall not be distributed before the losses thereof before the previous accounting years have been made up. Any undistributed profit for the previous accounting years may be distributed together with the distributable profit for the current accounting year.

**Circular 37.** Pursuant to SAFE's Notice on Relevant Issues Relating to Domestic Residents' Investment and Financing and Round-Trip Investment through Special Purpose Vehicles, or SAFE Circular 37, issued and effective on July 4, 2014, and its appendixes, PRC residents, including PRC institutions and individuals, must 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 interest in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a "special purpose vehicle." SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. SAFE promulgated the Notice on Further Simplifying and Improving the Administration of the Foreign Exchange Concerning Direct Investment in February 2015, which took effect on June 1, 2015, which amended SAFE Circular 37 requiring PRC residents or entities to register with qualified banks rather than SAFE or its local branch in connection with their establishment or control of an offshore entity established for the purpose of overseas investment or financing.

In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from making distributions of

profit to the offshore parent and from carrying out subsequent cross-border foreign exchange activities and the special purpose vehicle may be restricted in their ability to contribute additional capital into its PRC subsidiary. Further, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for foreign exchange evasion. These regulations apply to our direct and indirect shareholders who are PRC residents and may apply to any offshore acquisitions and share transfer that we make in the future if our shares are issued to PRC residents. See “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—PRC regulations relating to offshore investment activities by PRC residents may limit our PRC subsidiaries’ ability to increase their registered capital or distribute profits to us or otherwise expose us to liability and penalties under PRC law.”

We have completed the foreign exchange registration of PRC resident shareholders of Guangzhou Huaduo, as required by SAFE Circular 37, for our financings that were completed before the end of 2010. The SAFE Circular 37 registration in relation to the issuance of common shares to Tiger Global Six YY Holdings was completed on February 6, 2012. Our PRC resident shareholders further updated their SAFE Circular 37 registrations in March 2015 to reflect shareholding changes in our company resulting from our initial public offering.

**Stock Option Rules.** The Administration Measures on Individual Foreign Exchange Control were promulgated by the PBOC on December 25, 2006, and their Implementation Rules, issued by the SAFE on January 5, 2007, became effective on February 1, 2007 and amended on May 29, 2016. 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, restricted shares or restricted share units, or PRC optionees, are subject to the Stock Option Rules. 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 “D. Risk Factors—Risks Related to Doing Business in China—PRC regulations relating to offshore investment activities by PRC residents may limit our PRC subsidiaries’ ability to increase their registered capital or distribute profits to us or otherwise expose us to liability and penalties under PRC law.”

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 subsidiaries 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.



## Regulation on Tax

### PRC Enterprise Income Tax

The PRC enterprise income tax is calculated based on the taxable income determined under the applicable the PRC Enterprise Income Tax Law, or the New EIT Law and its implementation rules. On March 16, 2007, the National People's Congress of China enacted the New EIT Law, which became effective on January 1, 2008 and subsequently amended on February 24, 2017 and on December 29, 2018. On December 6, 2007, the State Council promulgated the implementation rules to the New EIT Law, which also became effective on January 1, 2008. The New 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 New 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 New 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 New 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 main 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 Notice Regarding the Determination of Chinese-Controlled Overseas 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 No. 45, both issued by the SAT, which provide main 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 is in the PRC;

- 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;

- 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, Bulletin No. 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 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.

Although we do not believe that our company should be treated as a PRC resident enterprise for PRC tax purposes, substantial uncertainty exists as to whether we will be deemed to be such by the relevant authorities. 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. See “D. Risk Factors—Risks Related to Doing Business in China—Under the PRC enterprise income tax law, we may be classified as a PRC “resident enterprise,” which could result in unfavorable tax consequences to us and our shareholders and have a material adverse effect on our results of operations and the value of your investment.”

In addition, although the New 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 subsidiaries are eligible for exemption.

According to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises issued by the PRC State Administration of Taxation on December 10, 2009, with retroactive effect from January 1, 2008, or SAT Circular 698, and the Notice on Several Issues Concerning Enterprise Income Tax for Indirect Share Transfer by Non-PRC Resident Enterprises, issued by the PRC State Administration of Taxation on February 3, 2015, or SAT Circular 7, an “indirect transfer” of assets of a PRC resident enterprise, including equity interests in a PRC resident enterprise, by non-PRC resident enterprises may be re-characterized and treated as a direct transfer of PRC taxable properties, if such transaction arrangement lacks of reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC enterprise income tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax, and tax filing or withholding obligations may be triggered, depending on the nature of the PRC taxable properties being transferred. According to SAT Circular 7, “PRC taxable properties” include assets of a PRC establishment or place of business, real properties in the PRC, and equity investments in PRC resident enterprises, in respect of which gains from their transfer by a direct holder, being a non-PRC resident enterprise, would be subject to PRC enterprise income taxes. When determining if there is a “reasonable commercial purpose” of the transaction arrangement, features to be taken into consideration include: whether the main value of the equity interest of the relevant offshore enterprise derives from PRC taxable properties; whether the assets of the relevant offshore enterprise mainly consists of direct or indirect investment in China or if its income mainly derives from China; whether the offshore enterprise and its subsidiaries directly or indirectly holding PRC taxable properties have real commercial nature which is evidenced by their actual function and risk exposure; the duration of existence of the business model and organizational structure; the replicability of the transaction by direct transfer of PRC taxable properties; and the tax situation of such indirect transfer and applicable tax treaties or similar arrangements. In respect of an indirect offshore transfer of assets of a PRC establishment or place of business of a foreign enterprise, the resulting gain is to be included with the annual enterprise filing of the PRC establishment or place of business being transferred, and would consequently be subject to PRC enterprise income tax at a rate of 25%. Where the underlying transfer relates to PRC real properties or to equity investments in a PRC resident enterprise, which is not related to a PRC establishment or place of business of a non-resident enterprise, a PRC enterprise income tax at 10% would apply, subject to available preferential tax treatment under applicable tax treaties or similar arrangements, and the party who is obligated to make the transfer payments has the withholding obligation. Where the payor fails to withhold any or sufficient tax, the transferor shall declare and pay such tax to the competent tax authority by itself within the statutory time limit. Late payment of applicable tax will subject the transferor to default interest. Currently, neither SAT Circular 698 nor SAT Circular 7 applies to transactions of sale of shares by investors through a public stock exchange where such shares were acquired from a transaction through a public stock exchange. In October 2017, SAT issued the Announcement on Issues Relating to Withholding at Source of Income Tax of Non-resident Enterprises, or SAT Circular 37, effective December 2017, superseded the Non-resident Enterprises Measures and SAT Circular 698 as a whole and partially amended some provisions in SAT Circular 7. SAT Circular 37 purports to clarify certain issues by providing the definition of equity transfer income and tax basis, the foreign exchange rate to be used in the calculation of withholding amount, and the date of occurrence of the withholding obligation. Specifically, SAT Circular 37 provides that where the transfer income subject to withholding at source is derived by a non-PRC resident enterprise in instalments, the instalments may first be treated as recovery of costs of previous investments. Upon recovery of all costs, the tax amount to be withheld must then be computed and withheld.

We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing and withholding or tax payment obligations on the transferors and transferees, while our PRC subsidiaries may be requested to assist in the filing. Any PRC tax imposed on a transfer of our shares or any adjustment of such gains would cause us to incur additional costs and may have a negative impact on the value of your investment in us.

## Value Added Tax

On January 1, 2012, the State Administration of Taxation officially launched a pilot VAT reform program (“Pilot Program”), applicable to businesses in selected industries. Taxable income derived from the businesses in the Pilot Program is subject to VAT in lieu of business tax. The Pilot Program initially applied only to transportation industry and “modern service industries” (“Pilot Industries”) in Shanghai in 2011 and expanded to eight trial regions (including Beijing and Guangdong province) and nationwide progressively from August to December 2012. 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, 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 Beijing and Guangdong province, Beijing launched the same Pilot Program on September 1, 2012, and Guangdong province launched it on November 1, 2012. In addition, the Supplementary Notice on Several Tax Policies in Relation to the Scope of VAT-able and Other Matters in the Transportation and Selected Modern Service Sectors under the VAT Reform Pilot Program, Caishui [2012] No. 86, or Circular 86, which was issued in December 2012, further defines the application scope of relevant industries and specifies that, starting from December 1, 2012, website operation services provided by website owners for non-self-owned online games are taxed as “Information System Services,” and therefore would also be subject to the VAT tax rate as 6%. Going forward, in Guangdong province, we will pay the pilot VAT instead of business taxes for our advertising activities, operating services for online games not owned by us and for any other parts of our business that are deemed by the competent state tax authorities to be in the scope of the Pilot Industries.

On December 12, 2013, the Ministry of Finance and the SAT issued the Circular on Including the Railway Transportation and Postal Industries in the Pilot Program of Replacing Business Tax with Value-Added Tax, or the Pilot Collection Circular. The scope of certain modern services industries under the Pilot Collection Circular is expanded to cover research and development and technical services, cultural and creative services, and radio, film and television services. In addition, according to the Notice on Including the Telecommunications Industry in the Pilot Program of Levying Value-added Tax in Lieu of Business Tax, which became effective on June 1, 2014, the scope of certain modern services industries under the Pilot Collection Circular is further expanded to cover the telecommunications industry. On March 23, 2016, the Ministry of Finance and the SAT issued the Notice of Taxation on Implementing the Pilot Program of Replacing Business Tax with Value-Added Tax in an All-round Manner, pursuant to which the pilot plan for the replacement of business tax with VAT was expanded to all regions and industries as of May 1, 2016. Live streaming revenues and membership revenues became subject to VAT from June 1, 2014, at a rate of 6%. Online games revenues and other revenues, are subject to VAT for the years ended December 31, 2016, 2017 and 2018.

#### Cultural Development Fee

According to applicable PRC tax regulations or rules, advertising service providers are generally required to pay a cultural development fee at the rate of 3% on the revenues (a) which are generated from providing advertising services and (b) which are also subject to VAT after the VAT reform program.

#### Dividends Withholding Tax

Under the Old EIT Law that was effective prior to January 1, 2008, dividends paid to foreign investors by foreign-invested enterprises, such as dividends paid to us by Beijing Huanju Shidai or Guangzhou Huanju Shidai, our PRC subsidiaries, were exempt from PRC withholding tax. We are a Cayman Islands holding company and substantially all of our income may come from dividends we receive from our subsidiaries located in the PRC. Pursuant to the New EIT Law and its implementation rules, dividends generated after January 1, 2008 and distributed to us by our PRC subsidiaries are subject to withholding tax at a rate of 10%, 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 holding enterprises are incorporated.

As uncertainties remain regarding the interpretation and implementation of the New 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 “D. Risk Factors—Risks Related to Doing Business in China—Under the PRC enterprise income tax law, we may be classified as a PRC “resident enterprise,” which could result in unfavorable tax consequences to us and our shareholders and have a material adverse effect on our results of operations and the value of your investment.”

## Labor Laws and Social Insurance

The principle laws that govern employment include:

Labor Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress on July 5, 1994, effective since January 1, 1995 and amended on August 27, 2009 and on December 29, 2018, respectively; and

Labor Contract Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress on June 29, 2007 and amended on December 28, 2012.

According to the Labor Law and 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 sanitation, strictly comply with state rules and standards and provide employees with workplace safety training. Violations of the Labor Contract Law and the Labor Law may result in the imposition of fines and other administrative penalties. For serious violations, criminal liability may arise.

In addition, 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. An enterprise must provide social insurance by processing social insurance registration with local social insurance agencies, and shall pay or withhold relevant social insurance premiums for or on behalf of employees. The Law on Social Insurance of the PRC, which was promulgated in October 28, 2010, effectively July 1, 2011 and amended on December 29, 2018, has consolidated pertinent provisions for basic pension insurance, unemployment insurance, maternity insurance, workplace injury insurance and basic medical insurance and has elaborated in detail the legal obligations and liabilities of employers who do not comply with relevant laws and regulations on social insurance.

We have caused all of our full-time employees to enter into written labor contracts with us and have provided and currently provide our employees with the proper welfare and employment benefits.

#### New M&A Regulations and Overseas Listings

On August 8, 2006, six PRC governmental agencies jointly promulgated the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the New M&A Rule, which became effective on September 8, 2006, and amended on June 22, 2009. The New M&A Rule requires offshore special purpose vehicles formed to pursue overseas listing of equity interests in PRC companies and controlled directly or indirectly by PRC companies or individuals to obtain the approval of the Chinese Securities Regulatory Commission, or the CSRC, prior to the listing and trading of such special purpose vehicle's securities on any stock exchange overseas.

The application of the M&A Rules remains unclear. Based on the understanding on the current PRC laws, rules and regulations and the M&A Rules of our PRC Legal Counsel, Fangda Partners, prior approval from the CSRC is not required under the M&A Rules for the listing and trading of our ADSs on the Nasdaq Global Select Market because (a) our PRC subsidiaries, Beijing Huanju Shidai and Guangzhou Huanju Shidai, are foreign-invested enterprises established by foreign enterprises, (b) we did not acquire any equity interest or assets of a PRC domestic company owned by PRC companies or individuals as defined under the M&A Rules, and (c) there is no provision that clearly classifies the contractual arrangements among our PRC subsidiary, Beijing Huanju Shidai, our PRC consolidated affiliated entities and their shareholders as a transaction regulated by the M&A Rules. However, as there has been no official interpretation or clarification of the M&A Rules, we are also advised by our PRC legal counsel that there is



uncertainty as to how this regulation will be interpreted or implemented.

Considering the uncertainties that exist with respect to the issuance of new laws, regulations or interpretation and implementing rules, the opinion of Fangda Partners, summarized above, is subject to change. If the CSRC or another PRC regulatory agency subsequently determines that prior CSRC approval was required, we may face regulatory actions or other sanctions from the CSRC or other PRC regulatory agencies.

### ***Overseas Regulations***

As our globalized operations evolve, we may, from time to time, be subject to overseas regulations. As the live streaming and short-form video businesses are still at an early stage of development in the jurisdictions where we have presence, new laws and regulations may be adopted from time to time to require new licenses and permits in addition to those we currently have. This section sets forth the most important laws and regulations that govern our current business activities in overseas jurisdictions, including European Union, India and Singapore.

## ***Regulations on Data Privacy and Protection***

### *General Data Protection Regulation – European Union*

The General Data Protection Regulation, or GDPR, regulates the collection and use of personal data in the EU. The GDPR covers any business, regardless of its location, that provides goods or services to residents in the EU and, thus, could incorporate our activities in EU member states. The GDPR imposes strict requirements on controllers and processors of personal data, including special protections for “sensitive information,” which includes health and genetic information of individuals residing in the EU. GDPR grants individuals the opportunity to object to the processing of their personal information, allows them to request deletion of personal information in certain circumstances, and provides the individual with an express right to seek legal remedies in the event the individual believes his or her rights have been violated. Further, the GDPR imposes strict rules on the transfer of personal data out of the EU to regions that have not been deemed to offer “adequate” privacy protections, such as the China. Failure to comply with the requirements of the GDPR and the related national data protection laws of the EU member states, which may deviate slightly from the GDPR, may result in warning letters, mandatory audits and financial penalties, including fines of up to 4 percent of global revenues, or €20,000,000, whichever is greater. As a result of the implementation of the GDPR, we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules.

There is significant uncertainty related to the manner in which data protection authorities will seek to enforce compliance with GDPR. For example, it is unclear whether the authorities will conduct random audits of companies doing business in the EU, or act solely after complaints are filed claiming a violation of the GDPR. The lack of compliance standards and precedent, enforcement uncertainty and the costs associated with ensuring GDPR compliance may be onerous and adversely affect our business, financial condition, results of operations and prospects

### *Information Technology Act 2000 – India*

Information Technology Act 2000, or the IT Act, governs the data privacy regulations in India. The IT Act contains three provisions on data protection and privacy. Section 43A provides that we are subject to civil liability to compensate for wrongful loss or gain to any person arising from negligence in implementing and maintaining reasonable security practices and procedures with respect to sensitive personal data or information that we possess, deal with or handle in our computer systems, networks, databases and software. Section 72A provides for criminal punishment if, in the course of performing a contract, a service provider discloses personal information without the consent of the person concerned or in breach of a lawful contract and he or she does so with the intention to cause, or knowing he or she is likely to cause, wrongful loss or wrongful gain. Section 72 prescribes criminal punishment if a government official discloses records and information accessed by him or her in the course of his or her duties without the consent of the concerned person or unless permitted by other laws. India has also implemented privacy laws,

including the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011, which impose limitations and restrictions on the collection, use and disclosure of personal information.

*Personal Data Protection Act 2012 (No. 26 of 2012) – Singapore*

A non-governmental entity collecting, processing or using personal data is subject to the Personal Data Protection Act, or the “PDPA,” as amended on December 30, 2015. Any information that may be used to directly or indirectly identify a natural person is considered “personal data,” including the name of the data subject, date of birth, identity card number, passport number, characteristics, fingerprints, marital status, family, education, occupation, medical record, medical treatment, genetic information, sexual life, health examination, criminal record, contact information, financial conditions, and social activities.

When an entity collects personal data, it must inform the data subject of matters including the purpose of collection, how the data will be used, the rights of the data subject to review, duplicate, correct the personal data, and the right to request the entity to cease using the data. When such entity processes or uses any personal data collected by any third parties, it must further inform the data subject about the source of such data in addition to the requirements mentioned above. In principle, prior consent from the data subject is required in order to process and/or use his/her personal data. However, this requirement is exempted if the use relates to public interests or if the personal data is available from the public domain and the interest to be protected is more important than the privacy of the data subject. Furthermore, the competent authorities may impose restrictions on any overseas transmission of personal data if (i) such transmission is related to the interests of the nation, (ii) such restriction is imposed pursuant to an international treaty or agreement, (iii) the receiving country has no laws or regulations that are sufficient to protect personal data, or (iv) such transmission is made through a third nation/region for the purpose of avoiding the regulations of the PDPA.

Violation of the PDPA may lead to a criminal sentence if such violation is committed with the intent to gain profits, and may also lead to damage claims whether with such intent to gain profits or not, even if no actual damage can be proven. The competent authorities may request an entity to delete the data and prohibit the entity from further collecting, processing or using the data if the entity is perceived to have violated the PDPA. A victim may authorize certain public-interest associations to file a lawsuit against the violator on his/her behalf.

### ***Regulations on Intellectual Property***

#### *Copyright Act, 1957 – India*

Copyright law in India is governed by the Copyright Act, 1957, which has been amended six times, with the last amendment in 2012. It is a comprehensive set of statutes providing for legal protection to copyright, moral rights and neighboring rights. Under the fair use provisions of the Act, section 52(1)(b) provides that transient or incidental storage of a work or performance purely in the technical process of electronic transmission or communication to the public does not constitute infringement of copyright. This provision provides safe harbor to internet service providers that may have incidentally stored infringing copies of a work for the purpose of transmission of data.

### **C. Organizational Structure**

#### Corporate Structure

The following diagram illustrates our corporate structure as of the date of this annual report, including our principal subsidiaries and our variable interest entities and their principal subsidiaries:

- Beijing Tuda is our PRC consolidated affiliated entity. Mr. David Xueling Li, our co-founder, chairman and chief executive officer and director, owns 97.7% of Beijing Tuda's equity interests, as of the date of this annual report.
- (1) For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Beijing Tuda."

(2) Guangzhou Huaduo is our PRC consolidated affiliated entity. Mr. David Xueling Li and Beijing Tuda own 0.5% and 99.0% of Guangzhou Huaduo's equity interests, respectively, as of the date of this annual report. For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Guangzhou Huaduo."

(3) Bilin Online is our PRC consolidated affiliated entity. Mr. David Xueling Li owns 99.0% of Bilin Online's equity interests, as of the date of this annual report. For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Bilin Online."

(4) Guangzhou Huya is our PRC consolidated affiliated entity. Guangzhou Huaduo owns 99.01% of Guangzhou Huya's equity interests, as of the date of this annual report. For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Guangzhou Huya."

(5) We own more than 50% voting power in HUYA Inc. and remain control over HUYA Inc. as of the date of this annual report. The financial results of HUYA Inc. remain consolidated with our company.

(6) Duowan BVI and Guangzhou Huaduo is the limited partner of Engage L.P., Shanghai Yilian and Guangzhou Yixing, respectively.

(7) Sanrenxing is our PRC consolidated affiliated entity. Guangzhou Huaduo owns 46.55% of Sanrenxing's equity interests, as of the date of this annual report. For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Sanrenxing."

(8) Guangzhou BaiGuoYuan is our PRC consolidated affiliated entity. Mr. David Xueling Li owns 99.0% of Guangzhou BaiGuoYuan's equity interests, as of the date of this annual report. For a detailed description of the contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions—Contractual Arrangements with Guangzhou BaiGuoYuan."

(9) In March 2019, we completed the acquisition of the remaining 68.3% equity interest in Bigo from the other shareholders of Bigo. As of the date of this annual report, we hold 100% shares of Bigo, and Bigo is our wholly owned subsidiary.

#### D. Property, Equipment and Land Use Right

In November 2015, our principal executive offices were relocated to our previously purchased commercial premises in Panyu District, Guangzhou, China, which comprise 37,548 square meters. We acquired a building in Zhuhai in October 2017 as branch office, which comprises 27,206 square meters. This facility currently accommodates our management headquarters, principal development, engineering, sales and marketing, human resources and administrative activities. We also have a branch office in Beijing focusing on research and development, a branch office in Zhuhai focusing on games related businesses, and a representative office in Shanghai that handles advertising-related matters. We lease these relatively small premises under lease agreements from unrelated third parties, and we plan to renew these leases from time to time as needed.

In August 2015, we acquired the use right of a parcel of land located at Pazhou, Haizhu District, Guangzhou, China. This land and its adjacent areas are designated by the Guangzhou municipal government to be a new center for e-commerce companies. We expect to use this land to support future development of our company.

Our servers are hosted in leased internet data centers in different geographic regions in China. The data centers in our network are owned and maintained for us by major domestic internet data center providers. We typically enter into leasing and hosting service agreements that are renewable annually.

We believe that our existing facilities are sufficient for our current needs and we will obtain adequate facilities, principally through leasing, to accommodate our future expansion plans.

See Notes 13 and 14 to our financial statements for further information about our property and equipment and land use right.

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. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of selected events could 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” and elsewhere in this annual report.

## A. Operating Results

### Overview

We began our operations in 2005 by launching Duowan.com, a popular online web portal hosting game media content. We have grown significantly in recent years, developing and introducing YY Client in 2008 and extending our services into mobile devices in September 2010 and onto web browsers in October 2012. Our business has also expanded from focusing on providing voice communication services to becoming a live streaming platform. We offer a variety of live streaming content on our platforms, such as online music shows, live game playthrough streaming, online dating shows and online financial news and shows, which give our users a more diverse, immersive, engaging and enriching experience.

We derive our revenues primarily from live streaming services, accounting for 85.7%, 92.0% and 94.4% of our total net revenues in 2016, 2017 and 2018, respectively. Revenues from live streaming are primarily generated through YY Live platform and Huya platform. For the year ended December 31, 2018, we re-classified the remainder of our revenue as other revenues, which mainly include revenues from online games, membership, online education, advertising and financing income. The revenue presentation for the year ended December 31, 2016 and 2017 have been retrospectively adjusted. We have been exploring additional monetization opportunities and diversifying our revenue sources in order to capitalize on the large and highly engaged user base of our platforms.

An increasing number of users are accessing our platforms through mobile devices, and we consider the rise of mobile-based business to be a general trend. We have been taking measures to expand our success from PC-based products and services to the mobile platform. In 2010, we introduced Mobile YY, our music and entertainment mobile application. In the second half of 2016, along with our transition into a live streaming platform, we rebranded Mobile YY into YY Live APP, a mobile application for our YY Live platform. We also have introduced Huya APP, a mobile application for our Huya platform. We have also developed numerous mobile applications for other parts of our business. Our mobile applications in aggregate, have contributed 64.0% of the total revenue generated from our live streaming services in the fourth quarter of 2018, compared to 53.4% in the same period of 2017. An important element of our strategy is to continue to develop and enhance mobile applications to capture a greater share of the growing number of mobile users.

Our total net revenues increased from RMB8,204.1 million in 2016 to RMB 11,594.8 million in 2017 and to RMB15,763.6 million (US\$2,292.7 million) in 2018. We had a net income of RMB1,511.6 million, RMB2,508.4 million and RMB2,115.7 million (US\$307.7 million) in 2016, 2017 and 2018, respectively.

### Discussion of Selected Statements of Operations Items



## Revenues

Starting from the first quarter of 2018, we re-classified our revenues from live streaming, online games, revenues from memberships, and other revenues (which mainly represented revenues from our online advertising revenues) to the categories of live streaming and other revenues. The revenue presentation for the year ended December 31, 2016 and 2017 has been retrospectively adjusted. Our live streaming revenues are primarily comprised of revenues from YY Live platform and Huya platform. Other revenues mainly include revenues from online games, membership, online education, advertising and financing income. We expect that in the future, as is the case in 2019, an increasing portion of our revenues will be derived from live streaming revenues, including revenues from in-channel virtual items sold on our platforms, as well as other online products and services.

The following table sets forth the principal components of our total net revenues by amount and as a percentage of our total net revenues for the periods presented.

	For the Year Ended December 31, 2016		2017		2018		% of total net revenues
	RMB	% of total net revenues	RMB	% of total net revenues	RMB	US\$	
	(in thousands, except for percentages)						
Live streaming	7,027,227	85.7	10,670,954	92.0	14,877,667	2,163,867	94.4
Others	1,176,823	14.3	923,838	8.0	885,890	128,847	5.6
Total net revenues (1)	8,204,050	100.0	11,594,792	100.0	15,763,557	2,292,714	100.0

(1) Revenues are presented net of rebates and discounts.

*Live streaming revenues.* We generate live streaming revenues from the sales of in-channel virtual items used on our live streaming platforms, including YY Live platform and Huya platform. Users access content on our platforms free of charge, but are charged for purchases of virtual items.

The most significant factors that directly affect our live streaming revenues include the increase in the number of our paying users and ARPU:

*The number of paying users.* We had 11.0 million, 16.6 million and 19.8 million paying users in 2016, 2017 and 2018, respectively for our live streaming services. We calculate the number of paying users during a given period as the cumulative number of registered user accounts that have purchased virtual items or other products and services on our live streaming platform at least once during the relevant period. We were able to achieve an increase in the number of paying users primarily due to a larger active user base and a higher conversion ratio of active users to paying users, and we expect that the number of our paying users will continue to grow in the future as we expand our services and products offerings and further monetize our existing platform.

*ARPU.* Our ARPU for live streaming was RMB637.8, RMB643.2 and RMB751.2 in 2016, 2017 and 2018, respectively. ARPU is calculated by dividing our total revenues from live streaming during a given period by the number of paying users for our live streaming services for that period. As we begin to generate revenues from an increasing variety of live streaming services, our ARPU may fluctuate from period to period due to the mix of live streaming services purchased by our paying users.

Other significant factors that directly or indirectly affect our live streaming revenues include:

our ability to increase our popularity by offering new and attractive contents, products and services that allow us to monetize our live streaming platform;

our ability to attract and retain a large and engaged user base; and

our ability to attract and retain certain popular performers, channel owners, professional game playing team and commentators.

We expect that the portion of our revenues from live streaming derived from the sales of virtual items and services will continue to increase as we capitalize on monetization opportunities. We create and offer to users virtual items that can be used on various channels. Users can purchase consumable virtual items from us to show support for their favorite performers or time-based virtual items that provide users with recognized status, such as priority speaking rights or special symbols on the music and entertainment channels.

*Other revenues.* We generate other revenues mainly from our online games, memberships and other services.

*(i) Online games revenues.* We generate online games revenues from the sales of in-game virtual items used for games developed by us or by third parties under revenue-sharing arrangements on our platforms. Users play online games free of charge, but are charged for purchases of virtual items. The online games we currently offer are primarily web games that can be run from an internet browser and require an internet connection to play. We have historically derived a significant portion of our revenues from a number of popular online games, primarily through selling in-game virtual items for these games. A majority of our popular online games are developed by third party game developers under revenue-sharing arrangements that typically last one to two years.

*(ii) Membership revenues.* We generated membership revenues from the membership subscription fees paid by our users. In our membership program, users pay a flat monthly subscription fee in order to become members, and in exchange, we give them access to various privileges and enhanced features on our channels, including additional video usage, priority entrance to certain live performances, and exclusive rights to access VIP avatars, VIP ring-tones, VIP fonts and VIP emoticons.

*(iii) Others.* We generated other revenues from our online education, advertising and financing business. Online education service consists of vocational training, language training and K-12 afterschool education courses and we generated revenue from course fee. Advertising revenues were generated from sales of various forms of advertising and provision of promotion campaigns on the live streaming platforms. We also generated revenues from financing business by providing micro-credit personal loans to individual borrowers and corporate loans to corporate customers.

#### Cost of Revenues

Cost of revenues consists primarily of (i) revenue sharing fees and content costs including payments to various channel owners and performers, and content providers, (ii) bandwidth costs, (iii) salary and welfare, (iv) depreciation and amortization expense for servers, other equipment and intangibles directly related to operating the platform, (v) payment handling costs, (vi) share-based compensation, (vii) other taxes and surcharges, and (viii) other costs. We anticipate that revenue sharing fees and content costs paid to performers, channel owners and content providers will increasingly contribute to our cost of revenues. We expect that our cost of revenues will increase in absolute amount as we further grow our user base and expand our revenue-generating services.

*Revenue sharing fees and content costs.* Our revenue sharing fees and content costs paid to performers, channel owners and content providers increased from RMB3,790.6 million in 2016 to RMB5,727.1 million in 2017 and further increased to RMB8,272.7 million (US\$1,203.2 million) in 2018. We expect our revenue sharing fees and content costs to continue to increase as we continue to expand our live streaming offerings, our user engagement and spending levels increase, as well as our investments in expanding the amount of new and innovative content provided to users.

*Bandwidth costs.* Our bandwidth costs increased from RMB651.7 million in 2016 to RMB695.8 million in 2017 and further increased to RMB967.4 million (US\$140.7 million) in 2018. We expect bandwidth costs to continue to increase as of the continued user base expansion and video quality improvements, but be partially offset by our improved efficiency and pricing terms.

*Salary and welfare.* Our salary and welfare costs increased from RMB232.5 million in 2016 to RMB237.1 million in 2017 and further increased to RMB323.6 million (US\$47.1 million) in 2018. We expect our salary and welfare costs

to increase as we continue to hire additional employees in line with the expansion of our business.

*Depreciation and amortization.* Our depreciation and amortization decreased from RMB173.0 million in 2016 to RMB128.6 million in 2017, and further decreased to RMB117.3 million (US\$17.1 million) in 2018. Our depreciation and amortization decreased in 2018 because we purchased more content delivery network, or CDN services instead of purchasing servers directly. We expect depreciation and amortization to increase as we continue to expand our operations and purchase servers and other equipment or intangibles directly related to the operating of our platforms and business.

*Payment handling costs.* Our payment handling costs increased from RMB67.5 million in 2016 to RMB73.0 million in 2017 and further increased to RMB104.8 million (US\$15.2 million) in 2018. We expect payment handling costs to increase as we continue to grow our paying users base and expand our paid service offerings.

*Other taxes and surcharges.* Our other taxes and surcharges increased from RMB44.7 million in 2016 to RMB48.4 million in 2017 and further increased to RMB48.7 million (US\$7.1 million) in 2018. We expect the payment of surcharges to increase due to the expansion of our business.

*Share-based compensation.* Our share-based compensation allocated to the cost of revenues increased from RMB15.9 million in 2016 to RMB42.8 million in 2017 and further increased to RMB74.3 million (US\$10.8 million) in 2018.

## Operating Expenses

Our operating expenses consist of (i) research and development expenses, (ii) sales and marketing expenses, (iii) general and administrative expenses, and (iv) goodwill impairment. The following table sets forth the components of our operating expenses for the years indicated, both in absolute amounts and as percentages of our total net revenues. We expect our operating expenses to generally increase in both absolute amount and as percentage of total net revenues in the near future.

	For the Year Ended December 31,				2018		
	2016	2017	2017	2018	2018	2018	
	RMB	% of total net revenues	RMB	% of total net revenues	RMB	US\$	% of total net revenues
	(in thousands, except for percentages)						
Operating expenses:							
Research and development expenses	675,230	8.2	781,886	6.7	1,192,052	173,377	7.6
Sales and marketing expenses	387,268	4.7	691,281	6.0	1,149,316	167,161	7.3
General and administrative expenses	482,437	5.9	544,641	4.7	883,225	128,460	5.6
Goodwill impairment	17,665	0.2	2,527	0.0	-	-	-
Total operating expenses	1,562,600	19.0	2,020,335	17.4	3,224,593	468,998	20.5

## Research and Development Expenses

Research and development expenses consist primarily of salaries and benefits and share-based compensation expenses for research and development personnel and rental expenses and depreciation of office premises and servers utilized by the research and development personnel. Research and development expenses generally increased in the past three years ended December 31, 2018, due to the need for additional research and development personnel to accommodate the growth of our business. We expect our research and development expenses in both absolute amount and as percentage of total net revenues to increase as we intend to retain existing research and development personnel and also hire new ones to, among other things, develop new series of applications for our platforms, improve technology infrastructure to further enhance user experience, and further develop enhanced features for mobile devices to reach more users. However, we also expect to be able to leverage on the expertise of our established research and development team and achieve better efficiency.

## Sales and Marketing Expenses

Sales and marketing expenses consist primarily of (i) advertising and promotion expenses, and (ii) salary and welfare for sales and marketing personnel. Our sales and marketing expenses generally increased over the past three years ended December 31, 2018, primarily reflecting increased marketing and promotional activities. We expect that our sales and marketing expenses will increase in both absolute amount and as percentage of total net revenues as we expect to increase our spending on promotional activities, particularly relating to mobile applications and new business initiatives.

## General and Administrative Expenses

General and administrative expenses consist primarily of (i) salary and welfare for general and administrative personnel, (ii) share-based compensation for management and administrative personnel, and (iii) professional service fees. Our general and administrative expenses generally increased over the past three years ended December 31, 2018 as our business expanded, primarily due to an increase in the share-based compensation. We expect our general and administrative expenses generally increase in absolute amount and decrease as percentage of total net revenues in the near future as our business grows.

## Goodwill Impairment

We have noted further impairment indicator for 100 Online as well as impairment indicator for Bilin Online in 2016. Based on the result of the impairment assessment, impairment charges of RMB17.7 million were recognized in 2016. In December 2017, we have identified impairment indicator for a subsidiary. Based on the results of the impairment assessment, an impairment charge of RMB2.5 million for the subsidiary was recognized.

## Share-based Compensation Expenses

Our operating expenses include share-based compensation expenses as follows:

	For the Year Ended December 31,			
	2016	2017	2018	
	RMB	RMB	RMB	US\$
	(in thousands, except for percentages)			
Research and development expenses	78,816	122,348	225,173	32,750
Sales and marketing expenses	3,107	4,417	5,723	832
General and administrative expenses	59,469	88,137	342,790	49,857
Total	141,392	214,902	573,686	83,439

We grant stock-based award such as, but not limited to, share options, restricted shares, restricted share units and warrants to eligible employees, officers, directors, and non-employee consultants. Awards granted to employees, officers, and directors are initially accounted for as equity-classified awards, which are measured at the grant date fair value of the award and are recognized using the graded vesting method, net of estimated forfeitures, over the requisite service period, which is generally the vesting period. Awards granted to non-employees are initially measured at fair value on the grant date and periodically re-measured thereafter until the earlier of the performance commitment date or the date the service is completed and recognized over the period in which the service is provided.

## Operating Income

Gain on deconsolidation and disposal of subsidiaries



In June 2016, we disposed 60% of the equity interest in Shanghai Beifu for a consideration of RMB3.5 million, and recognized a loss of RMB23.5 million. After the disposal, we retained 10% of the equity interest in Shanghai Beifu. In December 2016, we disposed 33.86% of the equity interest in Beijing Xingxue for a consideration of RMB118.5 million, and recognized an income of RMB127.4 million. After the disposal, we retained 31.14% of the equity interest in Beijing Xingxue. In February 2017, we disposed 46% the equity interest in Beijing Yunke Online, and recognized an income of RMB 38.0 million.

#### Other income

Other income primarily consists of government grants in connection with our contributions to technology development, tax refund and investments in local business districts. These grants may not be recurring in nature.

#### Taxation

##### Cayman Islands

According to our Cayman Islands counsel, Maples and Calder (Hong Kong) LLP, the Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciations 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. There are no exchange control regulations or currency restrictions in 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.

Pursuant to Section 6 of the Tax Concessions Law (1999 Revision) of the Cayman Islands, we have obtained an undertaking from the Governor-in-Cabinet:

- (1) that no law which is enacted in the Cayman Islands imposing any tax to be levied on profits or income or gains or appreciations shall apply to us or our operations; and
- (2) that the aforesaid tax or any tax in the nature of estate duty or inheritance tax shall not be payable (i) on or in respect of our shares, debentures or other obligations, or (ii) by way of withholding in whole or in part of any relevant payment as defined in section 6(3) of the Tax Concessions Law (1999 Revision).

The undertaking is for a period of twenty years from August 2, 2011.

#### British Virgin Islands

Duowan BVI is our wholly owned subsidiary.

As Duowan BVI is a BVI business company subject to the provisions of the BVI Business Companies Act 2004 (as amended), it is exempt from all provisions of the Income Tax Act of the BVI (including with respect to all dividends, interests, rents, royalties, compensation and other amounts payable by Duowan BVI to persons who are not persons resident in the BVI).

Capital gains realized with respect to any shares, debt obligations or other securities of Duowan BVI by persons who are not persons resident in the BVI are also exempt from all provisions of the Income Tax Act of the BVI.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not persons resident in the BVI with respect to any shares, debt obligations or other securities of Duowan BVI, save for interest payable to or for the benefit of an individual resident in the European Union.

## Hong Kong

Our subsidiary registered in Hong Kong is subject to Hong Kong Profits Tax on the taxable income as reported in its respective statutory financial statements adjusted in accordance with relevant Hong Kong tax laws. The applicable tax rate is 16.5% in Hong Kong.

## Singapore

Our subsidiaries incorporated in Singapore are subject to a tax rate of 17% of their taxable income.

## PRC

Current taxation primarily represented the provision for a state and local corporate income tax, or EIT, for subsidiaries and consolidated affiliated entities operating in the PRC. Prior to January 1, 2008, companies established in the PRC were generally subject to EIT at statutory rates of 30% and 3% respectively. On March 16, 2007, the PRC National People's Congress promulgated the New EIT Law, which became effective on January 1, 2008. These subsidiaries and VIEs are subject to new EIT on their taxable income as reported in their respective statutory financial statements adjusted in accordance with the relevant tax laws and regulations in the PRC. All our PRC entities are subject to EIT at a rate of 25%, with the exception of any preferential treatments they may receive, such as the 15% preferential tax rate that Guangzhou Huaduo can enjoy for the periods reported as a result of its qualification as a high and new technology enterprise. Furthermore, Guangzhou Huanju Shidai has been qualified as a software enterprise since 2013, and is entitled to a two-year exemption from EIT followed by three years at 50% tax reduction starting from 2014, the first profit-making year.

According to a policy promulgated by the state tax bureau of the PRC and effective from 2008 onwards, enterprises engaged in research and development activities are entitled to claim 150% of the research and development expenses so incurred in a year as tax deductible expenses in determining its tax assessable profits for that year, or Super Deduction. The additional tax deducting amount of the qualified research and development expenses have been increased from 50% to 75%, effective from 2018 to 2020, according to a new tax incentives policy promulgated by the State Tax Bureau of the PRC in September 2018. Certain subsidiaries and VIEs have claimed such Super Deduction for the period reported.

In addition, according to the New EIT Law and its implementation rules, foreign enterprises, which have no establishment or place in the PRC but derive dividends, interest, rents, royalties and other income (including capital gains) from sources in the PRC is subject to PRC withholding tax, or WHT, at 10% (a further reduced WHT rate may be available according to the applicable double tax treaty or arrangement). The 10% WHT is applicable to any dividends to be distributed from our PRC subsidiaries and consolidated affiliated entities to us and our subsidiaries outside the PRC. In 2017, we determined to cause one of its PRC subsidiaries, Guangzhou Huanju Shidai, to declare and distribute a cash dividend of part of its stand-alone 2014-2016 earnings, amounted to US\$15 million, to its direct oversea parent company, Duowan BVI. As a result, Guangzhou Huanju Shidai paid for the withholding tax in the amount of US\$1.5 million in 2017. We do not have any present plan to pay out the retained earnings in the PRC subsidiaries and PRC consolidated affiliated entities in the foreseeable future. We currently intend to retain our available funds and any future earnings to operate and expand our business. Accordingly, no further WHT has been accrued.

Our PRC subsidiaries and PRC consolidated affiliated entities are subject to value added tax and related surcharges. Our live streaming revenues became subject to VAT from June 1, 2014, at a rate of 6%, while they were subject to business taxes at a rate of 3% prior to June 1, 2014. Online games revenues and other revenues are subject to VAT for the year ended December 31, 2016, 2017 and 2018. Surcharges are calculated based on 12% of the monthly business taxes and VAT payable for 2016, 2017 and 2018. Business taxes and related surcharges during 2016, 2017 and 2018 were RMB44.7 million, RMB48.4 million and RMB48.7 million (US\$7.1 million), respectively.

For more information on PRC tax regulations, see “PRC Regulation—Regulation on Tax.”

### Critical Accounting Policies

We prepare our financial statements in conformity with U.S. GAAP, which requires us to make estimates and assumptions that affect our reporting of, among other things, assets and liabilities, revenues and expenses. We regularly evaluate these estimates and assumptions based on the most recently available information, our own historical experiences and other factors that we believe to be relevant under the circumstances. Since our financial reporting process inherently relies on the use of estimates and assumptions, our actual results could differ from these

estimates. This is especially true with some accounting policies that require higher degrees of judgment than others in their application. We consider the policies discussed below to be critical to an understanding of our audited consolidated financial statements because they involve the greatest reliance on our management's judgment.

#### Revenue Recognition and Deferred Revenue

For the year ended December 31, 2018, revenue presentation has been changed to live streaming and others to better reflect the way we generate revenues. The revenue presentation for the years ended December 31, 2016 and 2017 are also retrospectively changed to be consistent with the year ended December 31, 2018. Revenues from live streaming are mainly generated from YY Live platform and Huya platform. Other revenues are mainly generated from online games, membership, online education, advertising and finance business.

On January 1, 2018, we adopted ASC 606, “Revenue from Contracts with Customers” using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under Topic 605. Based on our assessment, the adoption of ASC 606 did not result in any adjustment on our consolidated financial statements, and there were no material differences between our adoption of ASC 606 and our historic accounting under ASC 605.

Revenues are recognized when control of the promised virtual items or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those virtual items or services.

We have a recharge system for users to purchase our virtual currency. Users can recharge via various online payment platforms provided by third parties. Virtual currency is non-refundable and without expiry. As the virtual currency is often consumed soon after it is purchased based on history of turnover, we consider the impact of the breakage amount for virtual currency coupons is insignificant. Unconsumed virtual currency is recorded as deferred revenue. Virtual currencies used to purchase virtual items are recognized as revenue according to the prescribed revenue recognition policies of virtual items addressed below unless otherwise stated.

#### Live Streaming

We generate our live streaming revenue from sales of virtual items on our live streaming platforms, mainly YY Live platform and Huya platform. Our users can access the platforms and view the live streaming content for free. We share a portion of the sales proceeds of virtual items (“revenue sharing fee”) with performers and talent agencies in accordance with their revenue sharing arrangements. Those performers who do not have revenue sharing arrangements with us are not entitled to any revenue sharing fee.

We evaluate and determine that we are the principal and streaming users to be our customers. We report live streaming revenues on a gross basis. Accordingly, the amounts billed to users are recorded as revenues and revenue sharing fee paid to performers and talent agencies are recorded as cost of revenues. Where we are the principal, we control the virtual items before they are transferred to users. Our control is evidenced by our sole ability to monetize the virtual items before they are transferred to users, and is further supported by us being primarily responsible to users and having a level of discretion in establishing pricing.

We design, create and offer various virtual items for sales to users with pre-determined selling price. Sales proceeds are recorded as deferred revenue and recognized as revenue based on the consumption of the virtual items. Virtual items are categorized as consumable and time-based items. Consumable items are consumed upon purchase and use

while time-based items could be used for a fixed period of time. Users can purchase and present consumable items to performers to show support for their favorite performers, or purchase time-based virtual items for one or multiple months for a monthly fee, which provide users with recognized status, such as priority speaking rights or special symbols over a period of time. Accordingly, live streaming revenue is recognized immediately when the consumable virtual item is used, or in the case of time-based virtual items, revenue is recognized ratably over the fixed period on a straight-line basis. We do not have further obligations to the user after the virtual items are consumed immediately or after the stated period of time for time-based items.

We may also enter into contracts that can include various combinations of virtual items, which are generally capable of being distinct and accounted for as separate performance obligations, such as noble member program. Judgments are required as follow: 1) determining whether those virtual items are considered distinct performance obligations that should be accounted for separately versus together, 2) determining the standalone selling price for each distinct performance obligation, and 3) allocating of the arrangement consideration to the separate accounting of each distinct performance obligation based on their relative standalone selling prices. In instances where standalone selling price is not directly observable as we do not sell the virtual item separately, we determine the standalone selling price based on pricing strategies, market factors and strategic objectives. We recognize revenue for each of the distinct performance obligations identified in accordance with the applicable revenue recognition method relevant for that obligation.

As our live streaming virtual items are generally sold without right of return and we do not provide any other credit and incentive to its users, therefore accounting of variable consideration when estimating the amount of revenue to recognize is not applicable to the our live streaming business.

*Others*

Other revenues mainly generated from online games, membership, online education, advertising and finance business.

*Online games revenues*

We generate revenues from offering virtual items in online games developed by third parties or our self-developed online games to game players. Historically, the majority of online games revenues for the three years ended December 31, 2016, 2017 and 2018 were derived from third party-developed games.

Users play games through our platforms free of charge and are charged for purchases of virtual items including consumable and perpetual items, which can be utilized in the online games to enhance their game-playing experience. Consumable items represent virtual items that can be consumed by a specific user within a specified period of time. Perpetual items represent virtual items that are accessible to the users' accounts over the life of the online games.

Pursuant to contracts signed between the game developers and us, game developers own the games' copyrights and other intellectual property, and take primary responsibilities of game development and game operation, including designing, developing and updating of the games related to game content, pricing of virtual items, providing ongoing updates of new contents and bug fixing. Our responsibilities under the agreements with the game developers to offer certain standard promotions that include providing access to the platform, announcing the new games to users on the platform, and occasional advertising on our platforms. Accordingly, we record online games revenues derived from third party developed games, on a net basis, net of the amount paid to game developers.

Given that third party developed games are managed and administered by the third party game developers, we do not have access to the data on the consumption details such as when the game token is spent on the virtual items or the types of virtual items (consumable or perpetual items) purchased by each individual game player. However, we maintain historical data on timing of the conversion of its virtual currency into game specific tokens and the amount of purchases of game tokens. We believe that our responsibility to the game developers correspond to the game developers' services to the users. We have adopted a policy to recognize revenues relating to game tokens for third party developed games over the estimated user relationship period with us on a game-by-game basis, which is approximately one to six months for the periods presented. Future usage patterns may differ from historical usage patterns and therefore the estimated user relationship period with us may change in the future.



The estimated user relationship period is based on data collected from those users who have acquired game tokens. To estimate the user relationship period, we maintain a system that captures the following information for each user: (a) the frequency that users log into each game via our platforms, and (b) the amount and the timing of when the users convert or charge his or her game tokens. We estimate the user relationship period for a particular game to be the date a player purchases or converts from virtual currency to a game token through the date we estimate the user plays the game for the last time. This computation is performed on a user by user basis. Then, the results for all analyzed users are averaged to determine an estimated end user relationship period for each game. Revenues from in-game payments of each month are recognized over the user relationship period estimated for that game.

The consideration of user relationship period with each online game is based on our best estimate that takes into account all known and relevant information at the time of assessment. We assess the estimated user relationships period for each game on a quarterly basis. Any adjustments arising from changes in the user relationship period as a result of new information will be accounted as a change in accounting estimate in accordance with ASC 250 Accounting Changes and Error Corrections.

### *Membership*

We operate a membership subscription program where subscription members can have enhanced user privileges when using YY Client and live streaming channels. The membership fee is collected up-front from subscribers. The receipt of the revenue is initially recorded as deferred revenue and revenue is recognized ratably over the period of the subscription when services are rendered. Unrecognized portion beyond 12 months from balance sheet date is classified as long-term deferred revenue.

### *Online education revenues*

Educational programs and services consist of vocational training, language training courses and K-12 afterschool education courses. The course fee is generally paid in advance and is initially recorded as deferred revenue. Revenue for regular courses is recognized proportionately as the classes are attended, and is reported net of scholarships and course fee refunds. Students are entitled to one trial class of the purchased course and course fee is fully refundable if a student decides not to take the remaining course after the trial class. No refund will be provided to a student who withdraws from a course after the trial period, and revenue is recognized for the amount collected. Course fee refunds were insignificant over the period presented.

In addition to regular courses, we also provide a package of several regular courses to students, which have individual fair value in the market. Pursuant to the applicable accounting guidance, we have accounted for these course packages as a multiple-element arrangement because each individual course qualifies as a single unit of accounting, and allocated the course fee from the course package to each individual course in the package based on its standalone selling price. We recognize revenue equal to the fair value allocated to individual courses proportionately as the classes are delivered.

Students are granted a right to retake the courses at a substantial discount in the circumstances where the students fail to achieve certain score targets for some specific courses. The discount arrangement has a stand-alone value and qualifies as a separate unit of accounting under U.S. GAAP. Therefore, we have accounted for those courses as a multiple-element arrangement and allocated a portion of the initial course fee to the substantial discount based on a breakage rate. The breakage rate is determined based on our historical data. The amount allocated to the substantial discount is deferred and recognized as revenue upon the expiration of the retaking right, which is generally six months after the end of the initial course term.

We also sell pre-paid cards primarily to distributors. Pre-paid card sales represent prepaid service fees received from students for online courses. The prepaid service fee is recorded as deferred revenue upon receiving the upfront cash

payment. Revenue is recognized on a gross basis based on the selling price of the distributors to the students and is recognized over the period upon the online course is available to the students, which generally is from the enrolment date to the completion of the relevant professional examination date.

#### Advertising revenues

We primarily generate advertising revenues from sales of various forms of advertising and provision of promotion campaigns on the live streaming platforms by way of advertisement display or integrated promotion activities in shows and programs on the live streaming platforms. Advertisements on our platforms are generally charged on the basis of duration, and advertising contracts are signed to establish the fixed price and the advertising services to be provided. Where the service is transferred to our customers, advertising revenues from advertising contracts are recognized ratably over the contract period of display.

We enter into advertising contracts directly with advertisers or third-party advertising agencies that represent advertisers. Payment terms and conditions vary by contract type, although the terms generally include a requirement of payment within 1 to 3 months. Both third-party advertising agencies and direct advertisers are generally billed at the end of the display period and payments are due usually within 3 months. In instances where the timing of revenue recognition differs from the timing of billing, we have determined the advertising contracts generally do not include a significant financing component. The primary purpose of the credits terms is to provide customers with simplified and predictable ways of purchasing our advertising services, not to receive financing from our customers or to provide customers with financing.

Certain customers may receive sales incentives in the forms of discounts and rebates to advertisers or advertising agencies based on purchase volume, which is accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers considering the contracted rebate rates and estimated sales volume based on historical experience, and reduce revenues recognized. We believe that there will not be significant changes to its estimates of variable consideration.

#### *Financing revenues*

We generate revenues from micro-credit personal loans provided to individual borrowers and corporate loans to corporate customers. We recognize financing income related to those services over the life of the underlying financing using the effective interest method on unpaid principal amounts after net of loan origination cost.

We do not accrue financing revenues when a financing receivables is placed on non-accrual status. Financing revenues will be recognized when cash is received on a cash basis cost recovery method by applying first to reduce principal and then to interests thereafter.

#### Advances from customers and deferred revenue

Advances from customers primarily consist of prepayments from users in the form of our virtual currency that are not yet consumed or converted into game tokens, and upon the consumption or conversion, are recognized as revenue according to the prescribed revenue recognition policies described above. Deferred revenue primarily consists of the unamortized game tokens, prepaid subscriptions under the membership program and unamortized revenue from virtual items in our various channels on our platforms, where there is still an implied obligation to be provided by us which will be recognized as revenue when all of the revenue recognition criteria are met.

#### Accounts receivable, net

Accounts receivable are presented net of allowance for doubtful accounts. We use specific identification in providing for bad debts when facts and circumstances indicate that collection is doubtful and a loss is probable and estimable. If the financial condition of its customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowance would be required.

We maintain an allowance for doubtful accounts which reflects our best estimate of amounts that potentially will not be collected. We determine the allowance for doubtful accounts on an individual basis taking into consideration various factors, including, but not limited to, historical collection experience, credit-worthiness of the debtors and the age of the individual receivables balance. Additionally, we make specific bad debt provisions based on any specific knowledge we have acquired that might indicate that an account is uncollectible. The facts and circumstances of each account may require us to use substantial judgment in assessing its collectability.

### **Financing receivables**

Financing receivables represent receivables derived from finance business, including micro-credit personal loans and corporate loans. Financing receivables are recorded at amortized cost, reduced by a valuation allowance estimated as of the balance sheet date. The amortized cost is equal to the unpaid principal amount, accrued interest receivables and net deferred origination costs. The origination costs are the direct costs attributable to originating the financing charged by third-party companies. The cash flows related to the principal of finance business are included in the investing activities category in the consolidated statement of cash flows.

#### *Micro-credit personal loans*

We provide micro loans to qualified individual borrowers. The micro loan periods granted to the borrowers generally range from one month to twelve months.

### *Corporate loans*

We provide loans to corporate borrowers mainly through sales-and-leaseback model. Under the sales-and-leaseback arrangement, we, as lender, purchase machinery and equipment from lessees, who are the borrowers, and lease the purchased equipment back to the lessees for a number of years. In a sales-and-leaseback arrangement, the transaction is in substance a collateral financing.

We assess the allowance for financing receivables either on an individual or collective basis. We estimate and evaluate the allowance amounts and whether such amounts are adequate to cover potential losses, and periodic reviews are performed to ensure such amounts continue to reflect the best estimate of the losses inherent in the outstanding portfolio of debts. The estimate is based on a pooled basis due to the composition of homogeneous financing with similar size and general credit risk characteristics for similar finance businesses. We consider the credit worthiness of the individuals and the companies receiving financing, aging of the outstanding financing receivables, value of the collateral assets and other specific circumstances related to the financing when determining the allowance for financing receivables.

Financing receivables are placed on non-accrual status upon reaching 90 days past due or when reasonable doubt exists in timely collection of the financing receivables. When a financing receivable is placed on non-accrual status, we stop accruing financing income. Financing receivable is returned to accrual status if the related individual or company has performed in accordance with the contractual terms for a reasonable period of time and, in our judgment, will continue to make period principal and financing income payments as scheduled.

### **Investments**

ASU 2016-01 (“ASU 2016-01”), Recognition and Measurement of Financial Assets and Financial Liabilities amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The main provisions require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value through earnings, unless they qualify for a measurement alternative. The new guidance requires modified retrospective application to all outstanding instruments beginning January 1, 2018, with a cumulative effect adjustment recorded to opening accumulated deficit as of the beginning of the first period in which the guidance becomes effective. However, changes to the accounting for equity securities without a readily determinable fair value would be applied prospectively. We adopted the new financial instruments accounting standard from January 1, 2018. Following the adoption of this guidance, accumulated fair value gain, amounting to RMB87.8 million, was reclassified from accumulated other comprehensive loss to retained earnings as of January 1, 2018.

*Equity Investments with Readily Determinable Fair Values*

Equity investments with readily determinable fair values are measured and recorded at fair value using the market approach based on the quoted prices in active markets at the reporting date. We classify the valuation techniques that use these inputs as Level 1 of fair value measurements.

*Equity Investments without Readily Determinable Fair Values*

After the adoption of this new accounting standard, we elected to record equity investments without readily determinable fair values and not accounted for under the equity method at cost, less impairment, adjusted for subsequent observable price changes on a nonrecurring basis, and report changes in the carrying value of the equity investments in current earnings. Changes in the carrying value of the equity investments are required to be made whenever there are observable price changes in orderly transactions for the identical or similar investment of the same issuer. The implementation guidance notes that an entity should make a “reasonable effort” to identify price changes that are known or that can reasonably be known.

*Equity Investments Accounted for Using the Equity Method*

We account for its equity investment over which it has significant influence but does not own a majority equity interest or otherwise control using the equity method. We adjust the carrying amount of the investment and recognizes investment income or loss for share of the earnings or loss of the investee after the date of investment. We assess its equity investment for other-than-temporary impairment by considering factors including, but not limited to, current economic and market conditions, operating performance of the entities, including current earnings trends and undiscounted cash flows, and other entity-specific information. The fair value determination, particularly for investment in privately held entities, requires judgment to determine appropriate estimates and assumptions. Changes in these estimates and assumptions could affect the calculation of the fair value of the investment and determination of whether any identified impairment is other-than-temporary.

**Consolidation**

Our consolidated financial statements include the financial statements of our company, our subsidiaries, variable interest entities, or VIEs, for which we or our subsidiaries are the primary beneficiaries. All transactions and balances among our company, subsidiaries and VIEs have been eliminated upon consolidation.

A subsidiary is an entity in which our company, directly or indirectly, controls more than one half of the voting power, has the power to appoint or remove the majority of the members of the board of directors or to cast a majority vote at each meeting of directors, or has the power to govern the financial and operating policies of the investee under a statute or agreement among the entity's shareholders or equity holders.

A VIE is an entity in which our company, or our subsidiary, through contractual agreements, bears the risks of, and enjoys the rewards normally associated with ownership of the entity, and therefore our company or our subsidiary is the primary beneficiary of the entity. In determining whether our company or our subsidiaries are the primary beneficiary, we considered whether we have the power to direct activities that are significant to the VIE's economic performance, and also our obligation to absorb losses of the VIE that could potentially be significant to the VIEs or the right to receive benefits from the VIEs that could potentially be significant to the VIEs. Beijing Huanju Shidai, Bilin Changxiang, Huya Technology, 100 Edu Technology and ultimately we hold all the variable interests of the VIEs and have been determined to be the primary beneficiary of the VIEs.

Foreign ownership of internet-based businesses is subject to significant restrictions under current PRC laws and regulations. We conduct our operations in China primarily through a series of contractual arrangements entered into among Beijing Huanju Shidai, our PRC subsidiary, Guangzhou Huaduo and Beijing Tuda, as well as Guangzhou



Huaduo and Beijing Tuda's shareholders. Based on our evaluations of the relationships between us and Beijing Tuda and Guangzhou Huaduo, the economic benefit flow of contractual arrangements made with them, as well as the controls conferred to us through these contractual arrangements enacted, we consider, through Beijing Huanju Shidai, we exercise effective control over Guangzhou Huaduo and Beijing Tuda, receive substantially all of their economic benefits and residual returns, and absorb substantially all the risks and expected losses from these two companies as if we were their sole shareholder. We also have an exclusive option to purchase all of the equity interests in each of Beijing Tuda and Guangzhou Huaduo when and if PRC law permits so and also the exclusive right to require any nominee shareholder of Beijing Tuda or Guangzhou Huaduo to transfer its interest in them to any person designated by us. A similar mechanism exists among Bilin Changxiang, Bilin Online and its shareholder as well as Huya Technology, Guangzhou Huya and its shareholders. For a detailed description of these contractual arrangements, see "Item 7. Major Shareholders and Related Party Transactions—B. Related Party—Contractual Arrangements with Beijing Tuda." Based on our evaluation, we consider each of Beijing Tuda, Guangzhou Huaduo, Bilin Online and Guangzhou Huya to be our VIE. Beijing Huanju Shidai, our wholly owned subsidiary in China, is the primary beneficiary of our VIEs, Beijing Tuda and Guangzhou Huaduo, Bilin Changxiang is the primary beneficiary of Bilin Online and Huya Technology is the primary beneficiary of Guangzhou Huya; therefore, we consolidate the results of Beijing Tuda, Guangzhou Huaduo, Bilin Online and Guangzhou Huya in our consolidated financial statements under U.S. GAAP.

As advised by our PRC counsel, Fangda Partners, the contractual arrangements among Beijing Huanju Shidai and Beijing Tuda and its shareholders, the contractual arrangements among Beijing Huanju Shidai and Guangzhou Huaduo and its shareholders, the contractual arrangements among Huya Technology and Guangzhou Huya and its shareholder and Bilin Changxiang and Bilin Online and its shareholder, governed by PRC law, are valid, binding and enforceable, and do not violate PRC laws currently in effect. However, as advised by our PRC legal counsel, because of the substantial uncertainties involved, if such contracts are held to be unenforceable, or if there are changes in PRC laws and regulations that affect our ability to control Beijing Tuda, Guangzhou Huaduo, Guangzhou Huya and Bilin Online, we may be precluded from consolidating these companies in the future. See “Item 3. Key Information—D. Risk Factors—Substantial uncertainties exist with respect to the interpretation and implementation of the New Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.”

We established three funds entities, namely Engage L.P., Shanghai Yilian and Guangzhou Yilianyixing, or the Funds, collectively, in March 2015, June 2015 and September 2017, respectively. We hold 93.5% of interests in Engage L.P. and Shanghai Yilian, and 99% interests in Guangzhou Yilianyixing. We exercise effective controls over the Funds and are entitled to the various returns of the Funds and therefore the Funds have been accounted for as subsidiaries of and has been consolidated in our financial statements in accordance with ASC 810.

We deconsolidates our subsidiaries in accordance with ASC 810 as of the date we cease to have a controlling financial interest in our subsidiaries.

We account for the deconsolidation of our subsidiaries by recognizing a gain or loss in net income/loss attributable to us in accordance with ASC 810. This gain or loss is measured at the date our subsidiaries are deconsolidated as the difference between (a) the aggregate of the fair value of any consideration received, the fair value of any retained non-controlling interest in our subsidiaries being deconsolidated, and the carrying amount of any non-controlling interest in our subsidiaries being deconsolidated, including any accumulated other comprehensive income/loss attributable to the non-controlling interest, and (b) the carrying amount of the assets and liabilities of our subsidiaries being deconsolidated.

#### Share-based compensation

We awarded a number of share-based compensation to our employees and non-employees (such as consultants), which include share options, restricted shares, restricted share units of the Company, share option, restricted share units and ordinary shares of the Company’s subsidiaries granted to employees and non-employees. The details of these share-based awards and the respective terms and conditions are described in “Share-based compensation” in Note 26 to our audited consolidated financial statements for the years ended December 31, 2016, 2017 and 2018, which are included elsewhere in this annual report on Form 20-F.

Awards granted to employees, officers, and directors are initially accounted for as equity-classified awards. The related share-based compensation expenses are measured at the grant date fair value of the award and are recognized using the graded vesting method, net of estimated forfeiture rates, over the requisite service period, which is generally the vesting period. Forfeitures are estimated at the time of grant based on historical forfeiture rates and will be revised in the subsequent periods if actual forfeitures differ from those estimates. We also granted share options, restricted shares and restricted share units to non-employees, which are also initially accounted for as equity-classified awards. Awards granted to non-employees are initially measured at fair value on the grant date and periodically remeasured thereafter until the earlier of the performance commitment date or the date the service is completed and recognized over the period the service is provided. Awards are remeasured at each reporting date using the fair value as at each period end until the measurement date, generally when the services are completed and share-based awards are vested. Changes in fair value between the interim reporting dates are recorded in consistent with the method used in recognizing the original compensation costs.

For an award with a performance and/or service condition that affects vesting, the performance and/or service condition is not considered in determining the award's fair value on the grant date. Performance and service conditions should be considered when we are estimating the quantity of awards that will vest. Compensation cost will reflect the number of awards that are expected to vest and will be adjusted to reflect those awards that do ultimately vest. We recognize compensation cost for awards with performance conditions if and when we conclude that it is probable that the performance condition will be achieved, net of an estimate of pre-vesting forfeitures over the requisite service period. We reassess the probability of vesting at each reporting period for awards with performance conditions and adjusts compensation cost based on its probability assessment, unless on certain situations, we may not be able to determine that it is probable that a performance condition will be satisfied until the event occurs.

## Share options

In determining the fair value of share options granted, a binomial option-pricing model is applied. The determination of the fair value is affected by the stock price of YY on the Nasdaq Global Market, as well as assumptions regarding a number of complex and subjective variables, including risk-free interest rates, exercise multiples, expected forfeiture rates, the expected share price volatility rates, and expected dividends.

We use the similar method in determining the fair value of share options granted by Huya.

During the year ended December 31, 2018, we granted 10,934,300 share options to employees, pursuant to the 2011 Share Incentive Scheme.

## Restricted share units

In determining the fair value of restricted share units granted, the fair value of the underlying shares of YY on the grant dates is applied. The grant date fair value of restricted share units is based on stock price of YY on the Nasdaq Global Market.

The fair value of restricted share units of Huya is determined with reference to stock price of Huya on NYSE.

The following table sets forth certain information regarding the restricted share units of YY granted to our employees in 2016, 2017 and 2018 with share and per share information.

Grant Date	Restricted Shares Granted	Fair Value Per Common Share as of the Grant Date (US\$)	Type/Methodology of Valuation
January 1, 2016	192,000	3.0350	Contemporaneous/Stock price
June 30, 2016	1,338,008	1.6935	Contemporaneous/Stock price
March 22, 2017	985,000	2.3470	Contemporaneous/Stock price
June 30, 2017	850,000	2.9350	Contemporaneous/Stock price
July 1, 2017	266,756	2.9350	Contemporaneous/Stock price

August 2, 2017	640,000	3.5600	Contemporaneous/Stock price
October 19, 2017	160,000	4.6385	Contemporaneous/Stock price
December 30, 2017	19,188,274	5.6530	Contemporaneous/Stock price
April 16, 2018	241,200	4.6470	Contemporaneous/Stock price
June 12, 2018	203,700	5.7420	Contemporaneous/Stock price
June 15, 2018	498,100	5.7390	Contemporaneous/Stock price
June 30, 2018	7,174,328	5.0235	Contemporaneous/Stock price
July 31, 2018	2,088,006	4.6615	Contemporaneous/Stock price
October 1, 2018	20,000	3.6305	Contemporaneous/Stock price
December 30, 2018	1,752,460	3.0300	Contemporaneous/Stock price

### Acquisition

We apply the purchase method of accounting to account for our acquisitions. We determine the acquisition date based on the date at which all required licenses are transferred to us and we obtained control of the acquiree.

Purchase consideration generally consists of cash, contingent consideration and equity securities. In estimating the fair value of equity compensation, we consider both income and market approach and selected the methodology that is most indicative of our fair value in an orderly transaction between market participants as of the measurement date. Under the market approach, we utilize publicly-traded comparable company information to determine the revenue and earnings multiples that are used to value our equity securities. Under the income approach, we determine the fair value of our equity securities based on the estimated future cash flow discounted by an estimated weighted-average cost of capital, which reflects the overall level of inherent risk and the rate of return an outside investor would expect to earn. We base the cash flow projections on forecasted cash flows derived from the most recent annual financial forecast using a terminal value based on the perpetuity growth model.

In estimating the fair value of the contingent consideration recognized on the acquisition date, we consider the trinomial tree model. Under this model, we perform a scenario analysis and calculate the fair value of the contingent consideration based on the net present value of the total contingent payments under each scenario and the expected probability of each scenario.

The identifiable assets acquired and liabilities and contingent liabilities assumed in a business acquisition are measured initially at the fair value at the acquisition date. The excess of the cost of acquisition over the fair value of the identifiable net assets acquired is recorded as goodwill.

We are responsible for determining the fair value of the equity issued, assets acquired, liabilities assumed and intangibles identified as of the relevant acquisition date. Post-acquisition expenses are charged to general and administrative expenses directly.

#### Goodwill

Goodwill represents the amount by which the cost of acquired net assets in a business acquisition exceeds the fair value of the net identifiable assets on the date of purchase. Goodwill is carried at cost less accumulated impairment losses. Goodwill is allocated to the reporting units that are expected to benefit from the business combination in which the goodwill arises for the purpose of impairment testing. If the carrying value of the reporting unit exceeds its fair value, an impairment loss is recorded to the extent that the carrying value of goodwill exceeds its fair value. We have determined that the reporting units for testing goodwill impairment are the operating segments that constitute a business for which discrete financial information is available and for which management regularly reviews the operating results.

Estimating fair value is performed by utilizing various valuation techniques, with the primary technique being the discounted cash flow method. There are inherent limitations in any estimation technique and a minor change in the assumption could result in a significant change in its estimate of fair value, thereby increasing or decreasing the amounts of our consolidated assets, shareholders' equity and net income or loss.

We perform an impairment test on October 1 of each year or whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. RMB17.7 million, RMB2.5 million and nil of impairment of goodwill were recognized for the year ended December 31, 2016, 2017 and 2018, respectively.

## Intangible assets

Intangible assets that are acquired in business acquisitions are recognized apart from goodwill if the intangible assets arise from contractual or other legal rights, or are separately identifiable if the intangible assets do not arise from contractual or other legal rights.

The costs of determinable-lived intangible assets are amortized to expense over their estimated life and stated at cost (fair value at acquisition) less accumulated amortization. The value of indefinite-lived intangible assets is not amortized, but tested for impairment annually on October 1 of each year, or whenever events or changes in circumstances indicate that the carrying value of the assets may not be recoverable. We reassess indefinite-lived intangible assets at each reporting period to determine whether events or circumstances continue to support an indefinite useful life.

## Impairment of investment, long-lived assets and intangible assets

The carrying amounts of investment, long-lived assets and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is evaluated by a comparison of the carrying amount of assets to future undiscounted net cash flows expected to be generated by the assets. Such assets are considered to be impaired if the sum of the expected undiscounted cash flow is less than carrying amount of the assets. The impairment to be recognized is measured by the amount by which the carrying amounts of the assets exceed the fair value of the assets. RMB80.1 million of impairment of investments, RMB43.0 million of impairment of prepayment to a game developer and RMB3.8 million of impairment of intangible assets were recognized for the year ended December 31, 2016. RMB43.2 million of impairment of investments, was recognized for the year ended December 31, 2017. RMB35.3 million (US\$5.1 million) of impairment of investments, was recognized for the year ended December 31, 2018.

## Taxation and uncertain tax positions

Current income tax is provided on the basis of income for financial reporting purposes, adjusted for income and expense items which are not assessable or deductible for income tax purposes. In accordance with the regulations of the relevant tax jurisdictions, deferred income taxes are accounted for using an asset and liability method. Under this method, deferred income taxes are recognized for the tax consequences of temporary differences by applying enacted statutory rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. The tax base of an asset or liability is the amount attributed to that asset or liability for tax purpose. The effect on deferred taxes of a change in tax rates is recognized in statement of operations and comprehensive income in the period of change. A valuation allowance is provided to reduce the amount of deferred tax assets if it is considered more likely than not that some portion of, or all of the deferred tax assets will not be realized.

We currently have deferred tax assets resulting from net operating loss carryforwards and deductible temporary differences, all of which are available to reduce future tax payable in our significant tax jurisdictions. The largest component of our deferred assets are the temporary differences generated by our PRC subsidiary and VIE due to recognition of the deferred revenue. In assessing whether such deferred tax assets can be realized in the future, we need to make judgments and estimates on the ability of each of our PRC subsidiary and VIE to generate taxable income in the future years. To the extent that we believe it is more likely than not that some portion or the entire amount of deferred tax assets will not be realized, we established a total valuation allowance to offset the deferred tax assets. As of December 31, 2016, 2017 and 2018, a total valuation allowance of RMB80.7 million, RMB135.5 million and RMB175.8 million (US\$25.6 million), respectively, was recognized against deferred tax assets. If we subsequently determine that all or a portion of the temporary differences are more like than not to be realized, the valuation allowance will be released, which will result in a tax benefit in our consolidated statements of operations.

We adopted the guidance on accounting for uncertainty in income taxes on January 1, 2008. The guidance prescribes a more likely than not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Guidance was also provided on derecognition of income tax assets and liabilities, classification of current and deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, accounting for income taxes in interim periods, and income tax disclosures. Significant judgment is required in evaluating our uncertain tax positions and determining the relevant provision for income taxes. The adjustment to the opening balance of retained earnings as of January 1, 2008 as a result of the implementation of the guidance was zero. We did not recognize any significant interest and penalties associated with tax positions for the years ended December 31, 2016, 2017 and 2018. As of December 31, 2016, 2017 and 2018, we had no significant unrecognized uncertain tax positions.

In October 2016, the FASB issued ASU 2016-16, Income Taxes: Intra-Entity Transfers of Assets Other Than Inventory (Topic 740). This standard will require entities to recognize the income tax consequences of intra-entity transfers of assets other than inventory at the time of transfer. This standard requires a modified retrospective



approach to adoption. We adopted ASU 2016-16 from January 1, 2018 using a modified retrospective transition method. There was no material impact to our consolidated financial statements.

#### Foreign currency

We use Renminbi as our reporting currency. The functional currency of our company and our subsidiaries, incorporated in the Cayman Islands, British Virgin Islands, Hong Kong and Singapore is U.S. dollars, while the functional currency of the other entities is Renminbi, which is their respective local currency. In the consolidated financial statements, the financial information of our company and our subsidiaries which use U.S. dollars as their functional currency have been translated into Renminbi. Assets and liabilities are translated at the exchange rates on the balance sheet date, equity amounts are translated at historical exchange rates, and revenues, expenses, gains and losses are translated using the average rate for the period. Translation adjustments arising from these are reported as foreign currency translation adjustments and are shown as a component of other comprehensive income or loss in the statement of operations and comprehensive income.

Foreign currency transactions denominated in currencies other than functional currency are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are re-measured at the applicable rates of exchange in effect at that date. Foreign exchange gains and losses resulting from the settlement of such transactions and from re-measurement at year-end are recognized in foreign currency exchange gains (losses), net in the consolidated statements of operations and comprehensive income.

### Convertible Bonds

In accordance with ASC subtopic 470-20, the convertible debts are initially carried at the principal amount of the convertible debts. Related debts issuance cost, are subsequently amortized using effective interest method as adjustments to interest expense from the debt issuance date to its first put date. Convertible debts are classified as a current liability if they are or will be callable by us or puttable by the debt holders within one year from the balance sheet date, even though liquidation may not be expected within that period.

### Results of Operations

The following table sets forth a summary of our consolidated results of operations for the years indicated. Our business has grown rapidly since our inception, and our limited operating history makes it difficult to predict future operating results. We believe that period-to-period comparisons of results of operations should not be relied upon as indicative of future performance.

	For the Year Ended December 31,				2018			
	2016		2017		RMB	US\$		
	RMB	% of total net revenues	RMB	% of total net revenues	RMB	US\$		% of total net revenues
Total net revenues <sup>(1)(2)</sup>	8,204,050	100.0	11,594,792	100.0	15,763,557	2,292,714		100.0
Live streaming	7,027,227	85.7	10,670,954	92.0	14,877,667	2,163,867		94.4
Others	1,176,823	14.3	923,838	8.0	885,890	128,847		5.6
Cost of revenues	(5,103,430)	(62.2)	(7,026,402)	(60.6)	(10,017,134)	(1,456,932)		(63.5)
Gross profit	3,100,620	37.8	4,568,390	39.4	5,746,423	835,782		36.5
Research and development expenses	(675,230)	(8.2)	(781,886)	(6.7)	(1,192,052)	(173,377)		(7.6)
Sales and marketing expenses	(387,268)	(4.7)	(691,281)	(6.0)	(1,149,316)	(167,161)		(7.3)
General and administrative expenses	(482,437)	(5.9)	(544,641)	(4.7)	(883,225)	(128,460)		(5.6)

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Goodwill impairment	(17,665 )	(0.2 )	(2,527 )	(0.0 )	-	-	-
Total operating expenses	(1,562,600)	(19.0 )	(2,020,335 )	(17.4 )	(3,224,593 )	(468,998 )	(20.5 )
Gain on deconsolidation and disposal of subsidiaries	103,960	1.3	37,989	0.3	-	-	-
Other income	129,504	1.6	113,187	1.0	117,860	17,142	0.7
Operating income	1,771,484	21.6	2,699,231	23.3	2,639,690	383,926	16.7
Gain on deemed disposal and disposal of investments	25,061	0.3	45,861	0.4	16,178	2,353	0.1
Fair value loss on derivative liabilities	-	-	-	-	(2,285,223 )	(332,372 )	(14.5 )
Gain on fair value changes of investments	-	-	-	-	1,689,404	245,714	10.7
Foreign currency exchange (losses)/gains, net	1,158	0.0	(2,176 )	(0.0 )	(514 )	(75 )	(0.0 )
Interest expense	(81,085 )	(1.0 )	(32,122 )	(0.3 )	(8,616 )	(1,253 )	(0.1 )
Interest income and investment income	67,193	0.8	180,384	1.6	485,552	70,621	3.1
Other non-operating expense	-	-	-	-	(2,000 )	(291 )	(0.0 )
Income before income tax expenses	1,783,811	21.7	2,891,178	24.9	2,534,471	368,623	16.1
Income tax expenses	(280,514 )	(3.4 )	(415,811 )	(3.6 )	(477,707 )	(69,480 )	(3.0 )
Income before share of income in equity method investments, net of income taxes	1,503,297	18.3	2,475,367	21.3	2,056,764	299,143	13.0
Share of income in equity method investments, net of income taxes	8,279	0.1	33,024	0.3	58,933	8,571	0.4
Net income	1,511,576	18.4	2,508,391	21.6	2,115,697	307,714	13.4
Less: Net (loss) income attributable to the non-controlling interest shareholders and the mezzanine equity classified non-controlling interest shareholders	(12,342 )	(0.2 )	(4,532 )	(0.0 )	(93,310 )	(13,571 )	(0.6 )
Net income attributable to controlling interest of the Company	1,523,918	18.6	2,512,923	21.7	2,209,007	321,285	14.0
Less: Accretion of subsidiaries' redeemable convertible preferred shares to redemption value	-	-	19,688	0.2	73,159	10,641	0.5
Cumulative dividend on subsidiary's Series A Preferred Shares	-	-	-	-	4,606	669	0.0

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Deemed dividend to subsidiary's Series A Preferred Shareholders	-	-	-	-	489,284	71,163	3.1
Net income attributable to common shareholders of the Company	1,523,918	18.6	2,493,235	21.5	1,641,958	238,812	10.4

Notes:

(1) Net of rebates and discounts.

(2) From January 1, 2018, revenue presentation has been changed to live streaming and others. We also have retrospectively changed the revenue presentation for the years ended December 31, 2014, 2015, 2016 and 2017.

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

**Net revenues.** Our net revenues increased by 36.0% from RMB11,594.8 million in 2017 to RMB15,763.6 million (US\$2,292.7 million) in 2018. This increase was primarily driven by the increase in live streaming revenues.

**Live streaming revenues.** Our live streaming revenues, which consisted of revenues from YY Live platform and Huya platform, increased by 39.4% from RMB10,671.0 million in 2017 to RMB14,877.7 million (US\$2,163.9 million) in 2018. The overall increase was primarily caused by increases in the number of paying users from 16.6 million in 2017 to 19.8 million in 2018 and ARPU from RMB643.2 in 2017 to RMB751.2 in 2018. The increase in paying users were primarily due to (a) our ability to offer new and attractive products and services that allow us to monetize our platforms; (b) our ability to attract and retain a large and engaged user base through hosting an increasing number of events and activities; and (c) our ability to attract certain popular performers and channel owners.

**Other revenues.** Other revenues, which mainly include revenues from our online games, membership, online advertising and online education platform decreased by 4.1% to RMB885.9 million (US\$128.8 million) for 2018 from RMB923.8 million for 2017, primarily due to the decrease in online game revenue.

**Cost of revenues.** Our cost of revenues increased by 42.6% from RMB7,026.4 million in 2017 to RMB10,017.1 million (US\$1,456.9 million) in 2018. The increase in our cost of revenues was due in large part to an increase in our revenue sharing fees and content costs, which consist of the payments to performers, channel owners and content providers, which amounted to RMB8,272.7 million (US\$1,203.2 million) in 2018, representing a 44.4% increase from RMB5,727.1 million in 2017. This increase in revenue sharing fees and content costs was in line with the increase in live streaming revenues for both YY Live and Huya segments, respectively. Bandwidth costs increased 39.0% from RMB695.8 million in 2017 to RMB967.4 million (US\$140.7 million) in 2018, primarily reflecting the continued user base expansion and the video quality improvements.

**Operating expenses.** Our operating expenses increased by 59.6% from RMB2,020.3 million in 2017 to RMB3,224.6 million (US\$469.0 million) in 2018, primarily due to an increase in sales and marketing expenses, particularly in relation to sales and marketing activities in both China and the overseas market, and research and development expenses, which was associated with our commitment to research and development and the advancements in our technology development, as well as general and administrative expenses.

**Research and development expenses.** Our research and development expenses increased by 52.5% from RMB781.9 million in 2017 to RMB1,192.1 million (US\$173.4 million) in 2018. This increase was primarily due to the increase in salary of research and development staff by RMB296.8 million (US\$43.2 million) and the increase in share-based compensation by RMB102.8 million (US\$15.0 million).

**Sales and marketing expenses.** Our sales and marketing expenses increased by 66.3% from RMB691.3 million in 2017 to RMB1,149.3 million (US\$167.2 million) in 2018. This increase was primarily due to the our efforts in sales and marketing activities in both China and the overseas market.

**General and administrative expenses.** Our general and administrative expenses increased by 62.2% from RMB544.6 million in 2017 to RMB883.2 million (US\$128.5 million) in 2018. This increase was primarily due to the increase in the share-based compensation from RMB88.1 million in 2017 to RMB342.8 million (US\$49.9 million) in 2018.

**Foreign currency exchange gains (losses).** We had net foreign currency exchange losses of RMB0.5 million (US\$0.1 million) in 2018, compared to a net foreign currency exchange losses of RMB2.2 million in 2017.

**Interest income and investment income.** Our interest income and investment income increased from RMB180.4 million in 2017 to RMB485.6 million (US\$70.6 million) in 2018. This increase was primarily due to the follow-on public offering in 2017 and the issuance of the Series B-2 Preferred Shares and initial public offering of HUYA Inc. in 2018.

**Income tax expenses.** We recorded income tax expenses of RMB477.7 million (US\$69.5 million) in 2018 compared to RMB415.8 million in 2017. This increase was primarily due to the higher income before income tax expenses recorded by certain of our PRC subsidiaries and consolidated affiliated entities. To a lesser extent, the income tax expense in 2018 was also impacted by (i) non-recurring fair value loss on derivative liabilities which was non-deductible for income tax purpose, and (ii) gain on fair value change of Bigo Inc. which was non-taxable for income tax purpose, both recorded during the second quarter of 2018.

**Net income.** As a result of the foregoing, we had a net income attributable to common shareholders of the Company of RMB1,642.0 million (US\$238.8 million) in 2018 as compared to a net income of RMB2,493.2 million in 2017.

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

**Net revenues.** Our net revenues increased by 41.3% from RMB8,204.1 million in 2016 to RMB11,594.8 million in 2017. This increase was primarily driven by the increase in live streaming revenues.

**Live streaming revenues.** Our live streaming revenues, which consisted of revenues from YY Live platform and Huya platform, increased by 51.9% from RMB7,027.2 million in 2016 to RMB10,671.0 million in 2017. The overall increase was primarily caused by increases in the number of paying users from 11.0 million in 2016 to 16.6 million in 2017 and ARPU from RMB637.8 to RMB643.2 in 2017. The increase in paying users were primarily due to (a) our ability to offer new and attractive products and services that allow us to monetize our platforms; (b) our ability to attract and retain a large and engaged user base through hosting an increasing number of events and activities; and (c) our ability to attract certain popular performers and channel owners.

**Other revenues.** Other revenues, which mainly include revenues from our online games, membership, online advertising and online education platform, decreased by 21.5% to RMB923.8 million for 2017 from RMB1,176.8 million for 2016, primarily resulting from the decrease in online games revenues of RMB90.5 million and decrease in membership revenues of 87.3 million.

**Cost of revenues.** Our cost of revenues increased by 37.7% from RMB5,103.4 million in 2016 to RMB7,026.4 million in 2017. The increase in our cost of revenues was due in large part to an increase in our revenue sharing fees and content costs, which consist of the payments to performers, channel owners and content providers, which amounted to RMB5,727.1 million in 2017, representing a 51.1% increase from RMB3,790.6 million in 2016. This increase in revenue sharing fees and content costs was in line with the increase in revenues and was primarily due to higher levels of user engagement and spending driven by promotional activities, as well as investments in expanding the amount of new and innovative content we provide to users. Bandwidth costs increased 6.8% from RMB651.7 million in 2016 to RMB695.8 million in 2017, primarily reflecting the continued user base expansion and the video quality improvements, but largely offset by our improved efficiency and pricing terms.

**Operating expenses.** Our operating expenses increased by 29.3% from RMB1,562.6 million in 2016 to RMB2,020.3 million in 2017, primarily due to an increase in sales and marketing expenses, particularly in relation to mobile products promotion, and research and development expenses, which was associated with our commitment to research and development and the advancements in our technology development, as well as general and administrative expenses driven by our company's overall business expansion.

**Research and development expenses.** Our research and development expenses increased by 15.8% from RMB675.2 million in 2016 to RMB781.9 million in 2017. This increase was primarily due to an increase in salary level and the number of our research and development staff, especially engineers, which accounts for 52.0% of our total number of employees in 2017.

**Sales and marketing expenses.** Our sales and marketing expenses increased by 78.5% from RMB387.3 million in 2016 to RMB691.3 million in 2017. This increase was primarily due to the promotion of mobile products.

**General and administrative expenses.** Our general and administrative expenses increased by 12.9% from RMB482.4 million in 2016 to RMB544.6 million in 2017. This increase was associated with the general growth of our business and the decrease in investments impairment from RMB80.1 million in 2016 to RMB43.2 million in 2017.

**Foreign currency exchange gains (losses).** We had net foreign currency exchange losses of RMB2.2 million in 2017, compared to a net foreign currency exchange gains of RMB1.2 million in 2016. Such losses were mainly due to the appreciation of U.S. dollars as we converted certain offshore Renminbi to U.S. dollars in 2017.

**Interest income and investment income.** Our interest income and investment income increased from RMB67.2 million in 2016 to RMB180.4 million in 2017. This increase was primarily due to the follow-on public offering in 2017 and the issuance of the Series A Preferred Shares of HUYA Inc. in 2017.



**Income tax expenses.** We recorded income tax expenses of RMB415.8 million in 2017 compared to RMB280.5 million in 2016. This increase was primarily due to the higher income before income tax expenses recorded by certain of our PRC subsidiaries and consolidated affiliated entities.

**Net income.** As a result of the foregoing, we had a net income attributable to common shareholders of the Company of RMB2,493.2 million in 2017 as compared to a net income of RMB1,523.9 million in 2016.

#### Inflation

Since our inception, inflation in China has not materially affected 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.

#### Recently Issued Accounting Pronouncements

The recently issued accounting pronouncements that are relevant to us are included in note 2(mm) to our audited consolidated financial statements, which are included in this annual report.

## B. Liquidity and Capital Resources

### Cash Flows and Working Capital

In recent years, we have financed our operations primarily through cash flows from operations, the proceeds from our initial public offering in November 2012, the proceeds from our convertible senior notes offering in March 2014 and the proceeds from our follow-on offering in August 2017. We expect to require cash to fund our ongoing operational needs, particularly our revenue sharing fees and content costs, salaries and benefits, bandwidth costs and potential acquisitions or strategic investments. We believe that our current cash and cash equivalents and the anticipated cash flow from operations will be sufficient to meet our anticipated working capital requirements and capital expenditures needs for the next 12 months. However, we may require additional cash resources due to changing business conditions or other future developments, including any investments or acquisitions we may decide to selectively pursue. If our existing cash resources are insufficient to meet our requirements, we may seek to sell equity or equity-linked securities, debt securities or borrow from banks.

In March 2014, we issued an aggregate of US\$400.0 million 2.25% convertible senior notes due in 2019. The net proceeds from the sale of the notes were US\$390.8 million. The notes bore interest at a rate of 2.25% per year, payable semiannually in arrears on April 1 and October 1 of each year, and such notes matured on April 1, 2019. On April 1, 2017, we repurchased for cash the notes of an aggregate principal amount of US\$399.0 million. As of the date of this annual report, no principal amount of the notes remain outstanding.

On January 19, 2017, we entered into a loan agreement with a bank, pursuant to which we borrowed a loan with a principal amount of US\$30 million. The annualized interest rate of the loan is 3-month LIBOR plus 1.5%, accruing from draw-down. The draw-down of US\$30 million took place on March 8, 2017 and have been repaid on March 1, 2018. Term deposit of RMB500 million was pledged as collateral for the loan until March 13, 2018.

On February 17, 2017, we entered into a loan agreement with a bank, pursuant to which we borrowed a loan with a total principal amount of US\$60 million. The annualized interest rate of the loan is 3-month LIBOR, accruing from draw-down. The first draw-down of US\$45 million took place on March 21, 2017 and the second draw-down of US\$15 million took place on March 30, 2017. The loan shall be repaid before February 9, 2018. Term deposit of RMB500 million was pledged as collateral for the loan until February 23, 2018. On February 9, 2018, we repaid the loan with a total amount of US\$60 million.

On February 28, 2019, we entered into a facility agreement with Goldman Sachs Lending Partners LLC, or Goldman Sachs. Subject to the terms of this agreement, Goldman Sachs agreed to make available to us a U.S. dollar term loan facility in an aggregate amount of up to US\$100.25 million. In March 2019, we borrowed a loan amounting to

US\$100.25 million under this facility agreement. In April 2019, we have fully repaid such loan.

On May 16, 2017, HUYA Inc. entered into a series A preferred shares subscription agreement with its series A investors and pursuant to which, HUYA Inc. issued 22,058,823 series A preferred shares of HUYA Inc. at a price of US\$3.4 per share for an aggregate consideration of US\$75 million (equivalent to RMB509.7 million as of the issuance date). The issuance of the series A preferred shares was completed on July 10, 2017.

On August 21, 2017, we completed a secondary offering and received US\$442.2 million in net proceeds, after deducting commissions and offering expenses.

On March 8, 2018, HUYA Inc. issued 64,488,235 shares of Series B-2 redeemable convertible preferred shares at a price of US\$7.16 per share for cash consideration of US\$461.6 million to Linen Investment Limited, a wholly owned subsidiary of Tencent Holdings Limited.

In May 2018, HUYA Inc., our majority-controlled subsidiary, successfully completed its initial public offering of 17,250,000 ADSs at a price of US\$12.0 per ADS, including 2,250,000 ADSs offered pursuant to the underwriters' full exercise of their over-allotment options. Each HUYA Inc. ADS represents one Class A ordinary share of HUYA Inc. HUYA Inc. received net proceeds of US\$190.1 million.

In June 2018, we invested US\$272 million in the Series D round of financing of Bigo as the lead investor. We were then an existing shareholder of Bigo and had become its largest shareholder after the Series D financing.

As of December 31, 2016, 2017 and 2018, we had RMB1,579.7 million, RMB3,617.4 million and RMB6,004.2 million (US\$873.3 million), respectively, in cash, cash equivalents and restricted cash.

As of December 31, 2018, our subsidiaries, VIEs, and VIE's subsidiaries located in the PRC held cash and cash equivalents in the amount of RMB4,724.4 million (US\$678.1 million). Aggregate undistributed earnings and reserves of our subsidiaries, VIEs, and VIE's subsidiaries located in the PRC that are available for distribution to our company as of December 31, 2018 are RMB11,519.7 million (US\$1,675.5 million). We would need to accrue and pay withholding taxes if we were to distribute funds from our subsidiaries in the PRC to our offshore subsidiaries. We do not intend to repatriate such funds in the foreseeable future, as we plan to use existing cash balance in the PRC for general corporate purposes.

The following table sets forth a summary of our cash flows for the years indicated:

	For the Year Ended December 31,			US\$
	2016	2017	2018	
	RMB	RMB	RMB	
	(in thousands)			
Net cash provided by operating activities	2,421,135	3,718,452	4,464,814	649,379
Net cash used in investing activities	(2,172,359)	(3,037,516)	(6,295,386)	(915,626)
Net cash provided by financing activities	10,651	1,392,525	4,167,270	606,105
Net increase in cash, cash equivalents and restricted cash	259,427	2,073,461	2,336,698	339,858
Cash, cash equivalents and restricted cash at the beginning of the year	1,318,155	1,579,743	3,617,432	526,134
Effect of exchange rates change on cash, cash equivalents and restricted cash	2,161	(35,772)	50,101	7,287
Cash, cash equivalents and restricted cash at the end of the year	1,579,743	3,617,432	6,004,231	873,279

#### Operating Activities

Net cash used in or generated from operating activities consists primarily of our net income mitigated by non-cash adjustments, such as share-based compensation, depreciation of property and equipment and deferred taxes, and adjusted by changes in operating assets and liabilities, such as accounts receivable, prepayments and other assets,

account payables, accrued liabilities and deferred revenue.

Net cash provided by operating activities amounted to RMB4,464.8 million (US\$649.4 million) for the year ended December 31, 2018. In 2018, the difference between our net cash provided by operating activities and our net income of RMB2,115.7 million (US\$307.7 million) was primarily due to a non-cash item adjustment in fair value loss on derivative liabilities of RMB2,285.2 million (US\$332.4 million), an increase in accrued liabilities and other current liabilities of RMB947.0 million (US\$137.7 million) as a result of an increase in accrued revenue sharing fees, a non-cash item adjustment in share-based compensation of RMB648.0 million (US\$94.3 million), an increase in deferred revenue of RMB227.6 million (US\$33.1 million), a non-cash item adjustment in depreciation of property and equipment of RMB151.0 million (US\$22.0 million), partially offset by a non-cash item adjustment in gain on fair value change of investments of RMB1,689.4 million (US\$245.7 million) and an increase in prepayments and other assets of RMB380.8 million (US\$55.4 million).

Net cash provided by operating activities amounted to RMB3,718.5 million for the year ended December 31, 2017. In 2017, the difference between our net cash provided by operating activities and our net income of RMB2,508.4 million was primarily due to an increase in accrued liabilities and other current liabilities of RMB435.1 million as a result of an increase in accrued revenue sharing fees, an increase in deferred revenue of RMB366.6 million, a non-cash item adjustment in share-based compensation of RMB257.7 million, a non-cash item adjustment in depreciation of property and equipment of RMB176.7 million, partially offset by an increase in prepayments and other assets of RMB48.3 million and an adjustment in gain on deemed disposal and disposal of investments of RMB45.9 million.

Net cash provided by operating activities amounted to RMB2,421.1 million for the year ended December 31, 2016. In 2016, the difference between our net cash provided by operating activities and our net income of RMB1,511.6 million was primarily due to an increase in accrued liabilities and other current liabilities of RMB376.4 million as a result of an increase in accrued revenue sharing fees, a non-cash item adjustment in depreciation of property and equipment of RMB173.6 million, a non-cash item adjustment in share-based compensation of RMB157.3 million, a non-cash item adjustment in amortization of acquired intangible assets and land use rights of RMB100.9 million, partially offset by an adjustment in gain on deconsolidation and disposal of subsidiaries of RMB104.0 million and an increase in prepayments and other assets of RMB97.9 million.

### Investing Activities

Net cash used in investing activities largely reflects placements of short-term deposits, placements of short-term investments, purchases of property and equipment and other non-current assets in connection with the expansion and upgrade of our technology infrastructure, and our acquisitions of investments in certain companies.

Net cash used in investing activities amounted to RMB6,295.4 million (US\$915.6 million) in the year ended December 31, 2018. Net cash used in investing activities primarily resulted from the placements of short-term deposits of RMB9,512.8 million (US\$1,383.6 million), the placements of short-term investments of RMB3,505.1 million (US\$509.8 million), the placements of long-term deposits of RMB1,000.0 million (US\$145.4 million), payments of RMB334.0 million (US\$48.6 million) for the purchase of property and equipment, which mainly consisted of the purchase of servers, and cash paid for certain acquisitions and strategic investments of RMB2,402.8 million (US\$349.5 million), partially offset by the maturities of short-term deposits and short-term investments in various banks in the amount of RMB11,316.8 million (US\$1,646.0 million). The increase in cash used in investing activities was mainly due to the increase in investment in short-term deposits, short-term investments, long-term deposits and acquisitions and strategic investments.

Net cash used in investing activities amounted to RMB3,037.5 million in the year ended December 31, 2017. Net cash used in investing activities primarily resulted from the placements of short-term deposits of RMB9,667.4 million, payments of RMB397.3 million for the purchase of property and equipment, which mainly consisted of the purchase of servers, and cash paid for certain acquisitions and strategic investments of RMB329.7 million, partially offset by the maturities of short-term deposits and short-term investments in various banks in the amount of RMB7,426.2 million. The increase in cash used in investing activities was mainly due to the increase in investment in short-term deposits.

Net cash used in investing activities amounted to RMB2,172.4 million in the year ended December 31, 2016. Net cash used in investing activities primarily resulted from the placements of short-term deposits of RMB8,027.3 million, payments of RMB162.4 million for the purchase of property and equipment, which mainly consisted of the purchase

of servers, and cash paid for certain acquisitions and strategic investments of RMB199.2 million, partially offset by the maturities of short-term deposits in various banks in the amount of RMB6,324.9 million. The increase in cash used in investing activities was mainly due to the increase in investment in short-term deposits.

#### Financing Activities

Net cash provided by financing activities was RMB4,167.3 million (US\$606.1 million) in 2018, primarily attributable to the proceeds of RMB2,919.1 million from issuance of Huya's Series B-2 Preferred Shares, the proceeds of RMB1,207.7 million from issuance of Huya's common shares upon its initial public offering, net of issuance cost, the proceeds of RMB691.6 million from bank borrowings, and RMB1,308.1 million repayment of bank borrowings.

Net cash provided by financing activities was RMB1,392.5 million in 2017, primarily attributable to capital contributions from mezzanine equity amounting to RMB509.5 million, the proceeds of RMB621.1 million from bank borrowings, the proceeds of RMB2,950.6 million from issuance of common shares, net of issuance cost and RMB2,753.6 million repayment of convertible bonds.

Net cash provided by financing activities was RMB10.7 million in 2016, primarily attributable to capital contributions from non-controlling interests.

#### Capital Expenditures

We made capital expenditures of RMB237.8 million, RMB497.7 million and RMB392.8 million (US\$57.1 million) in 2016, 2017 and 2018, respectively. Our capital expenditures are primarily used to purchase office space, computers, servers, office furniture, operating rights, domain names and other assets.

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

In order to support the kind of multi-user, real-time online voice and video communications on a scale necessary for our platforms, we build and develop our own network infrastructure. See “Item 4. Information on the Company—B. Business Overview—Research and Development” for a description of the research and development aspect of our business and “Item 4. Information on the Company—B. Business Overview—Intellectual Property” for a description of the protection of our intellectual property.

Research and development expenses consist primarily of salaries and benefits for research and development personnel and rental and depreciation of office premises and servers utilized by the research and development personnel. Research and development expenses greatly increased in the past three years ended December 31, 2018, due to the need for additional research and development personnel to accommodate the rapid growth of our business. We expect our research and development expenses in absolute amount to increase as we intend to retain existing research and development personnel and also hire new ones to, among other things, develop new series of applications for our platforms, improve technology infrastructure to further enhance user experience, and further develop enhanced features for our mobile applications to reach more users. We incurred RMB675.2 million, RMB781.9 million and RMB1,192.1 million (US\$173.4 million) of research and development expenses in 2016, 2017 and 2018, respectively.

#### 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 the beginning of our fiscal year 2018 that are reasonably likely to have a material effect on our net revenues, income from operations, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future operating results or financial condition.



E. Off-Balance Sheet Arrangements

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholders' (deficit)/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. 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 research and development services with us.

F. Tabular Disclosure of Contractual Obligations

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

	Payment Due by Period				
	Total	Less than 1 year	1-2 years	3-5 years	More than 5 years
	<b>(in thousands)</b>				
Operating lease commitments <sup>(1)</sup> (in RMB)	221,895	84,689	53,609	83,597	-
Capital commitment <sup>(2)</sup> (in RMB)	193,412	154,427	27,383	11,599	3
Convertible senior notes <sup>(3)</sup> (in US\$)	1,006	1,006	-	-	-

- (1) Operating lease commitments refer to the lease of offices under operating lease agreements, where a significant portion of the risks and rewards of ownership are retained by the lessor. Payments made under operating leases are charged to the consolidated statements of operations on a straight-line basis over the period of the lease, including any free lease periods.
- (2) Capital commitment refers to capital expenditures related to properties and additional investments in equity investments.

(3) The convertible senior notes were redeemable at the holders' option on April 1, 2017. US\$399,000,000 aggregate principal amount of the notes were redeemed on April 1, 2017. We has accepted the repurchase and has forwarded cash in payment of the repurchase price to the paying agent for distribution to the holders who had exercised the option. Following the repurchase, US\$1,000,000 aggregate principal amount of the notes remained outstanding and has been fully repaid as of the date of this annual report.

Our operating lease obligations increased from December 31, 2017 to December 31, 2018 primarily because we entered into some new leases in 2018.

Other than the obligations set forth above, we did not have any significant operating lease obligations, purchase obligations or other long-term obligations as of December 31, 2018.

#### G. Safe Harbor

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

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

### A. Directors and Senior Management

The following table sets forth information regarding our directors and executive officers as of the date of this annual report. There are no family relationships among any of the directors or executive officers of our company.

<b>Directors and Executive Officers</b>	<b>Age</b>	<b>Position/Title</b>
David Xueling Li	46	Chairman of the Board and Director, Chief Executive Officer of YY Inc.
Qin Liu	48	Independent Director
Peter Andrew Schloss	58	Independent Director
Richard Weidong Ji	53	Independent Director
David Tang	66	Independent Director
Rongjie Dong	44	Chief Executive Officer of HUYA Inc.
Bing Jin	42	Chief Financial Officer
Ting Li	35	Chief Operating Officer
Pengjun Lu	38	Chief Technology Officer

*Mr. David Xueling Li* is our co-founder and has been our chairman since August 2016. Mr. Li served as our chief executive officer since our inception to August 2016 and as our acting chief executive officer from May 2017 to April 2019. Currently, Mr. Li serves as our chief executive officer and also oversees our Bigo business. Mr. Li focuses on our broader corporate strategy and the development of new and emerging applications and products. Furthermore, Mr. Li is in charge of overseeing the business operations of Bigo. Before founding our company, Mr. Li worked at Netease.com, Inc. from July 2003 to April 2005 and served as its chief editor. In 2000, Mr. Li founded CFP.cn, a website that provided a copyright trading platform for journalists and amateur photographers. Mr. Li received a bachelor's degree in philosophy from Renmin University of China in 1997.

*Mr. Qin Liu* has been a director of our company since June 2008. Mr. Liu co-founded and has served as managing director of Morningside Venture Capital Limited, or MVCL, since June 2007. MVCL provides management service to various funds and Mr. Liu has served as director in several non-public portfolio companies of such funds. Before co-founding MVCL, Mr. Liu served various roles including a business development director for investment at Morningside IT Management Services (Shanghai) Co., Ltd. Mr. Liu has been a director of Xunlei Limited (Nasdaq: XNET) since September 2005 and also serves as a director of Xiaomi Corporation (HKSE: 01810). Mr. Liu received a bachelor degree in industrial electrical automation from University of Science and Technology Beijing in July 1993, and a master degree in business administration from China Europe International Business School in April 2000.

*Mr. Peter Andrew Schloss* has served as our independent director since November 2012. Mr. Schloss is managing director and CEO of CastleHill Partners and a partner at Phoenix Media Fund. Since February 2016, Mr. Schloss has been an independent director of Zhaopin Limited (NYSE: ZPIN). Previously Mr. Schloss was an independent director and audit committee chairman of Giant Interactive Group Inc., a NYSE-listed company, from 2007 to 2015. From 2008 to 2012, Mr. Schloss served as the chief executive officer of Allied Pacific Sports Network Limited, a leading internet and wireless provider of live and on-demand sports programs in Asia. Prior to joining Allied Pacific Sports Network Limited, Mr. Schloss worked at TOM Online Inc., serving as the chief financial officer from 2003 to 2005, as an executive director from 2004 to 2007 and as the chief legal officer from 2005 to 2007. Mr. Schloss received a bachelor's degree in political science and a juris doctor degree from Tulane University.

*Mr. Richard Weidong Ji* has served as our independent director since May 2013. Mr. Ji is the cofounder and managing partner of All-Stars Investment Limited, which focuses on investing in Internet technology leaders and consumer brands that help enhance the lives of Chinese consumers. From 2005 to 2012, Mr. Ji served as managing director and head of Asia-Pacific Internet/media investment research at Morgan Stanley Asia Limited. During his time with Morgan Stanley, Mr. Ji was consistently rated as one of the top internet analysts covering the Chinese internet according to the Institutional Investor and Greenwich Associates' annual surveys. Over Mr. Ji's career, he has received many awards from reputable publications and research groups including the Financial Times, South China Morning Post, Asiamoney, Absolute Return & Alpha magazine and iResearch Consulting Group. Mr. Ji holds a doctor of sciences degree in biological science from Harvard University, an MBA from the Wharton School of Business at the University of Pennsylvania and a Bachelor of Science from Fudan University in China. He also serves as an independent director of Cheetah Mobile Inc.

*Mr. David Tang* has served as our independent director since May 2013. Mr. Tang currently serves as a managing director of Nokia Growth Partners, a global venture capital firm that specializes in investing in mobile technologies and mobile businesses. From 2011 to 2012, Mr. Tang was the vice president of the European Union Chamber of Commerce in China, vice chairman of the China Association of Enterprises with Foreign Investments, and vice chairman of the Beijing International Chamber of Commerce. Mr. Tang has spent nearly a decade with the Nokia group, having served as the vice chairman of Nokia (China) Investment Co., Ltd. and chairman of Nokia Telecommunications Ltd. where he was responsible for government relations, strategic partnerships, corporate development, and sustainability. Prior to serving in those roles, he was the vice chairman and vice president of sales for Nokia in the greater China region from 2005 to 2009. Mr. Tang has also held executive positions in other leading global technology firms such as Apple, AMD, 3Com, DEC, and AST. Mr. Tang received his bachelor's degree in

Computer Science and Engineering from California State University at Long Beach and a master's degree in Business from California State University at Fullerton.

*Mr. Rongjie Dong* is the chief executive officer of HUYA Inc., a role in which he has served since August 2016. He served as our executive vice president from April 2013 to August 2016. Prior to joining us, he served as product manager and head of the technology department of 163.com from 2000 to 2006. Mr. Dong received his bachelor's degree in computer hardware from Beijing Information Engineering Institute (now known as Beijing Information Science and Technology University) in 1999.

*Mr. Bing Jin* has been our chief financial officer since May 2017. Prior to joining us, Mr. Jin served as the Head of China Technology, Investment Banking and Capital Markets, Asia Pacific, at Credit Suisse. During his tenure at Credit Suisse, Mr. Jin worked with many U.S. listed and private Chinese technology companies for various financing and M&A transactions. From 2010 to 2014, Mr. Jin worked in Citi's China Investment Banking department. Before his investment banking career, Mr. Jin worked in government services, consulting, and corporate banking. Mr. Jin received an MBA from the Wharton School, a Master's degree in Pacific International Affairs from the University of California, San Diego, and a Bachelor's degree in English from the Beijing Foreign Studies University.

*Ms. Ting Li* has been our chief operating officer since 2016. Ms. Li has been focusing on our ecosystem development and the enrichment of our content and product offerings since she joined us in 2011. In 2017, Ms. Li was in charge of the updates and launch of YY Live 7.0, which for the first time in the industry observed and satisfied user demand for personalized interactions with live streaming hosts. Prior to joining us, Ms. Li served as product manager at Tencent from 2006 to 2011. Ms. Li received a Bachelor's degree from South China University of Technology in 2006.

*Mr. Pengjun Lu* has been our chief technology officer since May 2018. Prior to joining us, Mr. Lu served as the general manager in charge of search advertising and chief architect in infrastructure team at Baidu from 2014 to early 2018. From 2006 to 2014, Mr. Lu worked at Google, most recently as a staff engineer in charge of Shanghai advertising back-end team, and received the Google Founders Award for the QueST project. Mr. Lu received a Master's degree in computer science and technology from Fudan University, and a Bachelor's degree in computer science and technology from Wuhan University.

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

For the fiscal year ended December 31, 2018, we paid an aggregate of RMB19.6 million (US\$2.8 million) in cash, including salaries and bonuses, to our directors and executive officers. We also awarded an aggregate of 367,870 ordinary shares of HUYA Inc. to our directors and executive officers in 2018. For details on the share incentive grants to our directors and officers, see “—Share Incentive Plans.” For the fiscal year ended December 31, 2018, we made contributions for our directors and executive officers for their pension insurance, medical insurance, housing fund, unemployment and other statutory benefits as required by PRC laws in an aggregate amount of RMB0.5 million (US\$0.07 million). We did not set aside or accrue any other pension or retirement benefits for our directors and executive officers for the fiscal year ended December 31, 2018.

**Employment Agreements**

We have entered into employment agreements with our senior executive officers. We may terminate a senior executive officer's employment for cause at any time without remuneration for certain acts of the officer, such as being convicted of any criminal conduct, any act of gross or willful misconduct or any serious, willful, grossly negligent or persistent breach of any employment agreement provision, or engaging in any conduct which may make the continued employment of such officer detrimental to our company. We may also terminate a senior executive officer's employment by giving three months' prior written notice. A senior executive officer may terminate his or her employment at any time by giving three months' written notice, provided that such notice may only be given by the officer any time after the third anniversary of his or her employment.

Each senior executive officer has agreed to hold all information, know-how and records in any way connected with the business of our company, including, without limitation, all formulae, designs, specifications, drawings, data, operations and testing procedures, manuals and instructions and all customer and supplier lists, sales information, business plans and forecasts and all technical or other expertise and all computer software of our company, in strict confidence during and after his or her employment. Each officer also agrees that we shall own all the intellectual property developed by such officer during his or her employment.

## Share Incentive Plans

We have adopted two share incentive plans, namely, the 2009 Scheme and the 2011 Plan. In addition, our controlling subsidiary, HUYA Inc. adopted its 2017 share incentive plan, or HUYA Amended and Restated 2017 Plan, in July 2017 and amended and restated in March 2018. The purpose of these three share incentive plans is to attract and retain personnel by linking the personal interests of the members of the board, officers, employees and consultants to the success of our business and by providing such individuals with an incentive for outstanding performance. As of April 15, 2019, options to purchase 10,934,300 common shares, 41,179,601 restricted shares and 37,392,578 restricted share units were outstanding under the 2009 Scheme and the 2011 Plan. As of April 15, 2019, options to purchase 16,896,555 HUYA Inc.'s class A ordinary shares and 4,267,885 HUYA Inc.'s restricted share units were outstanding under the HUYA Amended and Restated 2017 Plan.

## 2009 Employee Equity Incentive Scheme

We adopted the 2009 Scheme in December 2009. In September 2011, YY Inc. assumed all the rights and obligations of Duowan Entertainment Corporation under all share-based compensation previously issued by Duowan Entertainment Corporation, including under the relevant award agreement and under the 2009 Scheme, if applicable, and undertook to issue its own common shares upon the exercise of any share-based compensation awards previously issued by Duowan Entertainment Corporation, subject to compliance with the terms and conditions of the relevant award agreements and the 2009 Scheme, if applicable.

Under the 2009 Scheme, the maximum number of shares in respect of which options or restricted shares may be granted is 120,020,001.

The following paragraphs summarize the terms of the 2009 Scheme.

***Types of Awards.*** The following briefly describe the principal features of the various awards that may be granted under the 2009 Scheme.

***Options.*** Options provide for the right to purchase a specified number of our common shares at a specified price and usually will become exercisable at the discretion of our plan administrator in one or more installments after the grant date. The option exercise price may be paid, subject to the discretion of the plan administrator, in cash or check, in our common shares which have been held by the option holder for such period of time as may be required to avoid adverse accounting consequences, in other property with value equal to the exercise price, through a broker-assisted cashless exercise, or by any combination of the foregoing.

***Restricted Shares.*** A restricted share award is the grant of our common shares which are subject to certain restrictions and may be subject to risk of forfeiture. Unless otherwise determined by our plan administrator, a restricted share is nontransferable and may be forfeited or repurchased by us upon termination of employment or service during a restricted period. Our plan administrator may also impose other restrictions on the restricted shares, such as limitations on the right to vote or the right to receive dividends.

***Plan Administration.*** Our board or a committee of one or more members of our board duly authorized for the purpose of the 2009 Scheme can act as the plan administrator.



**Award Agreement.** Options or restricted shares granted under the 2009 Scheme are evidenced by an award agreement that sets forth the terms, conditions and limitations for each grant.

**Option Exercise Price.** The exercise price in respect of any option shall be fixed by reference to the date upon which the option (or the relevant part thereof) is granted, and shall be, at the election of the plan administrator, (a) the latest valuation price per share certified by a third party valuer prior to the date of grant of the relevant option (or relevant part thereof) or (b) the latest price per share at which we have issued any shares prior to the date of grant of the relevant option (or relevant part thereof).

**Eligibility.** We may grant awards to our employees, officers and directors or consultants to our members.

**Term of the Awards.** The 2009 Scheme shall be valid and effective for a period of ten years from the date of effectiveness. The term of each option or restricted share grant shall be ten years from the date of the grant.

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

***Transfer Restrictions.*** Awards for options or restricted shares may not be transferred in any manner by the award holders and may be exercised only by such holders, subject to limited exceptions. Restricted shares may not be transferred during the period of restriction.

***Termination.*** The plan administrator may at any time terminate the operation of the 2009 Scheme.

Prior to the adoption of the 2009 Scheme, we granted certain share options to our employees pursuant to certain share option agreements which carried substantially the same terms and conditions with those stipulated in the 2009 Scheme.

#### 2011 Share Incentive Plan

We adopted the 2011 Plan in September 2011.

Under the 2011 Plan, the maximum number of common shares reserved for issuance under the plan is 43,000,000, plus an annual increase of 20,000,000 on the first day of each fiscal year, beginning in 2013, or such smaller number of common shares as determined by our board of directors.

The following paragraphs summarize the terms of the 2011 Plan.

***Types of Awards.*** The following briefly describe the principal features of the various awards that may be granted under the 2011 Plan.

***Options.*** Options provide for the right to purchase a specified number of our common shares at a specified price and usually will become exercisable at the discretion of our plan administrator in one or more installments after the grant date. The option exercise price may be paid, subject to the discretion of the plan administrator, in cash or check, in

our common shares which have been held by the option holder for such period of time as may be required to avoid adverse accounting consequences, in other property with value equal to the exercise price, through a broker-assisted cashless exercise, or by any combination of the foregoing.

*Restricted Shares.* A restricted share award is the grant of our common shares which are subject to certain restrictions and may be subject to risk of forfeiture. Unless otherwise determined by our plan administrator, a restricted share is nontransferable and may be forfeited or repurchased by us upon termination of employment or service during a restricted period. Our plan administrator may also impose other restrictions on the restricted shares, such as limitations on the right to vote or the right to receive dividends.

*Restricted Share Units.* A restricted share unit award is the grant of the right to receive a common share at a future date and may be subject to forfeiture. Our plan administrator has the discretion to set performance objectives or other vesting criteria that will determine the number or value of restricted share units to be granted. Unless otherwise determined by our plan administrator, a restricted share unit is nontransferable and may be forfeited or repurchased by us upon termination of employment or service during a restricted period. Our plan administrator, at the time of grant, specifies the dates on which the restricted share units become fully vested.

*Plan Administration.* Our board or a committee of one or more members of our board duly authorized for the purpose of the 2011 Plan can act as the plan administrator.

*Award Agreement.* Options, restricted shares or restricted shares units granted under the 2011 Plan are evidenced by an award agreement that sets forth the terms, conditions and limitations for each grant.

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

**Eligibility.** We may grant awards to our employees, consultants or directors.

**Term of the Awards.** The 2011 Plan shall be valid and effective for a period of ten years from the date of effectiveness. The term of each option grant shall not exceed ten years from the date of the grant.

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

**Transfer Restrictions.** Awards for options, restricted shares or restricted share units may not be transferred in any manner by the award holders and may be exercised only by such holders, subject to limited exceptions. Restricted shares may not be transferred during the period of restriction.

**Termination.** The plan administrator may at any time terminate the operation of the 2011 Plan.

HUYA Amended and Restated 2017 Plan

The following paragraphs describe the principal terms of the Amended and Restated 2017 Plan.

**Type of awards.** The Amended and Restated 2017 Plan permits the awards of options, restricted share units or any other type of awards approved by the committee or the board of directors of HUYA Inc.

**Plan administration.** The Amended and Restated 2017 Plan is administered by the board of directors of HUYA Inc. or by a committee of one or more members of the board of directors of HUYA Inc. to whom the board shall delegate the authority to grant or amend awards to any eligible persons other than any of members of the committee serving as

the plan administrator. The plan administrator has the power and authority to determine the persons who are eligible to receive awards, as well as other terms and conditions of awards. Any grant or amendment of awards to any committee member serving as the plan administrator shall then require an affirmative vote of a majority of the board members who are not on the committee serving as the plan administrator.

**Award agreement.** Any award granted under the Amended and Restated 2017 Plan is evidenced by an award agreement that sets forth terms, conditions and limitations for such award, which may include the number of shares subject to the award awarded, the exercise price, the provisions applicable in the event of the grantee's employment or service terminates, among other provisions. The plan administrator may amend the terms of any award, prospectively or retroactively; provided that no such amendment shall impair the rights of any participant without his or her consent.

**Eligibility.** HUYA Inc. may grant awards to directors, officers, employees and consultants of us, HUYA Inc. or any of HUYA Inc.'s subsidiaries.

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

**Exercise of options.** Once all the preconditions provided in the relevant award agreements are met, a participant may exercise options in whole or in part by giving written notice of exercise to us specifying information such as the number of shares to be purchased, as well as making full payment of the aggregate exercise price of the shares so purchased.

**Term of options.** The plan administrator determines the term of each option and provides it in the relevant award agreement, but no option shall be exercisable more than five years after the grant date.

**Transfer restrictions.** Except under the laws of descent and distribution or otherwise permitted by the plan administrator, the participant will not be permitted to sell, transfer, pledge or assign any awards. In principle, all awards shall be exercisable only by the participants. However, a participant may also transfer one or more awards to a trust controlled by him or her for estate planning purposes.

**Termination and amendment of the Amended and Restated 2017 Plan.** The board of directors of HUYA Inc. may amend, alter or discontinue the Amended and Restated 2017 Plan, but no amendment, alteration or discontinuation shall be made if such amendment, alteration or discontinuation would impair the rights of a participant under any award without such participant's consent.

The following table summarizes, as of April 15, 2019, the outstanding options granted to our executive officers, directors and other individuals as a group.

	Common Shares Underlying Options Awarded	Exercise Price (US\$/Share)	Date of Grant	Date of Expiration
Ting Li	*	4.7025	June 30, 2018	June 30, 2024
Bing Jin	*	4.7025	July 20, 2018	June 30, 2024
	*	4.7025	July 20, 2018	August 2, 2023
Other Individuals as a Group	*	4.7025	June 30, 2018	June 30, 2024
Total	10,934,300			

\* The aggregate number of common shares underlying the outstanding options held by this individual is less than 1% of our total outstanding shares.

We granted 11,737,705 options of HUYA Inc. in 2017 and 5,918,353 and 220,000 to our employees and non-employees in 2018, respectively. Among the grantees, David Xueling Li, our co-founder, chairman and chief executive officer, was awarded options to receive 5,882,353 Class A ordinary shares of HUYA Inc. on March 15, 2018, and such options will expire on March 14, 2028. In addition, Rongjie Dong, chief executive officer of HUYA Inc., was awarded options to receive 5,647,700 Class A ordinary shares of HUYA Inc. on August 9, 2017, and such options will expire on August 8, 2027. As of April 15, 2019, options to purchase 16,896,555 Class A ordinary shares of HUYA Inc. were outstanding.

The following table summarizes, as of April 15, 2019, the outstanding restricted shares granted to our executive officers, directors and other individuals as a group.

Name	Restricted Shares Granted	Date of Grant
Other Individuals as a Group	*	January 1, 2010 to January 1, 2011
	36,268,785	March 04, 2019
	*	April 1, 2019 to April 15, 2019
Total	41,179,601	

\* The aggregate number of common shares underlying the outstanding restricted shares held by each of these individuals is less than 1% of our total outstanding shares.

The following table summarizes, as of April 15, 2019, the outstanding restricted share units granted to our executive officers, directors and other individuals as a group.

Name	Common Shares Underlying Restricted Share Units Granted	Date of Grant
David Xueling Li	*	April 30, 2013
	*	June 20, 2014
Peter Andrew Schloss	*	November 7, 2012
	*	June 16, 2014
	*	November 7, 2015
Richard Weidong Ji	*	May 23, 2013
	*	June 16, 2014
David Tang	*	May 23, 2013
	*	June 16, 2014
Rongjie Dong	*	April 30, 2013
	*	July 19, 2013
	*	June 20, 2014
	*	June 30, 2015
Qin Liu	*	August 6, 2015
Ting Li	*	April 30, 2013
	*	June 20, 2014
	*	July 1, 2015
	*	June 30, 2018
Bing Jin	*	August 2, 2017
Pengjun Lu	*	June 30, 2018



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Other Individuals as a Group	31,076,488	January 1, 2011 to March 31, 2019
Total	37,392,578	

\* The aggregate number of common shares underlying the outstanding restricted share units, or RSUs, held by each of these individuals is less than 1% of our total outstanding shares.

In 2018, HUYA Inc. granted 4,183,685 and 10,000 restricted share units to its employees and non-employees, respectively. As of April 15, 2019, a total of 4,267,885 restricted share units of HUYA Inc. were granted and outstanding. Among the grantees, Rongjie Dong, the chief executive officer of HUYA Inc., was granted a certain amount of the restricted share units that are outstanding, which represent less than 1% of the total outstanding shares of HUYA Inc.

### C. Board Practices

Our board of directors currently consists of five directors. A director is not required to hold any shares in our company to qualify to serve as a director. A director may vote with respect to any contract, proposed contract, or arrangement in which he or she is materially interested. A director may exercise all the powers of the company to borrow money, mortgage its business, property and uncalled capital, and issue debentures or other securities whenever money is borrowed or as security for any obligation of the company or of any third party. See “Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers” for a description of the employment agreements we have entered into with our senior executive officers.

#### Committees of the Board of Directors

We have established an audit committee, a compensation committee and a corporate governance and nominating committee under the board of directors. 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. Peter Andrew Schloss, Mr. David Tang and Mr. Richard Weidong Ji, and is chaired by Mr. Schloss. We have determined that each of Mr. Schloss, Mr. Tang and Mr. Ji satisfies the “independence” requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq Global Select Market and meet the independence standards under Rule 10A-3 under the Securities Exchange Act of 1934, as amended. We have determined that Mr. Schloss 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:

selecting the independent registered public accounting firm and pre-approving all auditing and non-auditing services permitted to be performed by the independent registered public accounting firm;

reviewing with the independent registered public accounting firm any audit problems or difficulties and management’s response;

reviewing and approving all proposed related party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;

discussing the annual audited financial statements with management and the independent registered public accounting firm;

· reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of any material control deficiencies;

· annually reviewing and reassessing the adequacy of our audit committee charter;

· meeting separately and periodically with management and the independent registered public accounting firm; and

· reporting regularly to the board.

***Compensation Committee.*** Our compensation committee consists of Mr. David Xueling Li and Mr. David Tang, and is chaired by Mr. David Xueling Li. We have determined that Mr. Tang satisfies the “independence” requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq Global Select Market. 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 directors may not be present at any committee meeting during which their compensation is deliberated upon. The compensation committee is responsible for, among other things:

· reviewing the total compensation package for our executive officers and making recommendations to the board with respect to it;

· approving and overseeing the total compensation package for our executives other than the three most senior executives;

· reviewing the compensation of our directors and making recommendations to the board with respect to it;

· periodically reviewing and approving any long-term incentive compensation or equity plans, programs or similar arrangements, annual bonuses, and employee pension and welfare benefit plans; and

· selecting compensation consultant, legal counsel or other adviser only after taking into consideration all factors relevant to that person's independence from management.

**Corporate Governance and Nominating Committee.** Our nominating committee consists of Mr. David Tang, Mr. Qin Liu and Mr. Peter Andrew Schloss, and is chaired by Mr. Tang. We have determined that each of Mr. Tang and Mr. Schloss satisfies the "independence" requirements of Rule 5605(c)(2) of the Listing Rules of the Nasdaq Global Select Market. The nominating committee assists the board in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating committee is responsible for, among other things:

· recommending nominees to the board for election or re-election to the board, or for appointment to fill any vacancy on the board;

· reviewing annually with the board the current composition of the board with regards to characteristics such as independence, age, skills, experience and availability of service to us;

· selecting and recommending to the board the names of directors to serve as members of the audit committee and the compensation committee, as well as of the nominating committee itself; and

· monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

**Investment Committee.** Our investment committee consists of Mr. Xueling Li and Mr. Qin Liu. The investment committee is responsible for negotiating and determining the nature, timing, amount and other terms of an investment if such investment amount ranges from US\$50 million to US\$200 million.

## 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 also have a duty to exercise the care and diligence that a reasonably prudent person would exercise in comparable circumstances and a duty to exercise the skill they actually possess. 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 and the class rights vested thereunder in the holders of the shares. Our company has the right to seek damages if a duty owed by our directors is breached. In limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our directors is breached.

## Terms of Directors and Officers

Our officers are elected by and serve at the discretion of the board. Our directors are not subject to a term of office and hold office until such time as they are removed from office by special resolution of all shareholders. A director will be removed from office automatically if, among other things, the director (1) becomes bankrupt or makes any arrangement or composition with his creditors; or (2) dies or is found by our company to be of unsound mind.

## D. Employees

The following table sets forth the numbers of our employees, categorized by function, as of December 31, 2018:

Functions	Number of Employees
Management	15
Customer services and operations	1,303
Engineering and maintenance	175
Research and development	2,197
Sales and marketing	231
General and administration	404
Total	4,325

We had a total of 3,355, 3,336 and 4,325 employees as of December 31, 2016, 2017 and 2018, respectively.

We have developed a corporate culture that encourages initiative, technical superiority and self-development. In addition, we periodically evaluate our employees' performance and provide them with training sessions tailored to each job function to enhance performance and service quality.

As required by regulations in China, we participate in various employee social security plans that are organized by municipal and provincial governments, including pension, unemployment insurance, childbirth insurance, work-related injury insurance, medical insurance and housing insurance. We are required under PRC law to make contributions to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government from time to time. We believe that we maintain a good working relationship with our employees and we have not experienced any significant labor disputes.

E. Share Ownership

Class A Common Shares

As of April 15, 2019, we had 1,251,175,742 Class A common shares outstanding (excluding 45,926,302 outstanding restricted shares and treasury Class A common shares held by entities controlled by us).

Class B Common Shares

As of April 15, 2019, we had 326,509,555 Class B common shares outstanding.

Beneficial Ownership

The following table sets forth information concerning the beneficial ownership of our common shares as of April 15, 2019, by:

· each of our directors and executive officers; and

· each person known to us to beneficially own more than 5% of our common shares.

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 or that would become unrestricted shares within 60 days after April 15, 2019, the most recent practicable date, 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.

The calculations in the table below assume that there were 1,251,175,742 Class A common shares outstanding (excluding 45,926,302 outstanding restricted shares and treasury Class A common shares held by entities controlled by us) and 326,509,555 Class B common shares as of April 15, 2019.

	Class A Common Shares Beneficially Owned <sup>(1)</sup>		Class B Common Shares Beneficially Owned <sup>(2)</sup>		Total Common Shares Beneficially Owned		Total Voting Power <sup>(5)</sup>
	Number	%	Number	%	Number <sup>(3)</sup>	% <sup>(4)</sup>	%
<b>Directors and Executive Officers:*</b>							
David Xueling Li <sup>(6)</sup>	142,705,284	11.4	203,768,062	62.4	346,473,346	21.9	75.4
Qin Liu	**	**	-	-	**	**	**
Peter Andrew Schloss	**	**	-	-	**	**	**
Richard Weidong Ji	**	**	-	-	**	**	**
David Tang	**	**	-	-	**	**	**
Rongjie Dong	**	**	-	-	**	**	**
Bing Jin	**	**	-	-	**	**	**
Ting Li	**	**	-	-	**	**	**
Pengjun Lu	**	**	-	-	**	**	**
All directors and executive officers as a group	145,852,089	11.7	203,768,062	62.4	349,620,151	22.1	75.4
<b>Principal Shareholders:</b>							
Top Brand Holdings Limited <sup>(7)</sup>	-	-	122,741,483	37.6	122,741,483	7.8	-
YYME Limited <sup>(8)</sup>	138,540,804	11.1	203,768,062	62.4	342,308,866	21.7	75.4

Notes:

Except for Mr. Peter Andrew Schloss, Mr. Richard Weidong Ji, Mr. David Tang and Mr. Qin Liu, the business \*address of our directors and executive officers is c/o Building B-1, North Block of Wanda Plaza No. 79 Wanbo Er Road Nancun Town, Panyu District, Guangzhou, 511442, PRC.



\*\* The aggregate number of common shares beneficially owned by each of these individuals is less than 1% of our total outstanding shares.

(1) For each person and group included in this column, percentage ownership is calculated by dividing the number of Class A common shares beneficially owned by such person or group, including shares that such person or group has the right to acquire within 60 days of April 15, 2019, by the sum of (i) 1,251,175,742, which is the total number of Class A common shares outstanding as of April 15, 2019 (excluding 45,926,302 outstanding restricted shares and treasury Class A common shares held by entities controlled by us), and (ii) the number of Class A common shares that such person or group has the right to acquire within 60 days after April 15, 2019.

(2) For each person and group included in this column, percentage ownership is calculated by dividing the number of Class B common shares beneficially owned by such person or group by 326,509,555, being the total number of Class B common shares outstanding as of April 15, 2019.

(3) Represents the sum of Class A and Class B common shares beneficially owned by such person or group.

(4) For each person and group included in this column, percentage ownership is calculated by dividing the number of total common shares beneficially owned by such person or group, by the sum of the number of common shares outstanding and the number of common shares such person or group has the right to acquire upon exercise of the stock options or warrants within 60 days after April 15, 2019.

For each person or group included in this column, the 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 of our outstanding Class A and Class B common shares as one class. Each holder of Class A common shares is entitled to (5) one vote per share. Each holder of our Class B common shares is entitled to ten votes per share on all matters requiring a shareholders' vote. Our Class B common shares are convertible at any time by the holder into Class A common shares on a one-for-one basis, whereas Class A common shares are not convertible into Class B common shares under any circumstances.

Representing (i) 138,540,804 Class A common shares and 199,448,382 Class B common shares held by YY One Limited, a British Virgin Islands company, (ii) 4,319,680 Class B common shares held by New Wales Holdings Limited, a British Virgin Islands company, and (iii) 4,164,480 Class A common shares underlying options and restricted share units granted to Mr. David Xueling Li that have vested or will become vested within 60 days of (6) April 15, 2019. Mr. David Xueling Li is the sole owner and director of YYME Limited. Each of YY One Limited and New Wales Holdings Limited is wholly-owned by YYME Limited. In August 2016, Mr. Jun Lei, who beneficially owned 122,741,483 Class B common shares as of April 15, 2019, delegated the voting rights of such shares to Mr. David Xueling Li.

Representing 122,741,483 Class B common held by Top Brand Holdings Limited, a BVI company wholly owned and controlled by Mr. Jun Lei. The voting rights of such 122,741,483 Class B common were delegated to Mr. (7) David Xueling Li in August 2016. The business address of Top Brand Holdings Limited is c/o Jun Lei, 19E, Huating Jiayuan, No.6 of Middle Beisihuan Road, Chaoyang District, Beijing 100102, PRC.

Representing (i) 138,540,804 Class A common shares and 199,448,382 Class B common shares held by YY One Limited, a British Virgin Islands company, and (ii) 4,319,680 Class B common shares held by New Wales Holdings Limited, a British Virgin Islands company. Mr. David Xueling Li is the sole owner and director of (8) YYME Limited. Each of YY One Limited and New Wales Holdings Limited is wholly owned by YYME Limited. The business address of YYME Limited is c/o David Xueling Li, Building B-1, North Block of Wanda Plaza No. 79 Wanbo Er Road Nancun Town, Panyu District, Guangzhou, 511442, PRC.

As of April 15, 2019, 1,577,685,297 of our common shares were issued and outstanding, including 326,509,555 Class B common shares and 1,251,175,742 Class A common shares (excluding 45,926,302 outstanding restricted shares and treasury Class A common shares held by entities controlled by us). Based on a review of the register of members maintained by our Cayman Islands corporate administrator, we believe that as of April 15, 2019, none of our total outstanding shares were held by record holder in the United States; The number of beneficial owners of our 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. None of our existing shareholders have different voting rights from other shareholders in the same class. See "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Employee Agreements" for a description of the employment agreements we have entered into with our senior executive officers.

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. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

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

## B. Related Party Transactions

### Contractual Arrangements

The PRC government extensively regulates foreign ownership of, and the licensing and permit requirements pertaining to, companies that provide internet-based services such as our platforms. To comply with these restrictions, we conduct our operations primarily through Beijing Huanju Shidai's contractual arrangements with Beijing Tuda, Guangzhou Huaduo and their respective shareholders. As to Bilin business, there is also a similar contractual arrangement among Bilin Changxiang, Bilin Online and its shareholders. Similarly, we operate Huya platform through contractual arrangement among Huya Technology, Guangzhou Huya and its shareholders. Furthermore, we operate Bigo platform through contractual arrangement among BaiGuoYuan Technology, Guangzhou BaiGuoYuan and its shareholders.

### Contractual Arrangements with Beijing Tuda

The following is a summary of the currently effective contracts among our subsidiary, Beijing Huanju Shidai, our PRC consolidated affiliated entity, Beijing Tuda, and the shareholders of Beijing Tuda.

#### Agreements that transfer economic benefits to us

#### Exclusive Business Cooperation Agreement

Under the exclusive business cooperation agreement between Beijing Huanju Shidai and Beijing Tuda, as amended, Beijing Huanju Shidai has the exclusive right to provide to Beijing Tuda technology support, business support and consulting services related to Beijing Tuda's business, the scope of which is to be determined by Beijing Huanju Shidai from time to time. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Beijing Tuda to Beijing Huanju Shidai is up to 100% of the net profit of Beijing Tuda, and the timing and amount of the fee payments shall be determined at the sole discretion of Beijing Huanju Shidai. The term of this agreement will expire in 2039 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Beijing Tuda, while neither Beijing Tuda nor its shareholders are entitled to terminate the agreement.

## Exclusive Technology Support and Technology Services Agreement

Under the exclusive technology support and technology services agreement between Beijing Huanju Shidai and Beijing Tuda, as amended, Beijing Huanju Shidai has the exclusive right to provide to Beijing Tuda technology support and technology services related to all technologies needed for its business. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Beijing Tuda to Beijing Huanju Shidai is 10% of Beijing Tuda's gross revenues. The term of this agreement will expire in 2029 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Beijing Tuda, while neither Beijing Tuda nor its shareholders are entitled to terminate the agreement.

## Agreements that provide us effective control over Beijing Tuda

## Powers of Attorney

Under the irrevocable powers of attorney executed by each shareholder of Beijing Tuda, each such shareholder appointed Beijing Huanju Shidai as its attorney-in-fact to exercise such shareholders' rights in Beijing Tuda, including, without limitation, the power to vote on its behalf on all matters of Beijing Tuda requiring shareholder approval under PRC laws and regulations and the articles of association of Beijing Tuda. Each power of attorney will remain in force until the shareholder ceases to hold any equity interest in Beijing Tuda.

### Exclusive Option Agreement

Under the exclusive option agreement between Beijing Huanju Shidai, each of the shareholders of Beijing Tuda and Beijing Tuda, each of the shareholders irrevocably granted Beijing Huanju Shidai or its designated representative(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Beijing Tuda. Beijing Huanju Shidai or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. Without Beijing Huanju Shidai's prior written consent, Beijing Tuda's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Beijing Tuda. The term of this agreement is ten years and may be extended at Beijing Huanju Shidai's sole discretion.

### Equity Interest Pledge Agreement

Under the equity interest pledge agreement between Beijing Huanju Shidai and the shareholders of Beijing Tuda, the shareholders of Beijing Tuda have pledged all of their equity interests in Beijing Tuda to Beijing Huanju Shidai to guarantee the performance by Beijing Tuda and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement, exclusive technology support and technology services agreement and powers of attorney. If Beijing Tuda or its shareholders breach their contractual obligations under those agreements, Beijing Huanju Shidai, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. This pledge became effective on the date the pledged equity interests were registered with the competent administration for industry and commerce and will remain effective until the pledgors are no longer the shareholders of Beijing Tuda.

### Contractual Arrangements with Guangzhou Huaduo

In 2018, we received service fees of RMB313.1 million (US\$45.5 million) from Guangzhou Huaduo. The following is a summary of the currently effective contracts among Beijing Huanju Shidai, Guangzhou Huaduo and the shareholders of Guangzhou Huaduo.

Agreements that transfer economic benefits to us

### Exclusive Business Cooperation Agreement

Under the exclusive business cooperation agreement between Beijing Huanju Shidai and Guangzhou Huaduo, as amended, Beijing Huanju Shidai has the exclusive right to provide to Guangzhou Huaduo technology support, business support and consulting services related to Guangzhou Huaduo's business, the scope of which is to be determined by Beijing Huanju Shidai from time to time. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Guangzhou Huaduo to Beijing Huanju Shidai is up to 100% of the net profit of Guangzhou Huaduo, and the timing and amount of the fee payments will be determined at the sole discretion of Beijing Huanju Shidai. The term of this agreement will expire in 2038 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huaduo, while neither Guangzhou Huaduo nor its shareholders are entitled to terminate the agreement.

#### Exclusive Technology Support and Technology Services Agreement

Under the exclusive technology support and technology services agreement between Beijing Huanju Shidai and Guangzhou Huaduo, as amended, Beijing Huanju Shidai has the exclusive right to provide to Guangzhou Huaduo technology support and technology services related to all technologies needed for its business. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Guangzhou Huaduo to Beijing Huanju Shidai is 10% of Guangzhou Huaduo's gross revenues. The term of this agreement will expire in 2028 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huaduo, while neither Guangzhou Huaduo nor its shareholders are entitled to terminate the agreement.

Agreements that provide us effective control over Guangzhou Huaduo

#### Powers of Attorney

Under the irrevocable powers of attorney executed by each shareholder of Guangzhou Huaduo, each such shareholder appointed Beijing Huanju Shidai as its attorney-in-fact to exercise such shareholders' rights in Guangzhou Huaduo, including, without limitation, the power to vote on its behalf on all matters of Guangzhou Huaduo requiring shareholder approval under PRC laws and regulations and the articles of association of Guangzhou Huaduo. Each power of attorney will remain in force until the shareholder ceases to hold any equity interest in Guangzhou Huaduo.

#### Exclusive Option Agreement

Under the exclusive option agreement between Beijing Huanju Shidai, each of the shareholders of Guangzhou Huaduo and Guangzhou Huaduo, each of the shareholders irrevocably granted Beijing Huanju Shidai or its designated representative(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Guangzhou Huaduo. Beijing Huanju Shidai or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. Without Beijing Huanju Shidai's prior written consent, Guangzhou Huaduo's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Guangzhou Huaduo. The term of this agreement is ten years and may be extended at Beijing Huanju Shidai's sole discretion.

#### Equity Interest Pledge Agreement

Under the equity interest pledge agreement between Beijing Huanju Shidai and the shareholders of Guangzhou Huaduo, the shareholders of Guangzhou Huaduo have pledged all of their equity interests in Guangzhou Huaduo to Beijing Huanju Shidai to guarantee the performance by Guangzhou Huaduo and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement, exclusive technology support and technology services agreement and powers of attorney. If Guangzhou Huaduo and/or its shareholders breach their contractual obligations under those agreements, Beijing Huanju Shidai, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. The pledge became effective on the date the pledged equity interests were registered with the competent administration for industry and commerce and will remain effective until the pledgors are no longer the shareholders of Guangzhou Huaduo.



### Contractual Arrangements with Bilin Online

In August 2015, we acquired Bilin business, a mobile instant communication application and its relevant business line, by purchasing 55.05% of the equity interests in its holding company BiLin Cayman. In March 2018, we acquired the rest 44.95% of the equity interests in BiLin Cayman. The Bilin entities had a complete VIE structure. Upon the consummation of the acquisition, Bilin Changxiang, Bilin Online and its shareholder entered into a series of agreements, which is similar to the contractual arrangements with Beijing Tuda and Guangzhou Huaduo, to reestablish the VIE structure. The agreements and related instruments include an Exclusive Business Cooperation Agreement, a Powers of Attorney, an Exclusive Option Agreement, an Exclusive Assets Purchase Agreement, and an Equity Interest Pledge Agreement. This arrangement ensures the transfer of economic benefits to us, and our effective control over Bilin Online. In 2018, we received service fees of RMB11.0 million (US\$1.6 million) from Bilin Online.

### Contractual Arrangements with Guangzhou Huya

In 2018, we received service fees of RMB420.2 million (US\$61.1 million) from Guangzhou Huya. The following is a summary of the currently effective contracts among our subsidiary, Huya Technology, our PRC consolidated affiliated entity, Guangzhou Huya, and the shareholders of Guangzhou Huya.

Agreements that transfer economic benefits to us

#### Exclusive Business Cooperation Agreement

On July 10, 2017, Huya Technology, Guangzhou Huya, and the shareholders of Guangzhou Huya entered into an exclusive business cooperation agreement. Under the exclusive business cooperation agreement, Huya Technology has the exclusive right to provide Guangzhou Huya with technology support, business support and consulting services related to Guangzhou Huya's business, the scope of which is to be determined by Huya Technology from time to time. Huya Technology owns the exclusive intellectual property rights created as a result of the performance of this agreement. The timing and amount of the service fee payments shall be determined at the sole discretion of Huya Technology. The term of this agreement is ten years from the execution date of this agreement and will be automatically extended for another ten years, unless otherwise agreed upon by Huya Technology and Guangzhou Huya.

Agreements that provide us effective control over Guangzhou Huya

#### Shareholder Voting Rights Proxy Agreement

On July 10, 2017, Huya Technology, Guangzhou Huya, and the shareholders of Guangzhou Huya entered into a voting rights proxy agreement. Under the voting rights proxy agreement, each of the shareholders of Guangzhou Huya irrevocably executed a power of attorney and appointed Huya Technology as its attorney-in-fact to exercise such shareholders' rights in Guangzhou Huya, including, without limitation, the power to vote on its behalf on all matters of Guangzhou Huya requiring shareholder approval under PRC laws and regulations and the articles of association of Guangzhou Huya and rights to information relating to all business aspects of Guangzhou Huya. The term of this agreement is ten years from the execution date of this agreement and will be automatically extended for one more year indefinitely. Huya Technology has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huya.

Equity Interest Pledge Agreement

On July 10, 2017, Huya Technology, Guangzhou Huya and the shareholders of Guangzhou Huya entered into an equity interest pledge agreement. Pursuant to the equity interest pledge agreement, the shareholders of Guangzhou Huya have pledged all of their equity interests in Guangzhou Huya to Huya Technology to guarantee the performance by Guangzhou Huya and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement and voting rights proxy agreement. If Guangzhou Huya or its shareholders breach their contractual obligations under those agreements, Huya Technology, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. This pledge will become effective on the date the pledged equity interests are registered with the competent administration for industry and commerce and will remain effective until the pledgors are no longer the shareholders of Guangzhou Huya. We registered the pledged equity interests with the competent administration for industry and commerce on August 25, 2017.

Agreement that provide us with the option to purchase the equity interests in Guangzhou Huya

#### Exclusive Option Agreement

On July 10, 2017, Huya Technology, Guangzhou Huya, and the shareholders of Guangzhou Huya entered into an exclusive option agreement. Under the exclusive option agreement, each of the shareholders irrevocably granted Huya Technology or its designated representatives an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Guangzhou Huya. Huya Technology or its designated representatives have sole discretion as to when to exercise such options, either in part or in full. Without Huya Technology's prior written consent, Guangzhou Huya's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Guangzhou Huya. The term of this agreement is ten years and may be extended at Huya Technology's sole discretion.

## Contractual Arrangements with Guangzhou BaiGuoYuan

The following is a summary of the currently effective contracts among our subsidiary, Guangzhou BaiGuoYuan Information Technology Co., Ltd., or BaiGuoYuan Technology, our PRC consolidated affiliated entity, Guangzhou BaiGuoYuan Network Technology Co., Ltd., or Guangzhou BaiGuoYuan, and the shareholders of Guangzhou BaiGuoYuan.

### Agreements that transfer economic benefits to us

#### Exclusive Business Cooperation Agreement

In 2017, BaiGuoYuan Technology and Guangzhou BaiGuoYuan, entered into an exclusive business cooperation agreement. Under the exclusive business cooperation agreement, BaiGuoYuan Technology has the exclusive right to provide Guangzhou BaiGuoYuan with technology support, business support and consulting services related to Guangzhou BaiGuoYuan's business, the scope of which is to be determined by BaiGuoYuan Technology from time to time. BaiGuoYuan Technology owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Guangzhou BaiGuoYuan to BaiGuoYuan Technology shall be paid quarterly, and the amount is up to 100% of the quarterly net profit of Guangzhou BaiGuoYuan. The term of this agreement is in perpetuity from the execution date of this agreement, unless otherwise decided by BaiGuoYuan Technology.

### Agreements that provide us effective control over Guangzhou BaiGuoYuan

#### Shareholder Voting Rights Proxy Agreement

In 2017, BaiGuoYuan Technology, Guangzhou BaiGuoYuan, and the shareholders of Guangzhou BaiGuoYuan entered into a voting rights proxy agreement. Under the voting rights proxy agreement, each of the shareholders of Guangzhou BaiGuoYuan irrevocably executed a power of attorney and appointed BaiGuoYuan Technology or its designated representatives as its attorney-in-fact to exercise such shareholders' rights in Guangzhou BaiGuoYuan, including, without limitation, the power to vote on its behalf on all matters of Guangzhou BaiGuoYuan requiring shareholder approval under PRC laws and regulations and the articles of association of Guangzhou BaiGuoYuan and rights to information relating to all business aspects of Guangzhou BaiGuoYuan. The term of this agreement is in perpetuity from the execution date of this agreement, unless otherwise agreed upon by BaiGuoYuan Technology,

Guangzhou BaiGuoYuan, and the shareholders of Guangzhou BaiGuoYuan.

#### Equity Interest Pledge Agreement

BaiGuoYuan Technology, Guangzhou BaiGuoYuan and the each of the shareholders of Guangzhou BaiGuoYuan entered into an equity interest pledge agreement. Pursuant to the equity interest pledge agreement, the shareholders of Guangzhou BaiGuoYuan have pledged all of their equity interests in Guangzhou BaiGuoYuan to BaiGuoYuan Technology to guarantee the performance by Guangzhou BaiGuoYuan and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement and voting rights proxy agreement. If Guangzhou BaiGuoYuan or its shareholders breach their contractual obligations under those agreements, BaiGuoYuan Technology, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. This pledge will become effective on the date the pledged equity interests are registered with the competent administration for industry and commerce and will remain effective until the pledgors are no longer the shareholders of Guangzhou BaiGuoYuan. We registered the pledged equity interests with the competent administration for industry and commerce on January 19, 2016.

Agreement that provide us with the option to purchase the equity interests in Guangzhou BaiGuoYuan

#### Exclusive Option Agreement

In 2017, BaiGuoYuan Technology, Guangzhou BaiGuoYuan, and each of the shareholders of Guangzhou BaiGuoYuan entered into an exclusive option agreement. Under the exclusive option agreement, each of the shareholders irrevocably granted BaiGuoYuan Technology or its designated representatives an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Guangzhou BaiGuoYuan. BaiGuoYuan Technology or its designated representatives have sole discretion as to when to exercise such options, either in part or in full. Without BaiGuoYuan Technology's prior written consent, Guangzhou BaiGuoYuan's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Guangzhou BaiGuoYuan. The term of this agreement is in perpetuity from the execution date of this agreement. BaiGuoYuan Technology has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou BaiGuoYuan and its shareholders.

## Contractual Arrangements with Sanrenxing

The following is a summary of the currently effective contracts among our subsidiary, Guangzhou 100-Education Technology Co., Ltd., or 100-Education Technology, our PRC consolidated affiliated entity, Guangzhou Sanrenxing 100-Education Technology Co., Ltd., or Sanrenxing, and the shareholders of Sanrenxing.

### Agreements that transfer economic benefits to us

#### Exclusive Business Cooperation Agreement

On October 17, 2018, 100-Education Technology and Sanrenxing, entered into an exclusive business cooperation agreement. Under the exclusive business cooperation agreement, 100-Education Technology has the exclusive right to provide Sanrenxing with technology support, consulting services and other services related to Sanrenxing's business. 100-Education Technology owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Sanrenxing to 100-Education Technology shall be paid annually, and the amount shall be determined at the sole discretion of 100-Education Technology. The term of this agreement is thirty years from the execution date of this agreement and will be automatically extended for thirty more years, unless 100-Education Technology agrees terminating of this agreement prior to the expiration.

### Agreements that provide us effective control over Sanrenxing

#### Shareholder Voting Rights Proxy Agreement

On October 17, 2018, 100-Education Technology, Sanrenxing, and the shareholders of Sanrenxing entered into a voting rights proxy agreement. Under the voting rights proxy agreements, each of the shareholders of Sanrenxing irrevocably executed a power of attorney and appointed 100-Education Technology or its designated representatives as its attorney-in-fact to exercise such shareholders' rights in Sanrenxing, including, without limitation, the power to vote on its behalf on all matters of Sanrenxing requiring shareholder approval under PRC laws and regulations and the articles of association of Sanrenxing and rights to information relating to all business aspects of Sanrenxing. The term of this agreement is thirty years from the execution date of this agreement and will be automatically extended for one more year, unless 100-Education Technology agrees terminating of this agreement with thirty days prior notice.

Equity Interest Pledge Agreement

On October 17, 2018, 100-Education Technology, Sanrenxing, and the shareholders of Sanrenxing entered into an equity interest pledge agreement. Pursuant to the equity interest pledge agreements, the shareholders of Sanrenxing have pledged all of their equity interests in Sanrenxing to 100-Education Technology to guarantee the performance by Sanrenxing and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement, voting rights proxy agreement and power of attorney. If Sanrenxing or its shareholders breach their contractual obligations under those agreements, 100-Education Technology, as the pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. This pledge will become effective on the date the pledged equity interests are registered with the competent administration for industry and commerce and will remain effective until all the contractual obligations have been fulfilled and all the secured debts have been paid up. We registered the pledged equity interests with the competent administration for industry and commerce on February 19, 2019.

Agreement that provide us with the option to purchase the equity interests in Sanrenxing

#### Exclusive Option Agreement

On October 17, 2018, 100-Education Technology, Sanrenxing, and the shareholders of Sanrenxing entered into an exclusive option agreement. Under the exclusive option agreements, each of the shareholders irrevocably granted 100-Education Technology or its designated representatives an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Sanrenxing. 100-Education Technology or its designated representatives have sole discretion as to when to exercise such options, either in part or in full. Without 100-Education Technology's prior written consent, Sanrenxing's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Sanrenxing. This agreement becomes effective on the date of the execution of this agreement, and will be terminated when all the shares held by the shareholders of Sanrenxing or all the assets of Sanrenxing have been transferred to 100-Education Technology or its designated person.

#### Transactions with Affiliates

Guangzhou Huaduo holds 36% equity interest in Zhuhai Daren. Guangzhou Huaduo and Zhuhai Daren had entered into a series of cooperation agreements, under which Guangzhou Huaduo and Zhuhai Daren agreed to cooperate with respect to the operation of certain online games developed by Zhuhai Daren. In the years ended December 31, 2016, 2017 and 2018, the aggregate online game revenues shared from Zhuhai Daren was RMB29.7 million, RMB30.5 million and RMB21.8 million (US\$3.2 million), respectively.

In 2010 and 2011, Guangzhou Huaduo and Guangzhou Sunhongs Corp., Ltd (formerly named as Guangzhou Shanghang Information Technical Co., Ltd.), or Guangzhou Sunhongs, entered into certain server co-location agreements, under which Guangzhou Sunhongs provides Guangzhou Huaduo with bandwidth and server co-location services in different cities in China. In addition, Guangzhou Huaduo and Guangzhou Sunhongs entered into two content delivery network acceleration service agreements, under which Guangzhou Sunhongs provides content delivery network acceleration services to Guangzhou Huaduo. Guangzhou Sunhongs is 19.5% owned by Mr. Jun Lei, our major shareholder and 5.1% owned by Shanghai Yilian, respectively. In the years ended December 31, 2016, 2017 and 2018, the bandwidth service that Guangzhou Huaduo received from Guangzhou Sunhongs amounted to RMB96.2 million, RMB92.1 million and RMB103.4 million (US\$15.0 million), respectively.

In November 2013 and March 2014, Guangzhou Huaduo invested RMB7.0 million and RMB15.0 million respectively, in Guangzhou Kuyou Information Technology Co., Ltd., or Guangzhou Kuyou, subsequent to which, Guangzhou Huaduo held 20% equity interest in Guangzhou Kuyou. In 2014, Guangzhou Huaduo and Guangzhou



Kuyou entered into a series of cooperation agreements, under which Guangzhou Huaduo and Guangzhou Kuyou agreed to cooperate with respect to the exclusive operation of certain online games developed by Guangzhou Kuyou. Guangzhou Huaduo and Shanghai Jiazuo Internet and Technology Co., Ltd., or Shanghai Jiazuo, which is the wholly owned subsidiary of Guangzhou Kuyou, entered into similar series of cooperation agreements in 2015. The percentage of equity interest held by Guangzhou Huaduo in Guangzhou Kuyou was diluted to 12.3% as of December 31, 2018, due to the options granted by Guangzhou Kuyou to its management and employees and capital injection from an independent third party. The aggregate online game revenues shared from Guangzhou Kuyou and Shanghai Jiazuo was RMB57.0 million, RMB25.6 million and RMB5.0 million (US\$0.7 million) in 2016, 2017 and 2018, respectively.

In October 2014, we entered into an agreement to inject our free voice-over IP service, Weihui, into Bigo Inc. or Bigo, a company set up and which was then controlled by Mr. David Xueling Li. Following three series of capital injection from other investors of Bigo in 2015, 2017 and 2018, including Mr. Li, we retained a 31.7% ownership stake in Bigo. In March 2019, we completed the acquisition of the remaining 68.3% equity interest in Bigo from the other shareholders of Bigo, and Bigo became our wholly owned subsidiary. We had paid daily operating expenses of RMB53.6 million, 28.4 million and RMB15.0 million (US\$2.2 million) on behalf of Bigo in 2016, 2017 and 2018, respectively. Bigo borrowed RMB25.0 and RMB188.0 million from Guangzhou Huaduo in 2016 and 2018, respectively. As of December 31, 2018, we recorded amounts due from Bigo of RMB191.8 million (US\$27.9 million).

See Note 28 to our financial statements for further information about our related party transactions.

## Employment Agreements

See “Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Employee Agreements” for a description of the employment agreements we have entered into with our senior executive officers.

## Share Incentives

See “Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers” for a description of share-based compensation awards we have granted to our directors, officers and other individuals as a group.

## C. Interests of Experts and Counsel

Not applicable.

## ITEM 8.

## FINANCIAL INFORMATION

### A. Consolidated Statements and Other Financial Information

See “Item 18. Financial Statements.”

## Legal Proceedings

Guangzhou NetEase Computer System Co., Ltd. has initiated a lawsuit against us in Guangzhou in October 2014, claiming infringement of its rights of reproduction concerning the online game of *Fantasy Westward Journey* in an amount of RMB100 million. In 2017, Guangzhou Intellectual Property Court ordered us to compensate NetEase in an amount of RMB20.0 million. This judgment is not final and has been appealed to the appellate court. The appellate court held a trial in April 2018 but has not yet entered a judgement. Although we believe that the claim is unjustified and commercially motivated, if the final outcome of the proceeding is unfavorable to us, we may suffer considerable

damage to our financial position and reputation.

In April 2015, we initiated a litigation on antitrust and unfair competition against Guangzhou NetEase Computer System Co., Ltd. in the amount of RMB10 million. In September 2015, we initiated three actions against three game commentators who have breached their exclusive live broadcasting obligations owed to us, each in an amount of RMB15 million.

Apart from the aforesaid lawsuits, we are not currently a party to any pending material litigation or other material legal proceeding and are not aware of any pending or threatened litigation or other legal proceeding that may have a material adverse impact on our business or operations. However, we may be subject to various legal proceedings and claims that are incidental to our ordinary course of business. Regardless of the outcome, legal or administrative proceedings or claims may have an adverse impact on us because of defense and settlement costs, diversion of management attention and other factors.

#### Dividend Policy

We have not paid dividend in the past and do not have any present plan to pay any dividend 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 receive dividends from our PRC subsidiary for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC subsidiary to pay dividends to us. See “Item 3. Key information—D. Risk Factors—Risks Related to Our Corporate Structure and Our Industry—Our PRC subsidiaries and PRC consolidated affiliated entities are subject to restrictions on paying dividends or making other payments to us, which may restrict our ability to satisfy our liquidity requirements” and “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Regulation of Foreign Currency Exchange and Dividend Distribution.”

Our board of directors has complete discretion on whether to distribute dividends, subject to the approval of our shareholders. Even if our board of directors decides 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. If we pay any dividends, we will pay our ADS holders to the same extent as holders of our Class A common shares, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. See “Item 12. Description of Securities Other than Equity Securities—D. American Depositary Shares.” Cash dividends on our Class A common shares, if any, will be paid in U.S. dollars.

### B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

## ITEM 9.

## THE OFFER AND LISTING

### A. Offering and Listing Details

See “—C. Markets” and “Item 12. Description of Securities other than Equity Securities—D. American Depositary Shares.” We have a dual-class common share structure in which Class A common shares have different voting rights from Class B common shares. Class B common shares are each entitled to ten votes, whereas Class A common shares are each entitled to one vote. See “Item 3. Key Information—D. Risk Factors—Risks Related to Our ADSs—Our dual class common share structure with different voting rights 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 ADSs may view as beneficial.”

### B. Plan of Distribution

Not applicable.

### C. Markets

Our ADSs, each representing twenty Class A common shares, have been listed on the Nasdaq Global Select Market since November 21, 2012 and trade under the symbol “YY.”

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10.

ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

## B. Memorandum and Articles of Association

We are a Cayman Islands company and our affairs are governed by our memorandum and articles of association and the Companies Law, Cap. 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands, referred to as the Companies Law below. The following are summaries of certain provisions of our memorandum and articles of association in effect as of the date of this annual report insofar as they relate to the material terms of our common shares.

### Registered Office and Objects

Our registered office in the Cayman Islands is located at Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KYI-1111, Cayman Islands. The memorandum of association provides, inter alia, that the liability of the members of our company is limited to the amount, if any, for the time being unpaid on the common shares. The objects for which our company is established are unrestricted (including acting as an investment company), and we shall have and be capable of exercising all the functions of a natural person of full capacity irrespective of corporate benefit, as provided in Section 27(2) of the Companies Law and in view of the fact that we are an exempted Company, we will not trade in the Cayman Islands with any person, firm or corporation except in furtherance of our business carried on outside the Cayman Islands.

### Board of Directors

See “Item 6. Directors, Senior Management and Employees—C. Board Practices—Duties of Directors” and “—Terms of Directors and Officers.”

### Common Shares

### General

Our common shares are divided into Class A common shares and Class B common shares. Holders of Class A common shares and Class B common shares will have the same rights except for voting and conversion rights. The holders of ADSs will not be treated as our shareholders and will be required to surrender their ADSs for cancellation and withdrawal from the depositary facility in which the Class A common shares are held in accordance with the

provisions of the deposit agreement in order to exercise shareholders' rights in respect of the Class A common shares. The depositary will agree, so far as it is practical, to vote or cause to be voted the amount of underlying Class A common shares represented by ADSs in accordance with the non-discretionary written instructions of the holders of such ADSs.

All of our outstanding common shares are fully paid and non-assessable. Certificates representing our common shares are issued in the registered form. Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their common shares.

## Meetings

Shareholders' meetings may be convened by a majority of our board of directors or the chairman. Advance notice in writing of at least ten clear days is required for the convening of our annual general meeting and any other general meeting of our shareholders. A quorum required for a meeting of shareholders consists of at least one or more shareholders present in person or by proxy, or (in the case of a shareholder being a corporation) by its duly authorized representative representing not less than one-third in nominal value of the total issued voting shares in our company present throughout the meeting.

Notwithstanding that a meeting is called by shorter notice than that mentioned above, but, subject to the Companies Law, it will be deemed to have been duly called, if it is so agreed (a) in the case of a meeting called as an annual general meeting by all of our shareholders entitled to attend and vote at the meeting; and (b) in the case of any other meeting, by a majority in number of the shareholders having the right to attend and vote at the meeting, being a majority together holding not less than 95% in nominal value of the issued shares giving that right.

No business other than the appointment of a chairman may be transacted at any general meeting unless a quorum is present at the commencement of business. However, the absence of a quorum will not preclude the appointment of a chairman. If present, the chairman of our board of directors shall be the chairman presiding at any shareholders' meetings.

A corporation being a shareholder shall be deemed for the purpose of our articles of association to be present in person if represented by its duly authorized representative being the person appointed by resolution of the directors or other governing body of such corporation to act as its representative at the relevant general meeting or at any relevant general meeting of any class of our shareholders. Such duly authorized representative shall be entitled to exercise the same powers on behalf of the corporation that he represents as that corporation could exercise if it were our individual shareholder.

The quorum for a separate general meeting of the holders of a separate class of shares is described in “—Modification of Rights” below.

Our articles of association do not allow our shareholders to approve matters to be determined at shareholders' meetings by way of written resolutions without a meeting.

### Voting Rights

In respect of all matters requiring a shareholders' 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. At any shareholders' meeting, on a show of hands, every shareholder present in person or by proxy (or, in the case of a shareholder being a corporation, by its duly authorized representative) shall have one vote and on a poll, every shareholder present in person or by proxy, or in the case of a shareholder being a corporation, by its duly authorized representative shall have one vote for each fully paid share of which such shareholder is the holder.

No shareholder shall, unless the Board otherwise determines, be entitled to vote or be reckoned in a quorum, in respect of any share, unless such shareholder is duly registered as our shareholder and all calls or installments due by such shareholder to us have been paid.

If a clearing house (or its nominee(s)) or a central depository entity, being a corporation, is a shareholder, it may authorize such person or persons as it thinks fit to act as its representative(s) at any meeting or at any meeting of any



class of shareholders, provided that the authorization shall specify the number and class of shares in respect of which each such person is so authorized. A person so authorized is entitled to exercise the same rights and powers on behalf of the clearing house or central depository entity (or its nominee(s)) as if such person was the registered holder of our shares held by the clearing house or central depository entity (or its nominee(s)) including the right to vote individually on a show of hands.

While there is nothing under the laws of the Cayman Islands which specifically prohibits or restricts the creation of cumulative voting rights for the election of directors of our company, it is not a concept that is accepted as a common practice in the Cayman Islands, and our company has made no provisions in our articles of association to allow cumulative voting for such elections.

### 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 any transfer of Class B common shares by a holder to any person or entity which is not an affiliate of such holder and which is not any of our founders or any affiliates of our founders, such Class B common shares shall be automatically and immediately converted into the equivalent number of Class A common shares. In addition, if at any time, Messrs. David Xueling Li, Jun Lei, Tony Bin Zhao and Jin Cao and their affiliates collectively beneficially own less than 5% of the total number of the issued and outstanding Class B common shares, each issued and outstanding Class B common share will be automatically and immediately converted into one Class A common share, and we will not issue any Class B common shares thereafter. Furthermore, if at any time more than 50% of the ultimate beneficial ownership of any holder of Class B common shares (other than our founders or our founders' affiliates) changes, each such Class B common share will be automatically and immediately converted into one Class A common share.

### Calls on Shares and Forfeiture of Shares

Subject to our memorandum and articles of association, our directors may from time to time make such calls upon the members in respect of any amounts unpaid on the shares held by them. The shares that have been called upon and remain unpaid after it has become due and payable are subject to forfeiture.

### Protection of Minority Shareholders

In principle, we will normally be the proper plaintiff to sue for a wrong done to us as a company because as a general rule a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, the Cayman Islands court can be expected to apply and follow the common law principles (namely the rule in *Foss v. Harbottle* and the exceptions thereto) which permit a minority shareholder to commence a class action against, or derivative actions in the name of, a company to challenge the following:

- (i) an act which is illegal or ultra vires and is therefore incapable of ratification by the shareholders;
- (ii) an act which, although not ultra vires, could only be effected duly if authorized by a special or qualified majority vote that has not been obtained; and
- (iii) an act which constitutes a fraud against the minority where the wrongdoers are themselves in control of the company.

In the case of a company (not being a bank) having its share capital divided into shares, the Grand Court of the Cayman Islands may, on the application of members holding not less than one fifth of the shares of the company in issue, appoint an inspector to examine the affairs of the company and to report thereon in such manner as the Grand Court of the Cayman Islands shall direct.

Any of our shareholders may petition the Grand Court of the Cayman Islands which may make a winding up order if the Grand Court of the Cayman Islands is of the opinion that it is just and equitable that we should be wound up or, as an alternative to a winding up order, (a) an order regulating the conduct of our affairs in the future, (b) an order requiring us to refrain from doing or continuing an act complained of by the shareholder petitioner or to do an act which the shareholder petitioner has complained we have omitted to do, (c) an order authorizing civil proceedings to be brought in our name and on our behalf by the shareholder petitioner on such terms as the Grand Court of the

Cayman Islands may direct, or (d) an order providing for the purchase of the shares of any of our shareholders by other shareholders or us and, in the case of a purchase by us, a reduction of our capital accordingly.

Generally, claims against us must be based on the general laws of contract or tort applicable in the Cayman Islands or individual rights as shareholders as established by our articles of association.

#### Pre-Emption Rights

There are no pre-emption rights applicable to the issue of new shares of our company under either Cayman Islands law or our memorandum and articles of association.

#### Liquidation Rights

Subject to any class or classes of shares or future shares which are issued with specific rights, privileges or restrictions as to the distribution of available surplus assets on liquidation, (a) if we are wound up and the assets available for distribution among our shareholders are more than sufficient to repay the whole of the capital paid up at the commencement of the winding up, the excess shall be distributed *pari passu* among those shareholders in proportion to the amount paid up at the commencement of the winding up on the shares held by them, respectively, and (b) if we are wound up and the assets available for distribution among the shareholders as such are insufficient to repay the whole of the paid-up capital, those assets shall be distributed so that, as nearly as may be, the losses shall be borne by the shareholders in proportion to the capital paid up at the commencement of the winding up on the shares held by them, respectively.

If we are wound up (whether the liquidation is voluntary or by the court), the liquidator may with the sanction of our special resolution and any other sanction required by the Companies Law, divide among our shareholders in specie or kind the whole or any part of our assets (whether or not they shall consist of property of the same kind) and may, for such purpose, set such value as the liquidator deems fair upon any property to be divided and may determine how such division shall be carried out as between the shareholders or different classes of shareholders. The liquidator may also vest the whole or any part of these assets in trustees upon such trusts for the benefit of the shareholders as the liquidator shall think fit, but so that no shareholder will be compelled to accept any assets, shares or other securities upon which there is a liability.

The consideration received by each holder of a Class A common share and a holder of a Class B common share will be the same in any liquidation event.

#### Variation of Rights

Alterations to our memorandum and articles of association may only be made by special resolution, meaning a majority of not less than two-thirds of votes cast at a shareholders' meeting.

Subject to applicable laws and our memorandum and articles of association, all or any of the special rights for the time being attached to the shares or any class of shares may, unless otherwise provided by the terms of issue of the shares of that class, from time to time be varied, modified or abrogated by a special resolution passed at a separate general meeting of the holders of the shares of that class. All the provisions of our articles of association relating to general meetings shall, mutatis mutandis, apply, but so that:

separate general meetings of the holders of a class or series of shares may be called only by (i) the chairman of our board of directors, or (ii) a majority of our board of directors (unless otherwise specifically provided by the terms of issue of the shares of such class or series). Our articles of association does not give any shareholder(s) the right to call a class or series meeting;

the necessary quorum shall be a person or persons (or in the case of a shareholder being a corporation, its duly authorized representative) together holding or representing by proxy not less than one-third in nominal value of the issued shares of that class;

every holder of shares of the class shall be entitled on a poll to one vote for every such share held by him; and

- any holder of shares of the class present in person or by proxy or authorized representative may demand a poll.

The special rights conferred upon the holders of any shares or class of shares shall not, unless otherwise expressly provided in the rights attaching to or the terms of issue of such shares, be deemed to be varied, modified or abrogated by the creation or issue of further shares ranking *pari passu* with such existing class of shares.

#### Alteration of Capital

We may from time to time by ordinary resolution in accordance with the Companies Law alter the conditions of our memorandum of association to:

- increase our capital by such sum, to be divided into shares of such amounts, as the resolution shall prescribe;

- consolidate and divide all or any of our share capital into shares of larger amounts than our existing shares;

cancel any shares which at the date of the passing of the resolution have not been taken or agreed to be taken by any person, and diminish the amount of its share capital by the amount of the shares so cancelled subject to the provisions of the Companies Law;

sub-divide our shares or any of them into shares of smaller amount than is fixed by our memorandum of association, subject nevertheless to the Companies Law, so that the resolution whereby any share is sub-divided may determine that, as between the holders of the shares resulting from such subdivision, one or more of the shares may have any such preferred or other special rights over, or may have such deferred rights or be subject to any such restrictions as compared with the others, as we have power to attach to unissued or new shares; and

divide our shares into several classes and without prejudice to any special rights previously conferred on the holders of existing shares, attach to the shares respectively any preferential, deferred, qualified or special rights, privileges, conditions or such restrictions that in the absence of any such determination in a general meeting may be determined by our directors.

We may, by special resolution, subject to any confirmation or consent required by the Companies Law, reduce our share capital or any capital redemption reserve in any manner authorized by law.

#### Transfer of Shares

Subject to any applicable restrictions set forth in our articles of association, including, for example, the board of directors' discretion to refuse to register a transfer of any share (not being a fully paid up share) to a person of whom it does not approve, or any share issued under share incentive plans for employees upon which a restriction on transfer imposed thereby still subsists, or a transfer of any share to more than four joint holders, any of our shareholders may transfer all or any of his or her shares by an instrument of transfer in the usual or common form or in a form prescribed by the Nasdaq Global Select Market or in another form that our directors may approve.

Our directors may decline to register any transfer of any share which is not paid up or on which we have a lien. Our directors may also decline to register any transfer of any share unless:

the instrument of transfer is lodged with us and is accompanied by the certificate for the shares to which it relates and such other evidence as our directors may reasonably require to show the right of the transferor to make the transfer;

the instrument of transfer is in respect of only one class of share;

the instrument of transfer is properly stamped (in circumstances where stamping is required); and

fee of such maximum sum as the Nasdaq Global Select 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 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 requirement of the Nasdaq Global Select Market, be suspended and the register closed at such times and for such periods as our 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 days in any year as our directors may determine.

## Register of Members

In accordance with Section 48 of the Companies Law, the register of members is prima facie evidence of the registered holder or member of shares of a company. Therefore, a person becomes a registered holder or member of shares of the company only upon entry being made in the register of members. Our directors will maintain one register of members, at the office of Codan Trust Company (Cayman) Limited, Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands, which provides us with corporate administrative services. We will perform the procedures necessary to register the shares in the register of members as required in “PART III—Distribution of Capital and Liability of Members of Companies and Associations” of the Companies Law, and will ensure that the entries on the register of members are made without any delay.

The shares underlying the ADSs are not shares in bearer form, but are in registered form and are “non-negotiable” or “registered” shares in which case the shares underlying the ADSs can only be transferred on the books of the company in accordance with Section 166 of the Companies Law.

If the name of any person is incorrectly entered in or omitted from our register of members, or if there is any default or unnecessary delay in entering on the register the fact of any person having ceased to be a member of our company, the person or member aggrieved (or any member of our company or our company itself) may apply to the Grand Court of the Cayman Islands for an order that the register be rectified, and the Court may either refuse such application or it may, if satisfied of the justice of the case, make an order for the rectification of the register.

## Share Repurchases

We are empowered by the Companies Law and our articles of association to purchase our own shares, subject to certain restrictions. Our directors may only exercise this power on our behalf, subject to the Companies Law, our memorandum and articles of association and to any applicable requirements imposed from time to time by the Nasdaq Global Select Market, the U.S. Securities and Exchange Commission, or by any other recognized stock exchange on which our securities are listed.

## Dividends

Subject to the Companies Law, our company in a general meeting or our directors may declare dividends in any currency to be paid to our shareholders, but no dividend shall be declared in excess of the amount recommended by



our board of directors. Dividends may be declared and paid out of our profits, realized or unrealized, or from any reserve set aside from profits which our directors determine is no longer needed. Our board of directors may also declare and pay dividends out of the share premium account or any other fund or account that can be authorized for this purpose in accordance with the Companies Law.

Except in so far as the rights attaching to, or the terms of issue of, any share otherwise provides, (a) all dividends shall be declared and paid according to the amounts paid up on the shares in respect of which the dividend is paid, but no amount paid up on a share in advance of calls shall be treated for this purpose as paid up on that share and (b) all dividends shall be apportioned and paid pro rata according to the amounts paid up on the shares during any portion or portions of the period in respect of which the dividend is paid.

Our directors may also pay interim dividends, whenever our financial position, in the opinion of our directors, justifies such payment.

Our directors may deduct from any dividend or bonus payable to any shareholder all sums of money (if any) presently payable by such shareholder to us on account of calls or otherwise.

No dividend or other money payable by us on or in respect of any share shall bear interest against us.

In respect of any dividend proposed to be paid or declared on our share capital, our directors may resolve and direct that (a) such dividend be satisfied wholly or in part in the form of an allotment of shares credited as fully paid up, provided that our shareholders entitled thereto will be entitled to elect to receive such dividend (or part thereof if our directors so determine) in cash in lieu of such allotment or (b) the shareholders entitled to such dividend will be entitled to elect to receive an allotment of shares credited as fully paid up in lieu of the whole or such part of the dividend as our directors may think fit. Our shareholders may, upon the recommendation of our directors, by ordinary resolution resolve in respect of any particular dividend that, notwithstanding the foregoing, a dividend may be satisfied wholly in the form of an allotment of shares credited as fully paid up without offering any right to shareholders to elect to receive such dividend in cash in lieu of such allotment.

Any dividend interest or other sum payable in cash to the holder of shares may be paid by check or warrant sent by mail addressed to the holder at his registered address, or addressed to such person and at such addresses as the holder may direct. Every check or warrant shall, unless the holder or joint holders otherwise direct, be made payable to the order of the holder or, in the case of joint holders, to the order of the holder whose name stands first on the register in respect of such shares, and shall be sent at his or their risk and payment of the check or warrant by the bank on which it is drawn shall constitute a good discharge to us.

All dividends unclaimed for one year after having been declared may be invested or otherwise made use of by our board of directors for the benefit of our company until claimed. Any dividend unclaimed after a period of six years from the date of declaration of such dividend shall be forfeited and reverted to us.

Whenever our directors have resolved that a dividend be paid or declared, our directors may further resolve that such dividend be satisfied wholly or in part by the distribution of specific assets of any kind, and in particular of paid up shares, debentures or warrants to subscribe for our securities or securities of any other company. Where any difficulty arises with regard to such distribution, our directors may settle it as they think expedient. In particular, our directors may issue fractional certificates, ignore fractions altogether or round the same up or down, fix the value for distribution purposes of any such specific assets, determine that cash payments shall be made to any of our shareholders upon the footing of the value so fixed in order to adjust the rights of the parties, vest any such specific assets in trustees as may seem expedient to our directors, and appoint any person to sign any requisite instruments of transfer and other documents on behalf of the persons entitled to the dividend, which appointment shall be effective and binding on our shareholders.

#### Untraceable Shareholders

We are entitled to sell any shares of a shareholder who is untraceable, provided that no such sale shall be made unless:

all checks or warrants in respect of dividends of such shares, not being less than three in number, for any sums payable in cash to the holder of such shares have remained un-cashed for a period of 12 years prior to the publication of the advertisement and during the three months referred to in the third bullet point below;

we have not during that time received any indication of the existence of the shareholder or person entitled to such shares by death, bankruptcy or operation of law; and

we, if so required by the rules of the Nasdaq Global Select Market, have given notice to, and caused an advertisement to be published in newspapers in accordance with such applicable rules giving notice of our intention to sell these shares, and a period of three months (or such shorter period as permitted under the applicable rules) has elapsed since the date of such advertisement.

The net proceeds of any such sale shall belong to us, and when we receive these net proceeds we shall become indebted to the former shareholder for an amount equal to such net proceeds.

#### 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.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described elsewhere in “Item 4. Information on the Company—B. Business Overview,” “Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions,” or elsewhere in this annual report.

D. Exchange Controls

See “Item 4. Information on the Company—B. Business Overview—PRC Regulation—Regulation of Foreign Currency Exchange and Dividend Distribution.”

E. Taxation

Cayman Islands Taxation

See “Item 5. Operating and Financial Review and Prospects—A. Operating Results—Discussion of Selected Statements of Operations Items—Taxation—Cayman Islands.”

People’s Republic of China Taxation

Under the existing tax laws in the PRC, we are qualified as a non-resident enterprise. We are a holding company incorporated in the Cayman Islands; our holding company indirectly holds 100% of the equity interests in our PRC subsidiaries through Duowan BVI, NeoTasks Cayman, BiLin Cayman and HUYA Inc. Our business operations are principally conducted through our PRC subsidiaries and our PRC consolidated affiliated entities. The PRC Enterprise Income Tax Law and its implementation rules, both of which became effective on January 1, 2008, provide that China-sourced income of foreign enterprises, such as dividends paid by a PRC subsidiary to its overseas parent that is not a PRC resident enterprise and has no establishment in the PRC, will normally be subject to PRC withholding tax at a rate of 10% (a further reduced WHT rate may be available according to the applicable double tax treaty or arrangement).

If the PRC tax authorities determine that YY Inc., our Cayman Islands holding company, is a PRC resident enterprise for enterprise income tax purposes, our world-wide income could be subject to PRC tax at a rate of 25%, which could

materially reduce our net income. In addition, we will also be subject to PRC enterprise income tax reporting obligations. Furthermore, although dividends paid by one PRC tax resident to another PRC tax resident should qualify as “tax-exempt income” under the PRC Enterprise Income Tax Law, we cannot assure you that dividends by our PRC subsidiaries to our Cayman holding company will not be subject to a 10% withholding tax, as the PRC foreign exchange control authorities, which enforce the withholding tax on dividends, and the PRC tax authorities have not yet issued guidance with respect to the processing of outbound remittances to entities that are treated as resident enterprises for PRC enterprise income tax purposes. In addition, ADS holders may be subject to PRC withholding tax on dividends payable by us and gains realized on the sale or other disposition of ADSs or common shares, if the PRC tax authorities determine that our Cayman Islands holding company is a PRC resident enterprise for enterprise income tax purposes. See “Risk Factors—Risks Related to Doing Business in China—Under the PRC enterprise income tax law, we may be classified as a PRC “resident enterprise,” which could result in unfavorable tax consequences to us and our shareholders and have a material adverse effect on our results of operations and the value of your investment.”

### United States Federal Income Tax Considerations

The following is a summary of certain United States federal income tax considerations relating to the ownership and disposition of our ADSs or common shares by a U.S. holder (as defined below) that holds our ADSs or common shares as “capital assets” (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended (the “Code”). This summary is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. This summary does not discuss all aspects of United States federal income taxation that may be important to particular holders in light of their particular circumstances, including holders subject to special tax rules (for example, banks and other financial institutions, insurance companies, broker-dealers, pension plans, cooperatives, real estate investment trusts, regulated investment companies, traders in securities that have elected the mark-to-market method of accounting for their securities, partnerships and their partners, and tax-exempt organizations (including private foundations)), holders who are not U.S. holders, holders who own (directly, indirectly, or constructively) 10% or more of our stock (by vote or value), holders that hold their ADSs or common shares as part of a straddle, hedge, conversion, constructive sale, or other integrated transaction for United States federal income tax purposes, persons who acquired ADSs or common shares pursuant to the exercise of any employee share option or otherwise as compensation, investors required to accelerate the recognition of any item of gross income with respect to our ADSs or common shares as a result of such income being recognized on an applicable financial statement, or holders that have a functional currency other than the United States dollar, all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, except to the extent described below, this summary does not discuss any state, local or non-United States tax considerations, Medicare tax, the alternative minimum tax or any non-income tax (such as the United States federal estate or gift tax) considerations. Each U.S. holder is urged to consult its tax advisor regarding the United States federal, state, local, and non-United States income and other tax considerations relating to the ownership and disposition of our ADSs or common shares.

## General

For purposes of this summary, a “U.S. holder” is a beneficial owner of our ADSs or common shares that is, for United States federal income tax purposes, (i) an individual who is a citizen or resident of the United States, (ii) a corporation (or other entity treated as a corporation for United States federal income tax purposes) created in, or organized under the law of, the United States or any state thereof or the District of Columbia, (iii) an estate the income of which is includible in gross income for United States federal income tax purposes regardless of its source, or (iv) a trust (A) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise elected to be treated as a United States person.

If a partnership (or other entity treated as a partnership for United States federal income tax purposes) is a beneficial owner of our ADSs or 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 our ADSs or common shares and partners in such partnerships are urged to consult their tax advisors regarding the ownership and disposition of our ADSs or common shares.

It is generally expected that a holder of ADSs should be treated, for United States federal income tax purposes, as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a holder of ADSs will be treated in this manner. Predicated upon such treatment, deposits or withdrawals of common shares for ADSs will not be subject to United States federal income tax.

## Passive Foreign Investment Company Considerations

A non-United States corporation, such as our company, will be classified as a “passive foreign investment company,” or “PFIC,” for United States federal income tax purposes, for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of its average quarterly assets (as determined on the basis of fair market value) during such year produce or are held for the production of passive income. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the company’s unbooked intangibles are taken into account for determining the value of its assets. We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock.

Although the law in this regard is unclear, we treat our PRC consolidated affiliated entities as being owned by us for United States federal income tax purposes, not only because we exercise effective control over the operation of such

entities but also because we are entitled to substantially all of their economic benefits, and, as a result, we consolidate their operating results in our consolidated financial statements.

No assurance can be given with respect to our PFIC status for the taxable year ended December 31, 2018 or any future taxable year. The determination of whether we are or will become a PFIC is uncertain, because it is a fact-intensive inquiry made on an annual basis that depends, in part, on the composition of our income and assets. Fluctuations in the market price of our ADSs and common shares may cause us to become a PFIC for the current taxable year or future taxable years. It is also possible that the Internal Revenue Service may challenge our classification or valuation of our goodwill and other unbooked intangibles, which may result in our company being or, becoming classified as, a PFIC for the current or future taxable years. The determination of whether we will be or become a PFIC will also depend, in part, upon the nature of our income and assets over time, which are subject to change from year to year. There can be no assurance our business plans will not change in a manner that will affect our PFIC status.

The discussion below under “Dividends” and “Sale or Other Disposition of ADSs or Common Shares” is written on the basis that we will not be classified as a PFIC for United States federal income tax purposes. The United States federal income tax rules that apply if we are classified as a PFIC for the current taxable year or any subsequent taxable year are generally discussed below under “Passive Foreign Investment Company Rules.”

## Dividends

Subject to the PFIC rules discussed below, any cash distributions (including the amount of any taxes withheld) paid on our ADSs or common shares out of our current or accumulated earnings and profits, as determined under United States 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 Depository, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of United States federal income tax principles, any distribution paid will generally be reported as a “dividend” for United States federal income tax purposes. A non-corporate recipient of dividend income will generally be subject to tax on dividend income from a “qualified foreign corporation” at a reduced United States federal tax rate rather than the marginal tax rates generally applicable to ordinary income provided that certain holding period requirements are met.

A non-United States corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) will generally be considered to be a qualified foreign corporation with respect to any dividend it pays on stock (or ADSs in respect of such stock) which is readily tradable on an established securities market in the United States or, in the event that the company is deemed to be a PRC resident under the PRC Enterprise Income Tax Law, the company is eligible for the benefits of the United States-PRC treaty. Although no assurances may be given, our ADSs are expected to be readily tradable on the Nasdaq Global Select Market, which is an established securities market in the United States. Since we do not expect that our common shares will be listed on established securities markets, it is unclear whether dividends that we pay on our common shares that are not backed by ADSs currently meet the conditions required for these reduced tax rates. There can be no assurance that our ADSs will be considered readily tradable on an established securities market in the current taxable year or future taxable years.



Dividends received on the ADSs or common shares are not expected to be eligible for the dividends received deduction allowed to corporations. Each U.S. holder is advised to consult its tax advisor regarding the rate of tax that will apply to such holder with respect to dividend distributions, if any, received from us.

Dividends generally will be treated as income from foreign sources for United States foreign tax credit purposes and generally will constitute passive category income. A U.S. holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any foreign withholding taxes imposed on dividends received on ADSs or common shares. A U.S. holder who does not elect to claim a foreign tax credit for foreign tax withheld, may instead claim a deduction, for United States federal income tax purposes, in respect of such withholdings, but only for a year in which such U.S. holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex. Each U.S. holder is advised to consult its tax advisor regarding the availability of the foreign tax credit under their particular circumstances.

### Sale or Other Disposition of ADSs or Common Shares

Subject to the PFIC rules discussed below, a U.S. holder generally will recognize capital gain or loss upon the sale or other disposition of ADSs or common shares in an amount equal to the difference between the amount realized upon the disposition and the U.S. holder's adjusted tax basis in such ADSs or common shares. Any capital gain or loss will be long-term if the ADSs or common shares have been held for more than one year and will generally be United States source gain or loss for United States foreign tax credit purposes. The deductibility of a capital loss may be subject to limitations. Each U.S. holder is advised to consult its tax advisor regarding the tax consequences if a foreign tax is imposed on a disposition of our ADSs or common shares, including the availability of the foreign tax credit under their particular circumstances.

### Passive Foreign Investment Company Rules

If we are classified as a PFIC for any taxable year during which a U.S. holder holds our ADSs or 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 that have a penalizing effect, regardless of whether we remain a PFIC, 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% 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 common shares), and (ii) any gain realized on the sale or other disposition, including, under certain circumstances, a pledge, of ADSs or common shares. Under the PFIC rules:

such excess distribution and/or gain will be allocated ratably over the U.S. holder's holding period for the ADSs or common shares;

such 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, or pre-PFIC year, will be taxable as ordinary income;

such 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 applicable to the U.S. holder for that year; and

an interest charge generally applicable to underpayments of tax will be imposed on the tax attributable to each prior taxable year, other than a pre-PFIC year.

If we are a PFIC for any taxable year during which a U.S. holder holds our ADSs or common shares and any of our non-United States subsidiaries is also a PFIC, such U.S. holder would be treated as owning a proportionate amount

(by value) of the shares of the lower-tier PFIC and would be subject to the rules described above on certain distributions by a lower-tier PFIC and a disposition of shares of a lower-tier PFIC even though such U.S. holder would not receive the proceeds of those distributions or dispositions. Each U.S. holder is advised to consult its tax advisor regarding the application of the PFIC rules to any of our subsidiaries.

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 for such stock to elect out of the tax treatment discussed above. 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. Our ADSs are listed on the Nasdaq Global Select Market, which is a qualified exchange or market for these purposes. We anticipate that our ADSs should qualify as being regularly traded, but no assurances may be given in this regard. Because a mark-to-market election cannot be made for equity interests in any lower-tier PFICs that we own, a U.S. holder may continue to be subject to the PFIC rules with respect to its indirect interest in any investments held by us that are treated as an equity interest in a PFIC for United States federal income tax purposes. If a mark-to-market election is made, the U.S. holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. holder’s adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election.

If a U.S. holder makes a mark-to-market election in respect of a corporation classified as a PFIC and such corporation ceases to be classified as a PFIC, the U.S. holder will not be required to take into account the mark-to-market gain or loss described above during any period that such corporation is not classified as a PFIC.

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

If a U.S. holder owns our ADSs or common shares during any taxable year that we are a PFIC, such holder is required to file an annual report containing such information as the United States Treasury Department may require and may be required to file an annual IRS Form 8621. Each U.S. holder is advised to consult its tax advisors regarding the potential tax consequences to such holder if we are or become classified as a PFIC, including the possibility of making a mark-to-market election.

#### Information Reporting

U.S. holders may be subject to information reporting to the Internal Revenue Service with respect to dividends on and proceeds from the sale or other disposition of our ADSs or common shares. Each U.S. holder is advised to consult with its tax advisor regarding the application of the United States information reporting rules to their particular circumstances.

An individual U.S. holder and certain entities may be required to submit to the United States Internal Revenue Service certain information with respect to his or her beneficial ownership of the ADSs or common shares, if such ADSs or common shares are not held on his or her behalf by a U.S. financial institution. This law also imposes penalties if an individual U.S. holder is required to submit such information to the United States Internal Revenue Service and fails to do so in a timely manner. Each U.S. holder is urged to consult its tax advisor as to any such reporting requirements.

#### F. Dividends and Paying Agents

Not applicable.

#### G. Statement by Experts

Not applicable.

H. Documents on Display

We previously filed with the SEC a registration statement on Form F-1 under the Securities Act with respect to our initial public offering of our Class A common shares represented by ADSs.

We are subject to the periodic reporting and other informational requirements of the Securities Exchange Act of 1934 or 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 within four months after the end of each fiscal year which is December 31. The SEC maintains a website at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. Copies of reports and other information, when filed, may also 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. 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 Citibank N.A., the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

### I. Subsidiary Information

For a listing of our principal subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

## ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

### Foreign Exchange Risk

The revenues and expenses of our subsidiaries and PRC consolidated affiliated entities are generally denominated in Renminbi and their assets and liabilities are denominated in Renminbi. Our financing activities are denominated in U.S. dollars.

To date, we have not entered into hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. Although our exposure to foreign exchange risks is generally limited, the value of your investment in our ADSs will be affected by the exchange rate between the U.S. dollar and the Renminbi because the value of our business is effectively denominated in Renminbi, while our ADSs will be traded in U.S. dollars.

The Renminbi is not freely convertible into foreign currencies. Remittances of foreign currencies into the PRC and exchange of foreign currencies into Renminbi require approval by foreign exchange administrative authorities and certain supporting documentation. The State Administration for Foreign Exchange, under the authority of the People's Bank of China, controls the conversion of Renminbi into other currencies.

The value of the RMB 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 RMB to the U.S. dollar, and the RMB 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 RMB and the U.S. dollar remained within a narrow band. Since June 2010, the RMB has fluctuated against the U.S. dollar, at times significantly and unpredictably. On November 30, 2015, the Executive Board of the International Monetary Fund (IMF) completed the regular five-year review of the basket of currencies that make up the Special Drawing Right, or the SDR, and decided that with effect from October 1, 2016, Renminbi is determined to be a freely usable currency and will be included in the SDR basket as a fifth currency, along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2016, the RMB has depreciated significantly in the backdrop of a surging U.S. dollar and persistent capital outflows of China. In 2017, the RMB has appreciated against the U.S. dollar. 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 RMB and the U.S. dollar in the future. 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 receive from the conversion. Conversely, if we decide to convert the Renminbi into U.S. dollars for the purpose of making payments for dividends on our common shares or ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amounts available to us.

## 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. 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. A hypothetical one percentage point decrease in interest rates would have resulted in a decrease of US\$12.8 million in our interest income for the year ended December 31, 2018.

## ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

### A. Debt Securities

Not applicable.

### B. Warrants and Rights

Not applicable.

### C. Other Securities

Not applicable.

### D. American Depositary Shares

Fees and Charges Our ADS holders May Have to Pay

As an ADS holder, you will be required to pay the following service fees to the depositary bank:



**Service**

- Issuance of ADSs (*e.g.*, an issuance upon a deposit of Shares, upon a change in the ADS(s)-to-Share(s) ratio, or for any other reason), excluding issuances as a result of distributions described in paragraph (4) below
- Cancellation of ADSs (*e.g.*, a cancellation of ADSs for Delivery of deposited Shares, upon a change in the ADS(s)-to-Share(s) ratio, or for any other reason)
- Distribution of cash dividends or other cash distributions (*e.g.*, upon a sale of rights and other entitlements)
- Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) an exercise of rights to purchase additional ADSs
- Distribution of securities other than ADSs or rights to purchase additional ADSs (*e.g.*, spin-off shares)
- ADS Services

**Fees**

- Up to US\$5.00 per 100 ADSs (or fraction thereof) issued
- Up to US\$5.00 per 100 ADSs (or fraction thereof) cancelled
- Up to US\$5.00 per 100 ADSs (or fraction thereof) held
- Up to US\$5.00 per 100 ADSs (or fraction thereof) held
- Up to US\$5.00 per 100 ADSs (or fraction thereof) held
- Up to US\$5.00 per 100 ADSs (or fraction thereof) held on the applicable record date(s) established by the Depositary

As an ADS holder, you will also be responsible for the following ADS charges:

- (i) taxes (including applicable interest and penalties) and other governmental charges;

the registration fees as may from time to time be in effect for the registration of Class A common shares on the (ii) share register and applicable to transfers of Class A common shares to or from the name of the custodian, the depositary bank or any nominees upon the making of deposits and withdrawals, respectively;

(iii) certain cable, telex and facsimile transmission and delivery expenses;

(iv) the expenses and charges incurred by the depositary bank in the conversion of foreign currency;

(v) the fees and expenses incurred by the depositary bank in connection with compliance with exchange control regulations and other regulatory requirements applicable to Class A common shares, ADSs and ADRs; and

(vi) the fees and expenses incurred by the depositary bank, the custodian, or any nominee in connection with the servicing or delivery of deposited property.

ADS fees and charges for (i) the issuance of ADSs and (ii) the cancellation of ADSs will be payable by the person for whom the ADSs are so issued by the depositary bank (in the case of ADS issuances) and by the person for whom ADSs are being cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depositary bank into DTC or presented to the depositary via DTC, the ADS issuance and cancellation fees and charges will be payable by the DTC participant(s) receiving the ADSs from the depositary bank or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account(s) of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participant(s) as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are payable by holders as of the applicable ADS record date established by the depositary bank. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, the applicable holders as of the ADS record date established by the depositary bank will be invoiced for the amount of the ADS fees and charges and such ADS fees may be deducted from distributions made to holders. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC, and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC from time to time and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs.

In the event of refusal to pay the depositary bank fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary bank fees from any distribution to be made to the ADS holder. Certain of the depositary fees and charges (such as the ADS service fee) may become payable shortly after the closing of the ADS offering. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary bank. You will receive prior notice of such changes. The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time.

Fees and Other Payments Made by the Depositary to Us

Citibank, N.A., as our current depositary replacing Deutsche Bank Trust Company Americas, has agreed to reimburse us for a portion of certain expenses we incur that are related to establishment and maintenance of the ADS program, including investor relations expenses. There are limits on the amount of expenses for which the depositary will reimburse us, but the amount of reimbursement available to us is not related to the amount of fees the depositary collects from investors. Further, the depositary has agreed to reimburse us certain fees payable to the depositary by holders of ADSs. For the year ended December 31, 2018, we have received US\$0.36 million from the depositary (both Deutsche Bank Trust Company Americas and its successor, Citibank, N.A.) as reimbursement for our expenses incurred in connection with the establishment and maintenance of our ADS program.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

See “Item 10. Additional Information” for a description of the rights of securities holders, which remain unchanged.

The following “Use of Proceeds” information relates to the registration statement on Form F-3, as amended (File Number 333-219961) for our public offering of 6,612,500 ADSs, representing 132,250,000 Class A common shares, which registration statement was effective immediately upon filing on August 14, 2017. We received net proceeds of US\$442.2 million, after deducting commissions and offering expenses.

As of the date of this annual report, we have used all of the net proceeds from our ADS offering in 2017 primarily for the investment in series D financing of Bigo, the acquisition of Bigo and the repayment of bank borrowings.

ITEM 15. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Exchange Act, our management, including our chief executive officer, and our chief financial officer, performed an evaluation of the effectiveness of our disclosure controls and procedures, as that term is defined in Rules 13a-15(e) of the Exchange Act, as of the end of the period covered by this annual report. Based on that evaluation, our management has concluded that our disclosure controls and procedures as of December 31, 2018, 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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with Generally Accepted Accounting Principles (GAAP) in the United States of America and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of our company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with GAAP, and that receipts and expenditures of our company are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of the unauthorized acquisition, use or disposition of our company's assets that could have a material effect on the consolidated financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management conducted an evaluation of the effectiveness of our company's internal control over financial reporting as of December 31, 2018 based on the framework in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, audited the effectiveness of our company's internal control over financial reporting as of December 31, 2018, as stated in its report, which appears on page F-2 of this Form 20-F.

#### Changes in Internal Control Over Financial Reporting

As required by Rule 13a-15(d), under the Exchange Act, our management, including our chief executive officer and our chief financial officer, also conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the period covered by this report have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, it has been determined that there has been no such change during the period covered by this annual report.

ITEM 16.

RESERVED

ITEM 16A.

AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. Peter Andrew Schloss is our audit committee financial expert, who is an independent director under the standards set forth in Nasdaq Stock Market Rule 5605(a)(2) and Rule 10A-3 of the Exchange Act. Mr. Schloss is the chairman of our audit committee.

ITEM 16B.

CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to our directors, officers, employees and agents, including certain provisions that specifically apply to our chief executive officers, chief financial officer, chief technology officer, vice presidents and any other persons who perform similar functions for us. We filed our code of business conduct and ethics as Exhibit 99.1 to our registration statement on Form F-1, as amended, which was originally filed with the SEC on October 15, 2012 and subsequently amended and filed with this annual report. We have posted a copy of our code of business conduct and ethics on our website at <http://ir.yy.com/corporate-governance.com>.

## ITEM 16C.

## PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees in connection with certain professional services rendered by PricewaterhouseCoopers Zhong Tian LLP, our independent registered public accounting firm, for the years indicated. We did not pay any other fees to our independent registered public accounting firm during the periods other than those indicated below.

	For the Year Ended December 31,	
	2017	2018
	(in RMB thousands)	
Audit fees <sup>(1)</sup>	10,317	20,101
Audit-related fees <sup>(2)</sup>	4,029	-
Tax fees <sup>(3)</sup>	-	763
Others <sup>(4)</sup>	-	680

“Audit fees” means the aggregate fees billed for professional services rendered by our independent registered public accounting firm for the annual audit and the quarterly review of our consolidated financial statement, audit of <sup>(1)</sup> internal controls over financial reporting, and audit of Huya’s financial statements, including services in connection with Huya’s initial public offering in 2018.

“Audit related fees” means aggregate fees billed for professional services rendered by our principal auditors for the <sup>(2)</sup> assurance and related services rendered in connection with our follow-on equity offering in 2017.

- (3) “Tax fees” means the aggregate fees billed in each of the fiscal years listed for professional services rendered by our principal auditors for tax service.
- (4) “Others” means the aggregate fees billed in each of the fiscal years listed services rendered by our principal auditors other than services reported under “Audit fees,” “Audit related fees” and “Tax fees.”

The policy of our audit committee is to pre-approve all audit and non-audit services provided by PricewaterhouseCoopers Zhong Tian LLP, including audit services, audit-related services, tax services and other services, other than those for *de minimis* services which are approved by the audit committee prior to the completion of the audit. Our audit committee has approved all of our audit and non-audit fees for the year ended December 31, 2018.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

As a Cayman Islands company listed on the Nasdaq Global Select Market, we are subject to the Nasdaq Global Select Market corporate governance requirements. However, Nasdaq Global Select 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 Global Select Market corporate governance requirements.



We relied on the exemption available to foreign private issuers to the requirement that each member of the compensation committee be an independent director. Currently, the chairman of our compensation committee, Mr. David Xueling Li, is not an independent director. We also relied on the exemption available to foreign private issuers to the requirement that shareholder approval should be obtained in certain circumstances prior to an issuance of securities in connection with the acquisition of the stock or assets of another company. If we continue to rely on the above and other exemptions available to foreign private issuers in the future, our shareholders may be afforded less protection than they otherwise would under the Nasdaq Global Select Market corporate governance requirements applicable to U.S. domestic issuers. See “Item 3. Key Information—D. Risk Factors—Risks Relating to Our ADSs—We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to United States domestic public companies.”

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 YY Inc. are included at the end of this annual report.

ITEM 19.

EXHIBITS

**Exhibit  
Number**

**Description of Document**

- 1.1 Second Amended and Restated Memorandum and Articles of Association of the Registrant, as amended (incorporated herein by reference to Exhibit 1.2 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 20, 2017)
- 2.1 Registrant’s Specimen American Depositary Receipt (incorporated herein by reference to Exhibit 4.1 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)
- 2.2 Registrant’s Specimen Certificate for Common Shares (incorporated herein by reference to Exhibit 4.2 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)
- 2.3 Form of Deposit Agreement, among the Registrant, the depository and holder of the American Depositary Receipts (incorporated herein by reference to Exhibit 4.3 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)
- 2.7 Amended and Restated Deposit Agreement dated May 21, 2018 among the Registrant, Citibank N.A., as depository, and holders and beneficial owners of American Depositary Shares evidenced by American Depositary Receipts issued thereunder (incorporated by reference to Exhibit 4.3 to the registration statement on Form S-8 (File No. 333-229099), filed with the Securities and Exchange Commission on December 31, 2018)
- 4.1 2009 Employee Equity Incentive Scheme of the Registrant, as amended and restated. (incorporated herein by reference to Exhibit 10.1 to the registration statement on Form F-1, as amended (File. No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)
- 4.2 2011 Share Incentive Plan and Amendment No. 1 to the 2011 Share Incentive Plan of the Registrant (incorporated herein by reference to Exhibit 10.2 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)
- 4.3 Form of Indemnification Agreement with the Registrant’s directors and officers (incorporated herein by reference to Exhibit 10.3 to the registration statement on Form F-1, as amended (File No. 333-184414),

initially filed with the Securities and Exchange Commission on October 15, 2012)

4.4 Form of Employment Agreement between the Registrant and an executive officer of the Registrant (incorporated herein by reference to Exhibit 10.4 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)

4.5 English translation of Exclusive Business Cooperation Agreement dated August 12, 2008 between Huanju Shidai (formerly known as Duowan Entertainment Information Technology (Beijing) Co., Ltd.) and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.5 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)

Exhibit Number	Description of Document
4.6	<u>English translation of Supplementary Agreement dated November 10, 2011 to Exclusive Business Cooperation Agreement between Huanju Shidai and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.6 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.7	<u>English translation of Confirmation Letter dated November 10, 2011 to Exclusive Business Cooperation Agreement between Huanju Shidai and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.7 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.8	<u>English translation of Exclusive Technology Support and Technology Services Agreement dated August 12, 2008 between Huanju Shidai and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.8 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.9	<u>English translation of Supplementary Agreement dated November 10, 2011 to Exclusive Technology Support and Technology Services Agreement between Huanju Shidai and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.9 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.10	<u>English translation of Confirmation letter dated November 10, 2011 to Exclusive Technology Support and Technology Services Agreement between Huanju Shidai and Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.10 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.11	<u>English translation of Powers of Attorney dated September 16, 2011 issued to Huanju Shidai by each of the shareholders of Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.11 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.12	<u>English translation of Exclusive Option Agreements dated September 16, 2011 among Huanju Shidai, Guangzhou Huaduo and each of the shareholders of Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.12 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.13	<u>English translation of Equity Interest Pledge Agreements dated September 16, 2011 between Huanju Shidai and each of the shareholders of Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.13 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.14	<u>English translation of Consent Letter dated November 10, 2011 issued by the shareholders of Guangzhou Huaduo (incorporated herein by reference to Exhibit 10.14 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>

4.15 English translation of Exclusive Business Cooperation Agreement dated December 3, 2009 between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.15 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)

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Exhibit Number	Description of Document
4.16	<u>English translation of Supplementary Agreement dated November 10, 2011 to Exclusive Business Cooperation Agreement between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.16 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.17	<u>English translation of Confirmation Letter dated November 10, 2011 to Exclusive Business Cooperation Agreement between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.17 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.18	<u>English translation of Exclusive Technology Support and Technology Services Agreement dated December 3, 2009 between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.18 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.19	<u>English translation of Supplementary Agreement dated November 10, 2011 to Exclusive Technology Support and Technology Services Agreement between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.19 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.20	<u>English translation of Confirmation Letter dated November 10, 2011 to Exclusive Technology Support and Technology Services Agreement between Huanju Shidai and Beijing Tuda (incorporated herein by reference to Exhibit 10.20 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.21	<u>English translation of Powers of Attorney dated May 27, 2011 issued to Huanju Shidai by each of the shareholders of Beijing Tuda (incorporated herein by reference to Exhibit 10.21 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.22	<u>English translation of Exclusive Option Agreements dated May 27, 2011 among Huanju Shidai, Beijing Tuda and each of the shareholders of Beijing Tuda (incorporated herein by reference to Exhibit 10.22 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.23	<u>English translation of Equity Interest Pledge Agreements dated July 1, 2011 between Huanju Shidai and each of the shareholders of Beijing Tuda (incorporated herein by reference to Exhibit 10.23 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>
4.24	<u>English translation of Consent Letter dated November 10, 2011 issued by the shareholders of Beijing Tuda (incorporated herein by reference to Exhibit 10.24 to the registration statement on Form F-1, as amended (File No. 333-184414), initially filed with the Securities and Exchange Commission on October 15, 2012)</u>

4.25 English summary of Contract for State-owned Construction Land Use Rights Assignment, dated August 20, 2015, by and between Guangzhou Land Resources and Real Estate Administration Bureau and Guangzhou Huaduo (incorporated herein by reference to Exhibit 4.27 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)

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Exhibit Number	Description of Document
4.26	<u>English translation of Exclusive Business Cooperation Agreement dated August 25, 2015 between Bilin Online and Bilin Changxiang (incorporated herein by reference to Exhibit 4.28 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)</u>
4.27	<u>English translation of Exclusive Option Agreement dated August 25, 2015 among David Xueling Li, Bilin Online and Bilin Changxiang (incorporated herein by reference to Exhibit 4.29 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)</u>
4.28	<u>English translation of Exclusive Assets Purchase Agreement dated August 25, 2015 among David Xueling Li, Bilin Online and Bilin Changxiang (incorporated herein by reference to Exhibit 4.30 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)</u>
4.29	<u>English translation of Equity Interest Pledge Agreement dated August 25, 2015 among David Xueling Li, Bilin Online and Bilin Changxiang (incorporated herein by reference to Exhibit 4.31 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)</u>
4.30	<u>English translation of Power of Attorney dated August 25, 2015 issued to Bilin Changxiang by David Xueling Li (incorporated herein by reference to Exhibit 4.32 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 28, 2016)</u>
4.31	<u>The loan agreement made on January 19, 2017 by the Registrant as the evidence for the Industrial and Commercial Bank of China (Thai) Public Company Limited (incorporated herein by reference to Exhibit (b) from our Amendment No. 1 to Schedule TO (File No. 005-87080), filed with the Securities and Exchange Commission on March 13, 2017)</u>
4.32	<u>HUYA Amended and Restated 2017 Plan (incorporated herein by reference to Exhibit 4.34 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)</u>
4.33	<u>Series A Preferred Share Subscription Agreement among HUYA Inc., Huya Limited, Guangzhou Huya, Mr. Rongjie Dong, Mr. David Xueling Li, YY and eight subscribers dated May 16, 2017 (incorporated herein by reference to Exhibit 4.35 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)</u>
4.34	<u>Series B-2 Preferred Share Subscription Agreement among HUYA Inc., Huya Limited, Guangzhou Huya, Huya Technology, YY, Mr. Rongjie Dong and his affiliates, and Linen Investment Limited dated March 8, 2018 (incorporated herein by reference to Exhibit 4.36 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)</u>
4.35	<u>Amended and Restated Shareholders Agreement dated as of March 8, 2018 between HUYA Inc. and other parties thereto (incorporated herein by reference to Exhibit 4.37 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)</u>



4.36 English translation of Non-Compete Agreement between Guangzhou Huaduo and Guangzhou Huya dated March 8, 2018 (incorporated herein by reference to Exhibit 4.38 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)

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Exhibit Number	Description of Document
4.37	<u>English translation of Business Cooperation Agreement between Shenzhen Tencent Computer Systems Company Ltd. and Guangzhou Huya dated February 5, 2018 (incorporated herein by reference to Exhibit 4.39 from our annual report on Form 20-F (File No. 001-35729), filed with the Securities and Exchange Commission on April 26, 2018)</u>
4.38	<u>Amended and Restated Share Purchase Agreement among the Registrant, Duowan Entertainment Corp., Bigo Inc., David Xueling Li, Jianqiang Hu and the other parties thereto dated February 26, 2019 (incorporated herein by reference to Exhibit C from the Amended No.4 to Schedule 13D (File No. 005-87080), filed by David Xueling Li with the Securities and Exchange Commission on March 12, 2019)</u>
4.39	<u>English translation of the Equity Interest Pledge agreement among Huya Technology, Guangzhou Huya, and Guangzhou Huaduo dated July 10, 2017 (incorporated herein by reference to Exhibit 10.5 to the registration statement on Form F-1 of HUYA Inc. (File No. 333-224202), as amended, initially filed with the Securities and Exchange Commission on April 9, 2018)</u>
4.40	<u>English translation of the Equity Interest Pledge Agreement among Huya Technology, Guangzhou Qinlv and Guangzhou Huya dated July 10, 2017 (incorporated herein by reference to Exhibit 10.6 to the registration statement on Form F-1 of HUYA Inc. (File No. 333-224202), as amended, initially filed with the Securities and Exchange Commission on April 9, 2018)</u>
4.41	<u>English translation of the Exclusive Business Operation Agreement between Huya Technology and Guangzhou Huya dated July 10, 2017 (incorporated herein by reference to Exhibit 10.7 to the registration statement on Form F-1 of HUYA Inc. (File No. 333-224202), as amended, initially filed with the Securities and Exchange Commission on April 9, 2018)</u>
4.42	<u>English translation of the Shareholder Voting Rights Proxy Agreement among Guangzhou Huaduo, Guangzhou Qinlv, Huya Technology and Guangzhou Huya dated July 10, 2017 (incorporated herein by reference to Exhibit 10.8 to the registration statement on Form F-1 of HUYA Inc. (File No. 333-224202), as amended, initially filed with the Securities and Exchange Commission on April 9, 2018)</u>
4.43	<u>English translation of the Exclusive Option Agreement among Huya Technology, Guangzhou Huaduo, Guangzhou Qinlv and Guangzhou Huya dated July 10, 2017 (incorporated herein by reference to Exhibit 10.9 to the registration statement on Form F-1 of HUYA Inc. (File No. 333-224202), as amended, initially filed with the Securities and Exchange Commission on April 9, 2018)</u>
4.44*	<u>English translation of Equity Interest Pledge Agreements dated January 17, 2017 among Guangzhou BaiGuoYuan, BaiGuoYuan Technology and each of the shareholders of Guangzhou BaiGuoYuan</u>
4.45*	<u>English translation of Exclusive Asset Purchase Agreements dated January 17, 2017 among Guangzhou BaiGuoYuan, BaiGuoYuan Technology and each of the shareholders of Guangzhou BaiGuoYuan</u>
4.46*	<u>English translation of Exclusive Business Cooperation Agreement dated January 17, 2017 between Guangzhou BaiGuoYuan and BaiGuoYuan Technology</u>

- 4.47\* English translation of Exclusive Option Agreements dated January 17, 2017 among Guangzhou BaiGuoYuan, BaiGuoYuan Technology and each of the shareholders of Guangzhou BaiGuoYuan
- 4.48\* English translation of Shareholder Voting Rights Proxy Agreements dated January 17, 2017 issued to BaiGuoYuan Technology by each of the shareholders of Guangzhou BaiGuoYuan
- 4.49\* English translation of Equity Interest Pledge Agreement dated October 17, 2018 among 100Edu Technology, Sanrenxing and each of the shareholders of Sanrenxing
- 4.50\* English translation of Exclusive Business Cooperation Agreement dated October 17, 2018 between 100Edu Technology and Sanrenxing
- 4.51\* English translation of Exclusive Option Agreement dated October 17, 2018 between 100Edu Technology, Sanrenxing and each of the shareholders of Sanrenxing
- 4.52\* English translation of Shareholder Voting Rights Proxy Agreement dated October 17, 2018 among 100Edu Technology, Sanrenxing and each of the shareholders of Sanrenxing
- 8.1\* List of Principal Subsidiaries and Consolidated Affiliated Entities
- 11.1 Amended Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 11.1 to the annual report on Form 20-F (File No. 001-35729) filed with the Securities and Exchange Commission on April 26, 2013)
- 12.1\* Certification by Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 12.2\* Certification by Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 13.1\*\* Certification by Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

**Exhibit  
Number**      **Description of Document**

13.2\*\*      Certification by Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

15.1\*      Consent of Maples and Calder (Hong Kong) LLP

15.2\*      Consent of Fangda Partners

15.3\*      Consent of Independent Registered Public Accounting Firm

101.INS\*    XBRL Instance Document

101.SCH\*    XBRL Taxonomy Extension Schema Document

101.CAL\*    XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF\*    XBRL Taxonomy Extension Definition Linkbase Document

101.LAB\*    XBRL Taxonomy Extension Labels 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.

Date: April 26, 2019

**YY INC.**

By: /s/ David Xueling Li

Name: David Xueling Li

Title: Director and Chairman of the Board

**YY INC.**

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of YY Inc.

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of YY Inc. and its subsidiaries (the “Company”) as of December 31, 2018 and 2017, and the related consolidated statements of comprehensive income, changes in shareholders’ equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, 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 accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

***Basis for Opinions***

The Company’s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Annual Report on Internal Control over Financial Reporting appearing under Item 15 of Form 20-F. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

***Definition and Limitations of Internal Control over Financial Reporting***

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Zhong Tian LLP  
Guangzhou, the People's Republic of China  
April 26, 2019

We have served as the Company's auditor since 2011.



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**CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2017 AND 2018**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	<b>Note</b>	<b>As of December 31,</b>		<b>2018</b>
		<b>2017</b>	<b>2018</b>	<b>US\$</b>
		<b>RMB</b>	<b>RMB</b>	<b>(Note2(e))</b>
<b>Assets</b>				
<b>Current assets</b>				
Cash and cash equivalents	5	2,617,432	6,004,231	873,279
Short-term deposits	6	6,000,104	7,326,996	1,065,667
Restricted short-term deposits	7	1,000,000	-	-
Short-term investments	8	124,550	979,053	142,397
Accounts receivable, net	9	153,944	198,428	28,860
Inventory		315	-	-
Amounts due from related parties	28	11,190	193,559	28,152
Financing receivables, net	10	-	768,343	111,751
Prepayments and other current assets	11	221,939	1,019,019	148,210
<b>Total current assets</b>		<b>10,129,474</b>	<b>16,489,629</b>	<b>2,398,316</b>
<b>Non-current assets</b>				
Long-term deposits	6	-	1,000,000	145,444
Deferred tax assets	23	113,017	70,834	10,302
Investments	12	1,153,019	4,591,524	667,809
Property and equipment, net	13	1,016,998	1,296,319	188,542
Land use rights, net	14	1,832,739	1,784,639	259,565
Intangible assets, net	15	37,481	74,685	10,862
Goodwill	16	11,716	11,763	1,711
Amounts due from related parties	28	20,000	-	-
Financing receivables, net	10	-	224,793	32,695
Other non-current assets		144,275	223,859	32,559
<b>Total non-current assets</b>		<b>4,329,245</b>	<b>9,278,416</b>	<b>1,349,489</b>
<b>Total assets</b>		<b>14,458,719</b>	<b>25,768,045</b>	<b>3,747,805</b>
<b>Liabilities, mezzanine equity and shareholders' equity</b>				
<b>Current liabilities</b>				
Convertible bonds (including convertible bonds of the consolidated variable interest entity without recourse to the Company of nil and nil as of December 31, 2017 and 2018, respectively)	20	-	6,863	998
Accounts payable (including accounts payable of the consolidated variable interest entity without recourse to the Company of RMB67,817 and RMB112,167 as of December 31, 2017 and 2018,		76,351	114,589	16,666

respectively)				
Deferred revenue (including deferred revenue of the consolidated variable interest entity without recourse to the Company of RMB757,244 and RMB950,816 as of December 31, 2017 and 2018, respectively)	17	758,044	951,616	138,407
Advances from customers (including advances from customers of the consolidated variable interest entity without recourse to the Company of RMB80,406 and RMB101,690 as of December 31, 2017 and 2018, respectively)		80,406	101,690	14,790
Income taxes payable (including income taxes payable of the consolidated variable interest entity without recourse to the Company of RMB142,204 and RMB162,118 as of December 31, 2017 and 2018, respectively)		146,298	235,561	34,261
Accrued liabilities and other current liabilities (including accrued liabilities and other current liabilities of the consolidated variable interest entity without recourse to the Company of RMB1,404,877 and RMB2,207,138 as of December 31, 2017 and 2018, respectively)	18	1,465,963	2,414,371	351,156
Amounts due to related parties (including amounts due to related parties of the consolidated variable interest entity without recourse to the Company of RMB30,502 and RMB28,336 as of December 31, 2017 and 2018, respectively)	28	30,502	28,336	4,121
Short-term loans (including short-term loans of the consolidated variable interest entity without recourse to the Company of nil and nil as of December 31, 2017 and 2018, respectively)	19	588,235	-	-
Total current liabilities		3,145,799	3,853,026	560,399
Non-current liabilities				
Convertible bonds (including convertible bonds of the consolidated variable interest entity without recourse to the Company of nil and nil as of December 31, 2017 and 2018, respectively)	20	6,536	-	-
Deferred revenue(including deferred revenue of the consolidated variable interest entity without recourse to the Company of RMB52,185 and RMB86,977 as of December 31, 2017 and 2018, respectively)	17	57,718	91,710	13,339
Deferred tax liabilities (including deferred tax liabilities of the consolidated variable interest entity without recourse to the Company of RMB8,404 and nil as of December 31, 2017 and 2018, respectively)	23	10,810	27,505	4,000
Total non-current liabilities		75,064	119,215	17,339
Total liabilities		3,220,863	3,972,241	577,738

**CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2017 AND 2018 (CONTINUED)**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	<b>Note</b>	<b>As of December 31,</b>		<b>2018</b>
		<b>2017</b>	<b>2018</b>	<b>US\$</b>
		<b>RMB</b>	<b>RMB</b>	<b>(Note 2(e))</b>
Commitments and contingencies	30			
Mezzanine equity	24	524,997	418,673	60,893
Shareholders' equity				
Class A common shares (US\$0.00001 par value; 10,000,000,000 shares authorized, 945,245,908 shares issued and outstanding as of December 31, 2017 and 981,740,848 shares issued and outstanding as of December 31, 2018)	25	57	59	9
Class B common shares (US\$0.00001 par value; 1,000,000,000 shares authorized, 317,982,976 shares issued and outstanding as of December 31, 2017 and 288,182,976 shares issued and outstanding as of December 31, 2018)	25	23	21	3
Additional paid-in capital		5,339,844	11,168,866	1,624,444
Statutory reserves	2(gg)	62,718	101,725	14,795
Retained earnings		5,218,110	6,913,469	1,005,522
Accumulated other comprehensive (loss) income	2(kk)	(9,597 )	336,152	48,891
Total YY Inc.'s shareholders' equity		10,611,155	18,520,292	2,693,664
Non-controlling interests		101,704	2,856,839	415,510
Total shareholders' equity		10,712,859	21,377,131	3,109,174
Total liabilities, mezzanine equity and shareholders' equity		14,458,719	25,768,045	3,747,805

The accompanying notes are an integral part of these consolidated financial statements.

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED  
DECEMBER 31, 2016, 2017 AND 2018**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	Note	For the year ended December 31,			2018
		2016	2017	2018	US\$
		RMB	RMB	RMB	(Note2(e))
Net revenues					
Live streaming		7,027,227	10,670,954	14,877,667	2,163,867
Others		1,176,823	923,838	885,890	128,847
Total net revenues		8,204,050	11,594,792	15,763,557	2,292,714
Cost of revenues <sup>(1)</sup>	21	(5,103,430)	(7,026,402)	(10,017,134)	(1,456,932)
Gross profit		3,100,620	4,568,390	5,746,423	835,782
<b>Operating expenses <sup>(1)</sup></b>					
Research and development expenses		(675,230)	(781,886)	(1,192,052)	(173,377)
Sales and marketing expenses		(387,268)	(691,281)	(1,149,316)	(167,161)
General and administrative expenses		(482,437)	(544,641)	(883,225)	(128,460)
Goodwill impairment	16	(17,665)	(2,527)	-	-
Total operating expenses		(1,562,600)	(2,020,335)	(3,224,593)	(468,998)
Gain on deconsolidation and disposal of subsidiaries		103,960	37,989	-	-
Other income	22	129,504	113,187	117,860	17,142
Operating income		1,771,484	2,699,231	2,639,690	383,926
Interest expense		(81,085)	(32,122)	(8,616)	(1,253)
Interest income and investment income		67,193	180,384	485,552	70,621
Foreign currency exchange gains (losses), net		1,158	(2,176)	(514)	(75)
Gain on deemed disposal and disposal of investments		25,061	45,861	16,178	2,353
Gain on fair value changes of investments	12	-	-	1,689,404	245,714
Fair value loss on derivative liabilities	24	-	-	(2,285,223)	(332,372)
Other non-operating expenses		-	-	(2,000)	(291)
Income before income tax expenses		1,783,811	2,891,178	2,534,471	368,623
Income tax expenses	23	(280,514)	(415,811)	(477,707)	(69,480)
		1,503,297	2,475,367	2,056,764	299,143

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Income before share of income in equity method investments, net of income taxes				
Share of income in equity method investments, net of income taxes	8,279	33,024	58,933	8,571
Net income	1,511,576	2,508,391	2,115,697	307,714
Less: Net (loss) income attributable to the non-controlling interest shareholders and the mezzanine equity classified non-controlling interest shareholders	(12,342 )	(4,532 )	(93,310 )	(13,571 )
Net income attributable to controlling interest of the Company	1,523,918	2,512,923	2,209,007	321,285
Less: Accretion of subsidiaries' redeemable convertible preferred shares to redemption value	-	19,688	73,159	10,641
Deemed dividend to subsidiary's Series A preferred shareholders	-	-	489,284	71,163
Cumulative dividend on subsidiary's Series A Preferred Shares	24 -	-	4,606	669
Net income attributable to common shareholders of the Company	1,523,918	2,493,235	1,641,958	238,812
Other comprehensive income (loss):				
Unrealized gain (loss) of available-for-sale securities, net of nil tax	134,768	(41,150 )	-	-
Foreign currency translation adjustments, net of nil tax	(5,317 )	(61,513 )	434,080	63,134
Comprehensive income attributable to the common shareholders of YY Inc.	1,653,369	2,390,572	2,076,038	301,946

**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME FOR THE YEARS ENDED  
DECEMBER 31, 2016, 2017 AND 2018 (CONTINUED)**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	Note	For the year ended December 31,			2018 US\$ (Note2(e))
		2016 RMB	2017 RMB	2018 RMB	
Net income per ADS*					
—Basic	27	27.04	42.03	25.64	3.73
—Diluted	27	26.40	41.33	25.38	3.69
Weighted average number of ADS used in calculating net income per ADS					
—Basic	27	56,367,166	59,323,007	64,042,390	64,042,390
—Diluted	27	60,805,566	60,831,887	64,704,470	64,704,470
Net income per common share*					
—Basic	27	1.35	2.10	1.28	0.19
—Diluted	27	1.32	2.07	1.27	0.18
Weighted average number of common shares used in calculating net income per common share					
—Basic	27	1,127,343,312	1,186,460,144	1,280,847,795	1,280,847,795
—Diluted	27	1,216,111,329	1,216,637,741	1,294,089,406	1,294,089,406

\* Each ADS represents 20 common shares.

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

	Note	For the year ended December 31,			
		2016 RMB	2017 RMB	2018 RMB	2018 US\$ (Note2(e))
Cost of revenues		15,894	42,759	74,339	10,812
Research and development expenses		78,816	122,348	225,173	32,750
Sales and marketing expenses		3,107	4,417	5,723	832
General and administrative expenses		59,469	88,137	342,790	49,857

The accompanying notes are an integral part of these consolidated financial statements.







Set-up of subsidiaries with non-controlling interest shareholders	-	-	-	-	-	-	-	-	-
Acquisition of subsidiaries with non-controlling interest shareholders	-	-	-	-	-	-	-	-	-
Capital injection in subsidiaries from non-controlling interest shareholders	-	-	-	-	-	-	-	-	-
Components of comprehensive income									
Net income (loss) attributable to YY Inc. and non-controlling interest shareholders	-	-	-	-	-	-	1,523,918	-	1,523,918
Unrealized gain of available-for-sale securities	-	-	-	-	-	-	-	134,768	134,768
Foreign currency translation adjustments, net of nil tax	-	-	-	-	-	-	-	(5,317 )	(5,317 )
Balance as of December 31, 2016	750,115,028	44	359,557,976	26	2,165,766	58,857	2,728,736	93,066	5,046,495

**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018 (CONTINUED)**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	Notes	Class A common shares		Class B common shares		Additional paid-in capital		Statutory reserves	Retained earnings	Accumulated other comprehensive income (loss)	Total YY Inc.'s shareholder equity
		Number of shares	Amount RMB	Number of shares	Amount RMB	RMB	RMB				
Balance as of December 31, 2016		750,115,028	44	359,557,976	26	2,165,766	58,857	2,728,736	93,066	5,046,495	
Issuance of common shares for exercised share options	25	379,120	-	-	-	20	-	-	-	20	
Issuance of common shares for vested restricted shares and restricted share units	25	20,926,760	1	-	-	(1)	-	-	-	-	
Issuance of common share Class B common shares converted to Class A common shares	25	132,250,000	9	-	-	2,946,125	-	-	-	2,946,134	
Share-based compensation	26	-	-	-	-	229,435	-	-	-	229,435	
Deemed disposal of partial interest in an equity investment		-	-	-	-	(1,501)	-	-	-	(1,501)	
Appropriation to statutory reserves	2(gg)	-	-	-	-	-	3,861	(3,861)	-	-	
Set-up of subsidiaries with non-controlling interest shareholders		-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	

Acquisition of subsidiaries with non-controlling interest shareholders									
Capital injection in subsidiaries from non-controlling interest shareholders	-	-	-	-	-	-	-	-	-
Disposal of subsidiaries with non-controlling interest shareholders	4	-	-	-	-	-	-	-	-
Components of comprehensive income									
Net income (loss) attributable to YY Inc. and non-controlling interest shareholders	-	-	-	-	-	-	2,512,923	-	2,512,923
Accretion of subsidiaries' redeemable convertible preferred shares to redemption value	-	-	-	-	-	-	(19,688 )	-	(19,688
Unrealized loss of available-for-sale securities	-	-	-	-	-	-	-	(41,150)	(41,150
Foreign currency translation adjustments, net of nil tax	-	-	-	-	-	-	-	(61,513)	(61,513
Balance as of December 31, 2017	945,245,908	57	317,982,976	23	5,339,844	62,718	5,218,110	(9,597 )	10,611,155

**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018 (CONTINUED)**

(All amounts in thousands, except share, ADS, per share and per ADS data)

	Notes	Class A common shares		Class B common shares		Additional paid-in capital		Statutory reserves	Retained earnings	Accumulated other comprehensive income (loss)	Total YY Inc.'s sharehold equity
		Number of shares	Amount of shares	Number of shares	Amount	RMB	RMB				
Balance as of December 31, 2017		945,245,908	57	317,982,976	23	5,339,844	62,718	5,218,110	(9,597 )		10,611,110
Adoption of ASU 2016-01		-	-	-	-	-	-	87,802	(87,802 )		-
Issuance of common shares for exercised share options	25	154,260	-	-	-	7	-	-	-		7
Issuance of common shares for vested restricted shares and restricted share units	25	6,540,680	-	-	-	-	-	-	-		-
Class B common shares converted to Class A common shares	25	29,800,000	2	(29,800,000 )	(2 )	-	-	-	-		-
Share-based compensation	26	-	-	-	-	648,025	-	-	-		648,025
Appropriation to statutory reserves	2(gg)	-	-	-	-	-	39,007	(39,007 )	-		-
Capital injection in subsidiaries from non-controlling interest shareholders		-	-	-	-	-	-	-	-		-
		-	-	-	-	(13,315 )	-	-	-		(13,315)

Acquisition of subsidiary's shares from mezzanine equity holders									
Conversion of a subsidiary's preferred shares to ordinary shares upon the completion of its IPO	-	-	-	-	4,009,874	-	-	-	4,009,874
Proceed from a subsidiary's IPO, net of issuance cost	-	-	-	-	795,073	-	-	-	795,073
Partial disposal of a subsidiary's interests to non-controlling interest shareholders	-	-	-	-	389,358	-	-	(529 )	388,829
Components of comprehensive income									
Net income (loss) attributable to YY Inc. and non-controlling interest shareholders	-	-	-	-	-	-	2,209,007	-	2,209,007
Accretion of subsidiaries' redeemable convertible preferred shares to redemption value	-	-	-	-	-	-	(73,159 )	-	(73,159)
Deemed dividend to subsidiary's Series A Preferred shareholders	-	-	-	-	-	-	(489,284 )	-	(489,284)
Foreign currency translation adjustments, net of nil tax	-	-	-	-	-	-	-	434,080	434,080

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Balance as of December 31, 2018	981,740,848	59	288,182,976	21	11,168,866	101,725	6,913,469	336,152	18,520,2
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The accompanying notes are an integral part of these consolidated financial statements.

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**CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018**

(All amounts in thousands)

	Note	For the year ended December 31,			2018 US\$ (Note2(e))
		2016 RMB	2017 RMB	2018 RMB	
Cash flows from operating activities					
Net income		1,511,576	2,508,391	2,115,697	307,714
Adjustments to reconcile net income to net cash provided by operating activities					
Depreciation of property and equipment	13	173,625	176,715	150,991	21,961
Amortization of acquired intangible assets and land use rights	14,15	100,892	62,419	69,095	10,049
Allowance for doubtful accounts		45,914	15,106	54,073	7,865
Loss (gain) on disposal of property and equipment		891	17,620	(799)	(116)
Impairment of investments	12	80,104	43,205	35,348	5,141
Impairment of intangible assets	15	3,828	-	-	-
Impairment of goodwill	16	17,665	2,527	-	-
Share-based compensation	26	157,286	257,661	648,025	94,251
Share of income in equity method investments, net of income taxes		(8,279)	(33,024)	(58,933)	(8,571)
Gain on deemed disposal and disposal of investments	12	(25,061)	(45,861)	(16,178)	(2,353)
Gain on deconsolidation and disposal of subsidiaries	4	(103,960)	(37,989)	-	-
Deferred income taxes, net	23	(7,768)	3,919	49,646	7,221
Foreign currency exchange (gains) losses, net		(1,158)	2,176	514	75
Investment income		-	-	(17,093)	(2,486)
Gain on fair value changes of investments		-	-	(1,689,404)	(245,714)
Fair value loss on derivative liabilities		-	-	2,285,223	332,372
Changes in operating assets and liabilities, net of business acquisition and disposal of subsidiaries					
Accounts receivable		(34,293)	18,383	(45,682)	(6,644)
Interest receivables recorded in financing receivables		-	-	(832)	(121)
Prepayments and other assets		(97,888)	(48,277)	(380,834)	(55,391)
Amounts due from related parties		1,839	155	486	71
Inventory		680	1,434	315	46
Amounts due to related parties		66,328	(18,615)	(1,896)	(276)
Accounts payable		36,888	(39,060)	8,699	1,265
Deferred revenue		81,513	366,634	227,564	33,098
Advances from customers		10,783	24,254	21,284	3,096
Income taxes payable		33,351	5,544	62,520	9,093



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Accrued liabilities and other current liabilities		376,379	435,135	946,985	137,733
Net cash provided by operating activities		2,421,135	3,718,452	4,464,814	649,379
Cash flows from investing activities					
Placements of short-term deposits		(8,027,325)	(9,667,447)	(9,512,818)	(1,383,582)
Maturities of short-term deposits		6,324,897	7,361,225	8,649,150	1,257,967
Placements of long-term deposits		-	-	(1,000,000)	(145,444 )
Placements of short-term investments		-	(189,550 )	(3,505,075)	(509,792 )
Maturities of short-term investments		-	65,000	2,667,665	387,996
Purchase of property and equipment		(162,395 )	(397,327 )	(333,994 )	(48,577 )
Purchase of intangible assets and land use right		(70,029 )	(17,749 )	(58,838 )	(8,558 )
Purchase of other non-current assets		(5,403 )	(82,645 )	-	-
Prepayments for investments		-	-	(67,250 )	(9,781 )
Cash paid for investments	12	(197,244 )	(325,647 )	(2,335,537)	(339,690 )
Cash received from disposal of investments		22,608	86,714	718,476	104,498
Cash dividend received from an equity investee		6,720	-	6,125	891
Acquisition of businesses, net of cash and cash equivalents acquired		(1,946 )	(6,161 )	-	-
Deconsolidation and disposal of subsidiaries, net of cash disposed	4	(5,370 )	117,005	-	-
Payments on behalf of related parties, net of repayment	28	(10,699 )	23,116	2,543	370
Loans to related parties	28	(44,500 )	(24,962 )	(188,000 )	(27,343 )
Repayments of loans from related parties	28	-	35,462	20,000	2,909
Loans to employees and third parties		(6,605 )	(20,550 )	(282,031 )	(41,020 )
Repayments of loans from employees and third parties		4,751	4,641	35,067	5,100
Payments to originate financing receivables		-	-	(1,458,012)	(212,059 )
Principal collection from financing receivables		-	-	346,028	50,328
Proceeds from disposal of property and equipment		181	1,359	1,115	161
Net cash used in investing activities		(2,172,359)	(3,037,516)	(6,295,386)	(915,626 )

**CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018 (CONTINUED)**

(All amounts in thousands)

	Note	For the year ended December 31,			2018 US\$ (Note2(e))
		2016 RMB	2017 RMB	2018 RMB	
Cash flows from financing activities					
Proceeds from exercise of vested share options	9		20	7	1
Capital contributions from the non-controlling interests shareholders		10,642	64,875	658	96
Capital contributions from mezzanine equity holders	24	-	509,535	3,231,261	469,967
Proceeds from issuance of subsidiary's ordinary shares upon its Initial Public Offering		-	-	1,207,749	175,660
Acquisition of subsidiary's shares from mezzanine equity holders		-	-	(30,000 )	(4,363 )
Partial disposal of subsidiary's interests to non-controlling interest shareholders		-	-	378,548	55,058
Proceeds from bank borrowings		-	621,118	691,612	100,591
Repayment of bank borrowings		-	-	(1,308,092)	(190,254 )
Proceeds from issuance of common shares, net of issuance cost		-	2,950,607	(4,473 )	(651 )
Repayment of convertible bonds		-	(2,753,630)	-	-
Net cash provided by financing activities		10,651	1,392,525	4,167,270	606,105
Net increase in cash, and cash equivalents and restricted cash		259,427	2,073,461	2,336,698	339,858
Cash, cash equivalents and restricted cash at the beginning of the year		1,318,155	1,579,743	3,617,432	526,134
Effect of exchange rate changes on cash, and cash equivalents and restricted cash		2,161	(35,772 )	50,101	7,287
Cash, cash equivalents and restricted cash at the end of the year		1,579,743	3,617,432	6,004,231	873,279
<b>Supplemental disclosure of cash flows information:</b>					
—Cash paid for interest, net of amounts capitalized		(59,884 )	(41,729 )	(9,354 )	(1,360 )

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—Income taxes paid	(254,931)	(406,348)	(365,541 )	(53,166 )
Supplemental disclosures of non-cash investing and financing activities:				
—Acquisition of property and equipment	37,649	16,865	64,041	9,314
—Conversion of subsidiary’s preferred shares to ordinary shares	-	-	6,290,417	914,903
—Amounts receivable from issuance of subsidiary’s preferred shares	-	-	102,951	14,974
—Disposal of subsidiaries and investments	153,310	7,986	77,423	11,261

The accompanying notes are an integral part of these consolidated financial statements.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****1. Organization and principal activities****(a) Organization and principal activities**

YY Inc. (the “Company”), through its subsidiaries, its variable interest entities (“VIEs”, also refer to VIEs and their subsidiaries as a whole, where appropriate) (collectively, the “Group”) is principally engaged in live streaming business in the People’s Republic of China (the “PRC” or “China”) through its two key platforms, namely YY Live and Huya, which are leading live streaming and live game broadcasting platforms.

**(b) Initial Public Offering**

The Company completed its initial public offering (“IPO”) on November 21, 2012 on the NASDAQ Global Market.

**(c) Principal subsidiaries and VIEs**

The details of the principal subsidiaries and VIEs through which the Company conducts its business operations as of December 31, 2018 are set out below:

<b>Name</b>	<b>Place of incorporation</b>	<b>Date of incorporation or acquisition</b>	<b>% of direct or indirect economic ownership</b>	<b>Principal activities</b>
<b>Principal subsidiaries</b>				
Duowan Entertainment Corporation (“Duowan BVI”)	British Virgin Islands (“BVI”)	November 6, 2007	100	% Investment holding
Huanju Shidai Technology (Beijing) Co., Ltd. (“Beijing Huanju Shidai” or “Duowan Entertainment”)	PRC	March 19, 2008	100	% Investment holding

Guangzhou Huanju Shidai Information Technology Co., Ltd. (“Guangzhou Huanju Shidai”)	PRC	December 2, 2010	100	% Software development
Engage Capital Partners I, L.P. (“Engage L.P.”)	Cayman Islands	March 23, 2015	93.5	% Investment
HUYA Inc. (“Huya”)	Cayman Islands	March 30, 2017	44.0	% Investment holding
Guangzhou Huya Technology Co., Ltd. (“Huya Technology”)	PRC	June 16, 2017	44.0	% Software development
Hago Singapore Pte. Ltd. (“Hago Singapore”)	Singapore	May 7, 2018	100	% Internet value added services
<b>Principal VIEs</b>				
Guangzhou Huaduo Network Technology Co., Ltd. (“Guangzhou Huaduo”)	PRC	April 11, 2005	100	Holder of internet content provider licenses and internet value added services
Zhuhai Huanju Interactive Entertainment Technology Co., Ltd. (“Zhuhai Huanju Interactive”)	PRC	May 4, 2015	100	% Software development
Shanghai Yilian Equity Investment Partnership (LP) (“Shanghai Yilian”)	PRC	June 23, 2015	93.5	% Investment
Guangzhou Huanju Microfinance Co., Ltd. (“Guangzhou Microfinance”)	PRC	January 11, 2016	100	% Financing services
Guangzhou Huya Information Technology Co., Ltd. (“Guangzhou Huya”)	PRC	August 10, 2016	44.0	Holder of internet content provider licenses and internet value added services
Guangzhou Yilianyixing Investment Partnership (LP) (“Guangzhou Yilianyixing”)	PRC	June 28, 2017	99	% Investment

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 1. Organization and principal activities (continued)

#### (d) Variable Interest Entities

To comply with PRC laws and regulations that prohibit or restrict foreign ownership of companies that provide internet-content, the Group conducts its operations primarily through its principal VIEs Guangzhou Huaduo and Guangzhou Huya, which hold the internet value-added service license and approvals to provide such internet services in the PRC.

#### (i) VIE agreements amongst Beijing Huanju Shidai, Guangzhou Huaduo and its nominee shareholders

The following is a summary of the contractual arrangements entered among Beijing Huanju Shidai, Guangzhou Huaduo and its nominee shareholders:

##### Exclusive Technology Support and Technology Services Agreement

Under the exclusive technology support and technology services agreement between Beijing Huanju Shidai and Guangzhou Huaduo, Beijing Huanju Shidai has the exclusive right to provide to Guangzhou Huaduo technology support and technology services related to all technologies needed for its business. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Guangzhou Huaduo to Beijing Huanju Shidai is determined by various factors, including the expenses Beijing Huanju Shidai incurs for providing such services and Guangzhou Huaduo's revenues. The term of this agreement will expire in 2028 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huaduo.

##### Exclusive Business Cooperation Agreement

Under the exclusive business cooperation agreement between Beijing Huanju Shidai and Guangzhou Huaduo, Beijing Huanju Shidai has the exclusive right to provide to Guangzhou Huaduo technology support, business support and

consulting services related to the services provided by Guangzhou Huaduo, the scope of which is to be determined by Beijing Huanju Shidai from time to time. Beijing Huanju Shidai owns the exclusive intellectual property rights created as a result of the performance of this agreement. The service fee payable by Guangzhou Huaduo to Beijing Huanju Shidai is a certain percentage of its earnings. The term of this agreement will expire in 2039 and may be extended with Beijing Huanju Shidai's written confirmation prior to the expiration date. Beijing Huanju Shidai is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huaduo.

#### ◆ Exclusive Option Agreement

The parties to the exclusive option agreement are Beijing Huanju Shidai, Guangzhou Huaduo and each of the shareholders of Guangzhou Huaduo. Under the exclusive option agreement, each of the shareholders of Guangzhou Huaduo irrevocably granted Beijing Huanju Shidai or its designated representative(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Guangzhou Huaduo. Beijing Huanju Shidai or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. Without Beijing Huanju Shidai's prior written consent, Guangzhou Huaduo's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Guangzhou Huaduo. The term of this agreement is ten years and may be extended at Beijing Huanju Shidai's sole discretion.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 1. Organization and principal activities (continued)

#### (d) Variable Interest Entities (continued)

##### (i) VIE agreements amongst Beijing Huanju Shidai, Guangzhou Huaduo and its nominee shareholders (continued)

###### Powers of Attorney

Pursuant to the irrevocable power of attorney executed by each shareholder of Guangzhou Huaduo, each such shareholder appointed Beijing Huanju Shidai as its attorney-in-fact to exercise such shareholders' rights in Guangzhou Huaduo, including, without limitation, the power to vote on its behalf on all matters of Guangzhou Huaduo requiring shareholder approval under PRC laws and regulations and the articles of association of Guangzhou Huaduo. Each power of attorney will remain in force until the shareholder ceases to hold any equity interest in Guangzhou Huaduo.

###### Share Pledge Agreement

Pursuant to the share pledge agreement between Beijing Huanju Shidai and the shareholders of Guangzhou Huaduo, the shareholders of Guangzhou Huaduo have pledged all of their equity interests in Guangzhou Huaduo to Beijing Huanju Shidai to guarantee the performance by Guangzhou Huaduo and its shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive option agreement, exclusive technology support and technology services agreement and powers of attorney. If Guangzhou Huaduo and/or its shareholders breach their contractual obligations under those agreements, Beijing Huanju Shidai, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests.

##### (ii) VIE agreements amongst Huya Technology, Guangzhou Huya and its nominee shareholders

In 2017, Huya undertook a reorganization (the "Huya Reorganization") through setting up Huya Technology, a wholly owned subsidiary, and entering into a series of VIE agreements with Guangzhou Huya and its nominee shareholders. The Huya Reorganization was completed on July 10, 2017.



The following is a summary of the contractual arrangements entered among Huya Technology, Guangzhou Huya and its nominee shareholders:

#### ◆ Exclusive Business Cooperation Agreement

Huya Technology and Guangzhou Huya entered into exclusive business cooperation agreement under which Guangzhou Huya engages Huya Technology as its exclusive provider of technology support, business support and consulting services. Guangzhou Huya shall pay to Huya Technology service fees, which is determined by Huya Technology at its sole discretion. Huya Technology shall have exclusive and proprietary rights and interests in all rights, ownership, interests and intellectual properties arising from the performance of the agreement. During the term of the agreement, Guangzhou Huya shall not accept any consultations and/or services provided by any third party and shall not cooperate with any third party for the provision of identical or similar services without prior consent of Huya Technology. The term of this agreement is ten years and will be extended for ten years automatically after expiration, unless otherwise agreed by both parties in a written agreement. Huya Technology is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huya.

#### ◆ Exclusive Purchase Option Agreement

Under the exclusive purchase option agreement, the nominee shareholders of Guangzhou Huya have granted Huya Technology or its designated representative(s) irrevocably an exclusive option to purchase, to the extent permitted under PRC law, all or part of their equity interests in Guangzhou Huya at the lowest price permitted by the laws of the PRC applicable at the time of exercise. Huya Technology or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. Without Huya Technology's prior written consent, the nominee shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Guangzhou Huya. The term of this agreement is ten years and may be extended for another ten years at Huya Technology's sole discretion. Huya Technology is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huya.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 1. Organization and principal activities (continued)

#### (d) Variable Interest Entities (continued)

##### (ii) VIE agreements amongst Huya Technology, Guangzhou Huya and its nominee shareholders (continued)

###### Equity Pledge Agreement

Pursuant to the equity pledge agreement, the nominee shareholders of Guangzhou Huya have pledged all of their equity interests in Guangzhou Huya to Huya Technology to guarantee the performance by Guangzhou Huya and its nominee shareholders' performance of their respective obligations under the exclusive business cooperation agreement, exclusive purchase option agreement, and powers of attorney. The nominee shareholders shall not transfer or assign the equity interests, the rights and obligations in the equity pledge agreement or create or permit to create any pledges which may have an adverse effect on the rights or benefits of Huya Technology without Huya Technology's written consent. If Guangzhou Huya and/or its nominee shareholders breach their contractual obligations under those agreements, Huya Technology, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests.

###### Power of Attorney

Pursuant to the irrevocable power of attorney, Huya Technology is authorized by each of the nominee shareholders as its attorney-in-fact to exercise such nominee shareholders' rights in Guangzhou Huya, including, without limitation, the power to vote on its behalf on all matters of Guangzhou Huya requiring nominee shareholder approval under PRC laws and regulations and the articles of association of Guangzhou Huya and rights to information relating to all business aspects of Guangzhou Huya. The term of this agreement is ten years from the execution date of this agreement and will be automatically extended for one more year indefinitely. Huya Technology has sole discretion to terminate the agreement at any time by providing 30 days' prior written notice to Guangzhou Huya.

Through the aforementioned contractual agreements, Guangzhou Huaduo and Guangzhou Huya are considered VIEs in accordance with Generally Accepted Accounting Principles in the United States ("U.S. GAAP") because the Company, through Beijing Huanju Shidai and Huya Technology, respectively, has the ability to:

exercise effective control over Guangzhou Huaduo and Guangzhou Huya;

receive substantially all of the economic benefits and residual returns, and absorb substantially all the risks and expected losses from these VIEs as if it were their sole shareholder; and

have an exclusive option to purchase all of the equity interests in these VIEs.

In addition to the aforementioned contractual agreements, Beijing Huanju Shidai also entered into similar contractual agreements with Beijing Tuda Science and Technology Co., Ltd. (“Beijing Tuda”), Guangzhou Bilin Changxiang Information Technology Co., Ltd. (“Bilin Changxiang”) and Guangzhou 100 Education Technology Co., Ltd. (“100 Edu Technology”), subsidiaries of the Company, also entered into similar contractual agreements with Guangzhou Bilin Online Information Technology Co., Ltd. (“Bilin Online”) and Guangzhou Sanrenxing 100 Education Technology Co., Ltd. (“Guangzhou Sanrenxing”), respectively. Through these contractual agreements, Beijing Tuda, Bilin Online and Guangzhou Sanrenxing are considered VIEs of the Group.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 1. Organization and principal activities (continued)

#### (d) Variable Interest Entities (continued)

In accordance with the aforementioned agreements, the Company has power to direct activities of the VIEs, and can have assets transferred out of the VIEs. Therefore the Company considers that there is no asset in the VIEs that can be used only to settle obligations of the VIEs, except for registered capital and PRC statutory reserves of the VIEs amounting to RMB4,660,890 as of December 31, 2018. As the VIEs were incorporated as limited liability companies under the PRC Company Law, the creditors do not have recourse to the general credit of the Company for all the liabilities of the VIEs.

Currently there is no contractual arrangement that could require the Company to provide additional financial support to the VIEs. As the Company is conducting its PRC internet value-added services business through the VIEs, the Company will, if needed, provide such support on a discretionary basis in the future, which could expose the Company to a loss.

There is no VIE where the Company has variable interest but is not the primary beneficiary.

Please refer to Note 3(a) for the consolidated financial information of the Group's VIEs as of December 31, 2018.

### 2. Principal accounting policies

#### (a) Basis of presentation

The consolidated financial statements of the Group have been prepared in accordance with the U.S. GAAP to reflect the financial position, results of operations and cash flows of the Group. Significant accounting policies followed by the Group in the preparation of the consolidated financial statements are summarized below.

**(b) Consolidation**

The Group's consolidated financial statements include the financial statements of the Company, its subsidiaries and VIEs for which the Company or its subsidiary is the primary beneficiary. All transactions and balances among the Company, its subsidiaries and VIEs have been eliminated upon consolidation.

A subsidiary is an entity in which the Company, directly or indirectly, controls more than one half of the voting powers; or has the power to appoint or remove the majority of the members of the board of directors; or to cast a majority of votes at the meeting of directors; or has the power to govern the financial and operating policies of the investee under a statute or agreement among the shareholders or equity holders.

A VIE is an entity in which the Company, or its subsidiary, through contractual agreements, bears the risks of, and enjoys the rewards normally associated with ownership of the entity, and therefore the Company or its subsidiary is the primary beneficiary of the entity. In determining whether the Company or its subsidiaries are the primary beneficiary, the Company considered whether it has the power to direct activities that are significant to the VIEs economic performance, and also the Company's obligation to absorb losses of the VIEs that could potentially be significant to the VIEs or the right to receive benefits from the VIEs that could potentially be significant to the VIEs. Beijing Huanju Shidai, Bilin Changxiang, Huya Technology, 100 Edu Technology and ultimately the Company hold all the variable interests of the VIEs and have been determined to be the primary beneficiary of the VIEs.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (b) Consolidation (continued)

The Company deconsolidates its subsidiaries in accordance with ASC 810 as of the date the Company ceased to have a controlling financial interest in the subsidiaries.

The Company accounts for the deconsolidation of its subsidiaries by recognizing a gain or loss in net income/loss attributable to the Company in accordance with ASC 810. This gain or loss is measured at the date the subsidiaries are deconsolidated as the difference between (a) the aggregate of the fair value of any consideration received, the fair value of any retained non-controlling interest in the subsidiaries being deconsolidated, and the carrying amount of any non-controlling interest in the subsidiaries being deconsolidated, including any accumulated other comprehensive income/loss attributable to the non-controlling interest, and (b) the carrying amount of the assets and liabilities of the subsidiaries being deconsolidated.

#### (c) Use of estimates

The preparation of the Company's consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, mezzanine equity and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period in the consolidated financial statements and accompanying notes. Actual results could differ materially from such estimates. The Company believes that the assessment of whether the Group acts as a principal or an agent in different revenue streams, classification of perpetual items versus consumable items under item-based model, the determination of estimated selling prices of multiple elements revenue contracts, income taxes, allowances for doubtful accounts, determination of share-based compensation expenses, impairment assessment of goodwill, long-lived assets and intangible assets, tax considerations for earnings retained in the Group's VIEs, assessment on the probability of performance condition affiliated in equity-classified award under ASC 718 that affect vesting, determination of the fair value of derivative liabilities arising from Huya's Preferred Shares prior to Huya's IPO, subsequent adjustment due to significant observable price change for the equity investments without readily determinable fair values and not accounted for by the equity method, represent critical accounting policies that reflect more significant judgments and estimates used in the preparation of its consolidated financial statements.

Management bases the estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from these estimates.

**(d) Foreign currency translation**

The Group uses Renminbi (“RMB”) as its reporting currency. The functional currency of the Company and its subsidiaries incorporated in the Cayman Islands, British Virgin Islands, Hong Kong and Singapore is United States dollar (“US\$”), while the functional currency of the other entities and VIEs in the Group is RMB, which is their respective local currency. In the consolidated financial statements, the financial information of the Company and its subsidiaries, which use US\$ as their functional currency, have been translated into RMB. Assets and liabilities are translated at the exchange rates on the balance sheet date, equity amounts are translated at historical exchange rates, and revenues, expenses, gains, and losses are translated using the average exchange rate for the period. Translation adjustments arising from these are reported as foreign currency translation adjustments and are shown as a component of other comprehensive income or loss in the statement of comprehensive income.

Foreign currency transactions denominated in currencies other than functional currency are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are remeasured at the applicable rates of exchange in effect at that date. Foreign exchange gains and losses resulting from the settlement of such transactions and from remeasurement at year-end are recognized in foreign currency exchange gains/losses, net in the consolidated statement of comprehensive income.

**(e) Convenience translation**

Translations of amounts from RMB into US\$ for the convenience of the reader were calculated at the noon buying rate of US\$1.00 = RMB 6.8755 on December 31, 2018 as set forth in the H.10 statistical release of the U.S. Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be, converted into US\$ at such rate.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (f) Cash and cash equivalents

Cash includes currency on hand and deposits held by financial institutions that can be added to or withdrawn without limitation. Cash equivalents represent short-term and highly liquid investments placed with banks, which have both of the following characteristics:

- i) Readily convertible to known amounts of cash throughout the maturity period;
- ii) So near their maturity that they present insignificant risk of changes in value because of changes in interest rates.

The Group considers all highly liquid investments with original maturities of three months or less as cash equivalents.

In November 2016, the FASB issued new guidance related to the classification of restricted cash in the statement of cash flows. The new standard requires that a statement of cash flows explain any change during the year in total cash, cash equivalents, and restricted cash. The new standard is effective for fiscal years beginning after December 15, 2017, and should be applied retrospectively. The Company adopted the new standard during the beginning of 2018 and applied the standard retrospectively for all periods presented. Cash, cash equivalents and restricted cash presented on the consolidated statements of cash flows included cash and cash equivalents and restricted short-term deposits in the consolidated balance sheets. As of December 31, 2017, cash, cash equivalents and restricted cash presented in the consolidated statement of cash flows is 3,617,432, including cash and cash equivalents of RMB2,617,432 and restricted short-term deposits of RMB1,000,000 in the consolidated balance sheet, respectively. As of December 31, 2018, cash, cash equivalents and restricted cash presented in the consolidated statement of cash flows is 6,004,231, including cash and cash equivalents of RMB6,004,231 and restricted short-term deposits of nil in the consolidated balance sheet, respectively.

#### (g) Short-term deposits



Short-term deposits represent time deposits placed with banks with original maturities between three months and one year. Interest earned is recorded as interest income in the consolidated statements of comprehensive income during the periods presented.

**(h) Long-term deposits**

Long-term deposits represent time deposits placed with banks with original maturities more than one year. Interest earned is recorded as interest income in the consolidated statements of comprehensive income during the periods presented.

**(i) Short-term investments**

For investments in financial instruments with a variable interest rate indexed to the performance of underlying assets, the Group elected the fair value method at the date of initial recognition and carried these investments subsequently at fair value. Changes in fair values are reflected in the consolidated statements of comprehensive income.

**(j) Accounts receivable**

Accounts receivable are presented net of allowance for doubtful accounts. The Group uses specific identification in providing for bad debts when facts and circumstances indicate that collection is doubtful and a loss is probable and estimable. If the financial conditions of its customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowance may be required.

The Group maintains an allowance for doubtful accounts which reflects its best estimate of amounts that potentially will not be collected. The Group determines the allowance for doubtful accounts on an individual basis taking into consideration various factors including but not limited to historical collection experience and credit-worthiness of the debtors as well as the age of the individual receivables balance. Additionally, Group makes specific bad debt provisions based on any specific knowledge Group has acquired that might indicate that an account is uncollectible. The facts and circumstances of each account may require Group to use substantial judgment in assessing its collectability.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (k) Financing receivables

Financing receivables represent receivables derived from finance business, including micro-credit personal loans and corporate loans. Financing receivables are recorded at amortized cost, reduced by a valuation allowance estimated as of the balance sheet date. The amortized cost is equal to the unpaid principal amount, accrued interest receivables and net deferred origination costs. The origination costs are the direct costs attributable to originating the financing charged by third-party companies. The cash flows related to the principal of finance business are included in the investing activities category in the consolidated statement of cash flows.

##### *Micro-credit personal loans*

The Group provides micro loans to qualified individual borrowers. The micro loan periods granted to the borrowers generally range from one month to twelve months.

##### *Corporate loans*

The Group provides loans to corporate borrowers mainly through sales-and-leaseback model. Under the sales-and-leaseback arrangement, the Group, who is also the lender, purchases machinery and equipment from lessees, who are also the borrowers, and leases the purchased equipment back to the lessees for a number of years. In a sales-and-leaseback arrangement, the transaction is in substance a collateral financing.

##### *Allowance for financing receivables*

The Group assesses the allowance for financing receivables either on an individual or collective basis. The Group estimates and evaluates the allowance amounts and whether such amounts are adequate to cover potential losses, and

periodic reviews are performed to ensure such amounts continue to reflect the best estimate of the losses inherent in the outstanding portfolio of debts. The estimate is based on a pooled basis due to the composition of homogeneous financing with similar size and general credit risk characteristics for similar finance businesses. The Group considers the credit worthiness of the individuals and the companies receiving financing, aging of the outstanding financing receivables, value of the collateral assets and other specific circumstances related to the financing when determining the allowance for financing receivables.

Financing receivables are placed on non-accrual status upon reaching 90 days past due or when reasonable doubt exists in timely collection of the financing receivables. When a financing receivable is placed on non-accrual status, the Group stops accruing financing income. Financing receivable is returned to accrual status if the related individual or company has performed in accordance with the contractual terms for a reasonable period of time and, in the Group's judgment, will continue to make period principal and financing income payments as scheduled.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (1) Investments

ASU 2016-01 (“ASU 2016-01”), Recognition and Measurement of Financial Assets and Financial Liabilities amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The main provisions require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value through earnings, unless they qualify for a measurement alternative. The new guidance requires modified retrospective application to all outstanding instruments beginning January 1, 2018, with a cumulative effect adjustment recorded to opening accumulated deficit as of the beginning of the first period in which the guidance becomes effective. However, changes to the accounting for equity securities without a readily determinable fair value would be applied prospectively. The Group adopted the new financial instruments accounting standard from January 1, 2018. Following the adoption of this guidance, accumulated fair value gain, amounting to RMB87.8 million, was reclassified from accumulated other comprehensive loss to retained earnings as of January 1, 2018.

#### *Equity Investments with Readily Determinable Fair Values*

Equity investments with readily determinable fair values are measured and recorded at fair value using the market approach based on the quoted prices in active markets at the reporting date. The Group classifies the valuation techniques that use these inputs as Level 1 of fair value measurements.

#### *Equity Investments without Readily Determinable Fair Values*

After the adoption of this new accounting standard, the Group elected to record equity investments without readily determinable fair values and not accounted for under the equity method at cost, less impairment, adjusted for subsequent observable price changes on a nonrecurring basis, and report changes in the carrying value of the equity investments in current earnings. Changes in the carrying value of the equity investments are required to be made whenever there are observable price changes in orderly transactions for the identical or similar investment of the same issuer. The implementation guidance notes that an entity should make a “reasonable effort” to identify price changes that are known or that can reasonably be known.

*Equity Investments Accounted for Using the Equity Method*

The Group accounts for its equity investment over which it has significant influence but does not own a majority equity interest or otherwise control using the equity method. The Group adjusts the carrying amount of the investment and recognizes investment income or loss for share of the earnings or loss of the investee after the date of investment. The Group assesses its equity investment for other-than-temporary impairment by considering factors including, but not limited to, current economic and market conditions, operating performance of the entities, including current earnings trends and undiscounted cash flows, and other entity-specific information. The fair value determination, particularly for investment in privately held entities, requires judgment to determine appropriate estimates and assumptions. Changes in these estimates and assumptions could affect the calculation of the fair value of the investment and determination of whether any identified impairment is other-than-temporary.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****2. Principal accounting policies (continued)****(m) Property and equipment**

Property and equipment are stated at historical cost less accumulated depreciation and impairment loss, if any. Depreciation is calculated using the straight-line method over their estimated useful lives. Residual rate is determined based on the economic value of the property and equipment at the end of the estimated useful lives as a percentage of the original cost.

	Estimated useful lives	Residual rate
Buildings	40 years	0 %
Servers, computers and equipment	3 years	0%-5 %
Leasehold improvements	Shorter of lease term or 5 years	0 %
Decoration of buildings	10 years	0 %
Motor vehicles	4 years	5 %
Furniture, fixture and office equipment	5 years	0%-5 %

Expenditures for maintenance and repairs are expensed as incurred. The gain or loss on the disposal of property and equipment is the difference between the net sales proceeds and the carrying amount of the relevant assets and is recognized in the consolidated statements of comprehensive income.

All direct and indirect costs that are related to the construction of property and equipment and incurred before the assets are ready for their intended use are capitalized as construction in progress. Construction in progress is transferred to specific property and equipment items and depreciation of these assets commences when they are ready for their intended use.

**(n) Business combinations**

Business combinations are recorded using the purchase method of accounting, and the cost of an acquisition is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued as well as the contingent considerations and all contractual contingencies as of the acquisition date. The costs directly attributable to the acquisition are expensed as incurred. Identifiable assets, liabilities and contingent liabilities acquired or assumed are measured separately at their fair value as of the acquisition date, irrespective of the extent of any non-controlling interests. The excess of (i) the total of consideration of acquisition, fair value of the non-controlling interests and acquisition date fair value of any previously held equity interest in the subsidiary acquired over (ii) the fair value of the identifiable net assets of the subsidiary acquired is recorded as goodwill. If the consideration of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the consolidated statements of comprehensive income.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****2. Principal accounting policies (continued)****(o) Intangible assets**

Intangible assets mainly consist of operating rights, software, domain names, technology and license. Identifiable intangible assets are carried at acquisition cost less accumulated amortization and impairment loss, if any. Finite-lived intangible assets are tested for impairment if impairment indicators arise. Amortization of finite-lived intangible assets is computed using the straight-line method over their estimated useful lives, which are as follows:

**Estimated useful lives**

Operating rights	Shorter of the economic life or contract terms
Software	3 -5 years
Domain names	15 years
Technology	5 years
License	15 years

**(p) Land use rights**

Land use rights are carried at cost less accumulated amortization. Amortization of the land use rights is made on straight-line basis over 40 years from the date when the Group first obtained the land use rights certificate from the local authorities.

**(q) Impairment of long-lived assets**

For long-lived assets other than investments and goodwill whose impairment policy is discussed elsewhere in the financial statements, the Group evaluates for impairment whenever events or changes (triggering events) indicate that the carrying amount of an asset may no longer be recoverable. The Group assesses the recoverability of the long-lived assets by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to receive from use of the assets and their eventual disposition. Such assets are considered to be impaired if the sum of the expected undiscounted cash flows is less than the carrying amount of the assets. The impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets.



The Group tests impairment of long-lived assets at the reporting unit level when impairment indicator appeared and recognizes impairment in the event that the carrying value exceeds the fair value of each reporting unit.

The impairment charges of intangible assets recorded in general and administrative expenses for the years ended December 31, 2016, 2017 and 2018 were amounting to RMB3,828, nil and nil, respectively.

**(r) Goodwill**

Goodwill represents the excess of the purchase price over the amounts assigned to the fair value of the assets acquired and the liabilities assumed of an acquired business.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (s) Annual test for impairment of goodwill

Goodwill assessment for impairment is performed on at least an annual basis on October 1 or whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. The Group performs a two-step goodwill impairment test. The first step compares the fair values of each reporting unit to its carrying amount, including goodwill. If the fair value of a reporting unit exceeds its carrying amount, goodwill is not considered impaired and the second step will not be required. If the carrying amount of a reporting unit exceeds its fair value, the second step compares the implied fair value of the affected reporting unit's goodwill to the carrying value of that goodwill. The implied fair value of goodwill is determined in a manner similar to accounting for a business combination with the allocation of the assessed fair value determined in the first step to the assets and liabilities of the reporting unit. The excess of the fair value of the reporting unit over the amounts assigned to the assets and liabilities is the implied fair value of goodwill. This allocation process is only performed for purposes of evaluating goodwill impairment and does not result in an entry to adjust the value of any assets or liabilities. An impairment loss is recognized for any excess in the carrying value of goodwill over the implied fair value of goodwill. The judgment in estimating the fair value of reporting units includes estimating future cash flows, determining appropriate discount rates and making other assumptions. Changes in these estimates and assumptions could materially affect the determination of the fair value of each reporting unit.

#### (t) Convertible bonds

The Group determines the appropriate accounting treatment of its convertible bonds in accordance with the terms in relation to the conversion feature, call and put options, and beneficial conversion feature. After considering the impact of such features, the Group may account for such instrument as a liability in its entirety, or separate the instrument into debt and equity components following the respective guidance described under ASC 815 Derivatives and Hedging and ASC 470 Debt. The debt discount, if any, together with related issuance cost are subsequently amortized as interest expense, using the effective interest method, from the issuance date to the earliest conversion date. Interest expenses are recognized in the statement of comprehensive income in the period in which they are incurred.

#### (u) Mezzanine equity and non-controlling interests

*Mezzanine equity*

For the Company's majority-owned subsidiaries and consolidated VIEs, a non-controlling interest is recognized to reflect the portion of their equity which is not attributable, directly or indirectly, to the Company. When the non-controlling interest is contingently redeemable upon the occurrence of a conditional event, which is not solely within the control of the Company, the non-controlling interest is classified as mezzanine equity.

In accordance with ASC subtopic 480-10, the Group calculated, on an accumulative basis from the acquisition date, (i) the amount of accretion that would increase the balance of non-controlling interests to their estimated redemption value over the period from the date of acquisition to the earliest redemption date of the non-controlling interests and (ii) the amount of net (loss) profit attributable to non-controlling shareholders of certain subsidiaries based on their ownership percentage. The carrying value of the non-controlling interests as mezzanine equity was adjusted by an accumulative amount equal to the higher of (i) and (ii).

Each type of increase in carrying amount shall be recorded as charges against retained earnings or, in the absence of retained earnings, by charges against additional paid-in capital.

#### *Non-controlling interests*

Non-controlling interests are recognized to reflect the portion of the equity of majority-owned subsidiaries and VIEs which is not attributable, directly or indirectly, to the controlling shareholder.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue

##### Revenue recognition and significant judgments

For the year ended December 31, 2018, revenue presentation has been changed to live streaming and others to better reflect the way the Group generates revenues. The revenue presentation for the years ended December 31, 2016 and 2017 are also retrospectively changed to be consistent with the year ended December 31, 2018. Revenues from live streaming are mainly generated from YY Live platform and Huya platform. Other revenues are mainly generated from online games, membership, online education, advertising and finance business. Disaggregated revenues are disclosed in Note 33 “Segment Reporting”.

On January 1, 2018, the Group adopted ASC 606, “Revenue from Contracts with Customers” using the modified retrospective method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with the Group’s historic accounting under Topic 605. Based on the Group’s assessment, the adoption of ASC 606 did not result in any adjustment on the Group’s consolidated financial statements, and there were no material differences between the Group’s adoption of ASC 606 and its historic accounting under ASC 605.

Revenues are recognized when control of the promised virtual items or services is transferred to the Group’s customers, in an amount that reflects the consideration the Group expects to be entitled to in exchange for those virtual items or services.

The Group has a recharge system for users to purchase the Group’s virtual currency. Users can recharge via various online payment platforms provided by third parties. Virtual currency is non-refundable and without expiry. As the virtual currency is often consumed soon after it is purchased based on history of turnover, the Group considers the impact of the breakage amount for virtual currency coupons is insignificant. Unconsumed virtual currency is recorded as deferred revenue. Virtual currencies used to purchase virtual items are recognized as revenue according to the prescribed revenue recognition policies of virtual items addressed below unless otherwise stated.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue (continued)

##### Revenue recognition and significant judgments (continued)

##### (i) Live streaming

Live streaming mainly consists of YY Live platform and Huya platform. It generates revenue from sales of virtual items in the platforms. Users can access the platforms and view the live streaming content showed by the performers. The Group shares a portion of the sales proceeds of virtual items (“revenue sharing fee”) with performers and talent agencies in accordance with their revenue sharing arrangements. Those performers who do not have revenue sharing arrangements with the Group are not entitled to any revenue sharing fee.

The Group evaluates and determines that it is the principal and views users to be its customers. The Group reports live streaming revenues on a gross basis. Accordingly, the amounts billed to users are recorded as revenues and revenue sharing fee paid to performers and talent agencies are recorded as cost of revenues. Where the Group is the principal, it controls the virtual items before they are transferred to users. Its control is evidenced by the Group’s sole ability to monetize the virtual items before they are transferred to users, and is further supported by the Group being primarily responsible to users and having a level of discretion in establishing pricing.

The Group designs, creates and offers various virtual items for sales to users with pre-determined selling price. Sales proceeds are recorded as deferred revenue and recognized as revenue based on the consumption of the virtual items. Virtual items are categorized as consumable and time-based items. Consumable items are consumed upon purchase and use while time-based items could be used for a fixed period of time. Users can purchase and present consumable items to performers to show support for their favorite performers, or purchase time-based virtual items for one or multiple months for a monthly fee, which provide users with recognized status, such as priority speaking rights or special symbols over a period of time. Accordingly, live streaming revenue is recognized immediately when the consumable virtual item is used, or in the case of time-based virtual items, revenue is recognized ratably over the fixed period on a straight-line basis. The Group does not have further obligations to the user after the virtual items are consumed immediately or after the stated period of time for time-based items.

The Group may also enter into contracts that can include various combinations of virtual items, which are generally capable of being distinct and accounted for as separate performance obligations, such as noble member program. Judgments are required as follow: 1) determining whether those virtual items are considered distinct performance obligations that should be accounted for separately versus together, 2) determining the standalone selling price for each distinct performance obligation, and 3) allocating of the arrangement consideration to the separate accounting of each distinct performance obligation based on their relative standalone selling prices. In instances where standalone selling price is not directly observable as the Group does not sell the virtual item separately, the Group determines the standalone selling price based on pricing strategies, market factors and strategic objectives. The Group recognizes revenue for each of the distinct performance obligations identified in accordance with the applicable revenue recognition method relevant for that obligation.

As the Group's live streaming virtual items are generally sold without right of return and the Group does not provide any other credit and incentive to its users, therefore accounting of variable consideration when estimating the amount of revenue to recognize is not applicable to the Group's live streaming business.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue (continued)

##### Revenue recognition and significant judgments (continued)

#### (ii) Others

Other revenues mainly generated from online games, membership, online education, advertising and finance business.

#### (1) Online games revenues

The Group generates revenues from offering virtual items in online games developed by third parties or the Group itself to game players. Historically, the majority of online games revenues for the three years ended December 31, 2016, 2017 and 2018 were derived from third parties developed games.

Users play games through the Group's platform free of charge and are charged for purchases of virtual items, including consumable and perpetual items, which can be utilized in the online games to enhance their game-playing experience. Consumable items represent virtual items that can be consumed by a specific user within a specified period of time. Perpetual items represent virtual items that are accessible to the users' account over the life of the online games.

Pursuant to contracts signed between the Group and the respective game developers, game developers own the games' copyrights and other intellectual property, and take primary responsibilities of game development and game operation, including designing, developing and updating of the games related to game content, pricing of virtual items, providing ongoing updates of new contents and bug fixing. The Group's responsibilities under the agreements with the game developers to offer certain standard promotions that include providing access to the platform, announcing the new games to users on the platform, and occasional advertising on the Group's platforms. Therefore, revenues derived from third party developed games are recorded on a net basis, net of the amount paid to game developers.



Given that third party developed games are managed and administered by the third party game developers, the Group does not have access to the data on the consumption details such as when the game token is spent on the virtual items or the types of virtual items (consumable or perpetual items) purchased by each individual game player. However, the Group maintains historical data on timing of the conversion of its virtual currency into game specific tokens and the amount of purchases of game tokens. The Group believes that its responsibility to the game developers correspond to the game developers' services to the users. The Group has adopted a policy to recognize revenues relating to game tokens for third party developed games over the estimated user relationship period with the Group on a game-by-game basis, which is approximately one to six months for the periods presented. Future usage patterns may differ from historical usage patterns and therefore the estimated user relationship period with the Group may change in the future.

The estimated user relationship period is based on data collected from those users who have acquired game tokens. To estimate the user relationship period, the Group maintains a system that captures the following information for each user: (a) the frequency that users log into each game via the Group's platform, and (b) the amount and the timing of when the users convert or charge his or her game tokens. The Group estimates the user relationship period for a particular game to be the date a player purchases or converts from virtual currency to a game token through the date the Group estimates the user plays the game for the last time. This computation is performed on a user by user basis. Then, the results for all analyzed users are averaged to determine an estimated end user relationship period for each game. Revenues from in-game payments of each month are recognized over the user relationship period estimated for that game.

The consideration of user relationship period with each online game is based on the Group's best estimate that takes into account all known and relevant information at the time of assessment. The Group assesses the estimated user relationship period for each game on a quarterly basis. Any adjustments arising from changes in the user relationship period as a result of new information will be accounted as a change in accounting estimate in accordance with ASC 250 Accounting Changes and Error Corrections.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue (continued)

##### Revenue recognition and significant judgments (continued)

#### (ii) Others (continued)

#### (2) Membership

The Group operates a membership subscription program where subscription members can have enhanced user privileges when using YY Client and live streaming channels. The membership fee is collected up-front from subscribers. The receipt of the revenue is initially recorded as deferred revenue and revenue is recognized ratably over the period of the subscription when services are rendered. Unrecognized portion beyond 12 months from balance sheet date is classified as long-term deferred revenue.

#### (3) Online education revenues

Educational programs and services consist of vocational training, language training courses and K-12 afterschool education courses. The course fee is generally paid in advance and is initially recorded as deferred revenue. Revenue for regular courses is recognized proportionately as the classes are attended, and is reported net of scholarships and course fee refunds. Students are entitled to one trial class of the purchased course and course fee is fully refundable if a student decides not to take the remaining course after the trial class. No refund will be provided to a student who withdraws from a course after the trial period, and revenue is recognized for the amount collected. Course fee refunds were insignificant over the period presented.

In addition to regular courses, Group also provides a package of several regular courses to students, which has individual fair value in the market. Pursuant to the applicable accounting guidance, Group has accounted for these course packages as a multiple-element arrangement because each individual course qualifies as a single unit of accounting, and allocated the course fee from the course package to each individual course in the package based on its stand alone selling price. Group recognizes revenue equal to the fair value allocated to individual courses

proportionately as the classes are attended.

Students are granted a right to retake the courses at a substantial discount in the circumstances where the students fail to achieve certain score targets for some specific courses. The discount arrangement has a stand-alone value and qualifies as a separate unit of accounting under U.S. GAAP. Therefore, Group has accounted for those courses as a multiple-element arrangement and allocated a portion of the initial course fee to the substantial discount based on a breakage rate. The breakage rate is determined based on our historical data. The amount allocated to the substantial discount is deferred and recognized as revenue upon the expiration of the retaking right, which is generally six months after the end of the initial course term.

Group also sells pre-paid cards primarily to distributors. Pre-paid card sales represent prepaid service fees received from students for online courses. The prepaid service fee is recorded as deferred revenue upon receiving the upfront cash payment. Revenue is recognized on a gross basis based on the selling price of the distributors to the students and is recognized over the period the online course is available to the students, which generally is from the enrolment date to the completion of the relevant professional examination date.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue (continued)

##### Revenue recognition and significant judgments (continued)

#### (ii) Others (continued)

#### (4) Advertising revenues

The Group primarily generate advertising revenues from sales of various forms of advertising and provision of promotion campaigns on the live streaming platforms by way of advertisement display or integrated promotion activities in shows and programs on the live streaming platforms. Advertisements on the Group's platforms are generally charged on the basis of duration, and advertising contracts are signed to establish the fixed price and the advertising services to be provided. Where collectability is reasonably assured, advertising revenues from advertising contracts are recognized ratably over the contract period of display.

The Group enters into advertising contracts directly with advertisers or third-party advertising agencies that represent advertisers. Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 1 to 3 months. Both third-party advertising agencies and direct advertisers are generally billed at the end of the display period and payments are due usually within 3 months. In instances where the timing of revenue recognition differs from the timing of billing, the Group has determined the advertising contracts generally do not include a significant financing component. The primary purpose of the credits terms is to provide customers with simplified and predictable ways of purchasing the Group's advertising services, not to receive financing from its customers or to provide customers with financing.

Certain customers may receive sales incentives in the forms of discounts and rebates to advertisers or advertising agencies based on purchase volume, which are accounted for as variable consideration. The Group estimates these amounts based on the expected amount to be provided to customers considering the contracted rebate rates and estimated sales volume based on historical experience, and reduce revenues recognized. The Group believes that there will not be significant changes to the estimates of variable consideration.

**(5) Financing revenues**

The Group generates revenues from micro-credit personal loans provided to individual borrowers and corporate loans to corporate customers. The Group recognizes financing income related to those services over the life of the underlying financing using the effective interest method on unpaid principal amounts after net of loan origination cost.

The Group does not accrue financing revenues when a financing receivables is placed on non-accrual status. Financing revenues will be recognized when cash is received on a cash basis cost recovery method by applying first to reduce principal and then to interests thereafter.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (v) Revenue (continued)

##### Contract balances

The Group collects accounts receivable from various online payment platforms, distribution platforms and advertising customers. The allowance for doubtful accounts reflects the Group's best estimate of probable losses inherent in the accounts receivable balance. The Group determines the allowance based on known troubled accounts, historical experience, and other currently available evidence. The activity in the allowance for doubtful accounts for the periods presented is disclosed and detailed in Note 9.

The opening balance of accounts receivable was RMB169,571 as of January 1, 2017. As of December 31, 2017 and 2018, accounts receivable were RMB153,944 and RMB198,428, respectively. During the years ended December 31, 2016, 2017 and 2018, the Group recognized a reversal of RMB3,571, an addition of RMB3,049 and an addition of RMB1,198 of allowance for accounts receivable, respectively.

Contract liabilities primarily consists of deferred revenue for unconsumed virtual items and unamortized revenue from virtual items in the Group's platforms, where there is still an obligation to be provided by the Group, which will be recognized as revenue when all of the revenue recognition criteria are met.

The opening balance of deferred revenue related to live streaming business as of January 1, 2017 was RMB320,547. As of December 31, 2017 and 2018, deferred revenue related to live streaming business were RMB682,613 and RMB922,774 respectively. During the years ended December 31, 2017 and 2018, the Group recognized revenue of live streaming business amounted to RMB308,545 and RMB637,346, respectively, that was included in the corresponding contract liability balance at the beginning of the periods.

The opening balance of deferred revenue related to other revenue as of January 1, 2017 was RMB135,595. As of December 31, 2017 and 2018, deferred revenue related to other revenue were RMB133,149 and RMB120,552, respectively. During the years ended December 31, 2017 and 2018, the Group recognized revenue of other revenue

amounted to RMB122,138 and RMB120,698, respectively, that was included in the corresponding contract liability balance at the beginning of the periods.

During the years ended December 31, 2016, 2017 and 2018, the Group does not have any arrangement where the performance obligations have already been satisfied in the past year, but the corresponding revenue is recognized in a later year.

As of December 31, 2018, the aggregate amount of the transaction price allocated to the remaining performance obligation is RMB1,043,326, the Group expects to recognize RMB951,616 performance obligation as revenue in 2019, the remaining performance obligation is expected to be recognized as revenue in 2020 and after years. However, the amount and timing of revenue recognition is largely driven by customer usage, which can extend beyond the original contractual term.

**(w) Advances from customers and deferred revenue**

Advances from customers primarily consist of prepayments from users in the form of the Group's virtual currency that are not yet consumed or converted into game tokens, and upon the consumption or conversion, are recognized as revenue according to the prescribed revenue recognition policies described above.

Deferred revenue primarily consists of the unamortized game tokens, prepaid subscriptions under the membership program and unamortized revenue from virtual items in various channels in the Group's platforms, where there is still an implied obligation to be provided by the Group, which will be recognized as revenue when all of the revenue recognition criteria are met.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (x) Cost of revenues

Amounts recorded as cost of revenue relate to direct expenses incurred in order to generate revenue. Such costs are recorded as incurred. Cost of revenues primarily consists of (i) revenue sharing fees and content costs, including payments to various channel owners and performers, and content providers, (ii) bandwidth costs, (iii) salary and welfare, (iv) depreciation and amortization expense for servers, other equipment and intangibles directly related to operating the platform, (v) payment handling cost, (vi) share-based compensation, (vii) other taxes and surcharges, and (viii) other costs.

The Group was subject to cultural development fee at a tax rate of 3% on service income from provision of advertising services in the PRC. The Group was also subject to surcharges of VAT, which are calculated based on 12% of the VAT paid for the years ended December 31, 2016, 2017 and 2018.

The Group reported other taxes and surcharges, and cultural development fees in cost of revenues.

Based on the Group's corporate structure and the contractual arrangements among the Group's PRC subsidiaries, the Group's VIEs and their shareholders, the Group is effectively subject to 6%, 16% or 17% VAT and related surcharges on revenues generated by the Group's subsidiaries based on the Group's contractual arrangements entered into with the Group's VIEs.

#### (y) Research and development expenses

Research and development expenses primarily consist of (i) salary and welfare for research and development personnel, (ii) share-based compensation for research and development personnel, (iii) depreciation of office premise and servers utilized by research and development personnel, and (iv) rental expenses. Costs incurred during the research stage are expensed as incurred. Costs incurred in the development stage, prior to the establishment of technological feasibility, which is when a working model is available, are expensed when incurred.



The Group recognizes internal use software development costs in accordance with guidance on intangible assets and internal use software. This requires capitalization of qualifying costs incurred during the software's application development stage and to expense costs as they are incurred during the preliminary project and post implementation/operation stages. The Group has not capitalized any costs related to internal use software during the years ended December 31, 2016, 2017 and 2018, respectively.

**(z) Sales and marketing expenses**

Sales and marketing expenses primarily consist of (i) advertising and market promotion expenses, and (ii) salary and welfare for sales and marketing personnel. The advertising and market promotion expenses amounted to approximately RMB298,681, RMB621,771 and RMB1,065,866 during the years ended December 31, 2016, 2017 and 2018, respectively.

**(aa) General and administrative expenses**

General and administrative expenses primarily consist of (i) share-based compensation for management and administrative personnel, (ii) salary and welfare for general and administrative personnel, and (iii) professional service fees.

**(bb) Employee social security and welfare benefits**

Employees of the Group in the PRC are entitled to staff welfare benefits including pension, work-related injury benefits, maternity insurance, medical insurance, unemployment benefit and housing fund plans through a PRC government-mandated multi-employer defined contribution plan. The Group is required to accrue for these benefits based on certain percentages of the employees' salaries, up to a maximum amount specified by the local government. The Group is required to make contributions to the plans out of the amounts accrued. The PRC government is responsible for the medical benefits and the pension liability to be paid to these employees and the Group's obligations are limited to the amounts contributed and no legal obligation beyond the contributions made. Employee social security and welfare benefits included as expenses in the accompanying statements of comprehensive income amounted to RMB206,704, RMB214,848 and RMB286,139 for the years ended December 31, 2016, 2017 and 2018, respectively.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (cc) Share-based compensation

The Group grants stock-based award, such as, but not limited to, share options, restricted shares, restricted share units of the Company, share option, restricted share units and ordinary shares of the Company's subsidiaries to eligible employees, officers, directors, and non-employee consultants.

Awards granted to employees, officers, and directors are initially accounted for as equity-classified awards. The related share-based compensation expenses are measured at the grant date fair value of the award and are recognized using the graded vesting method, net of estimated forfeiture rates, over the requisite service period, which is generally the vesting period. Forfeitures are estimated at the time of grant based on historical forfeiture rates and will be revised in the subsequent periods if actual forfeitures differ from those estimates. The Group also granted share options, restricted shares and restricted share units to non-employees, which are also initially accounted for as equity-classified awards. Awards granted to non-employees are initially measured at fair value on the grant date and periodically remeasured thereafter until the earlier of the performance commitment date or the date the service is completed and recognized over the period the service is provided. Awards are remeasured at each reporting date using the fair value as at each period end until the measurement date, generally when the services are completed and share-based awards are vested. Changes in fair value between the interim reporting dates are recorded in consistent with the method used in recognizing the original compensation costs.

For an award with a performance and/or service condition that affects vesting, the performance and/or service condition is not considered in determining the award's fair value on the grant date. Performance and service conditions should be considered when the Group is estimating the quantity of awards that will vest. Compensation cost will reflect the number of awards that are expected to vest and will be adjusted to reflect those awards that do ultimately vest. The Group recognizes compensation cost for awards with performance conditions if and when the Group concludes that it is probable that the performance condition will be achieved, net of an estimate of pre-vesting forfeitures over the requisite service period. The Group reassesses the probability of vesting at each reporting period for awards with performance conditions and adjusts compensation cost based on its probability assessment, unless on certain situations, the Group may not be able to determine that it is probable that a performance condition will be satisfied until the event occurs.

ASU 2017-09, Compensation—Stock Compensation (Topic 718), Scope of Modification Accounting, provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718.

An entity should account for the effects of a modification unless all the followings are met:

- The fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification.
- The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified.
- The classification of the modified award as an equity instrument or a liability instrument is the same as the classification immediately before the original award is modified.

The current disclosure requirements in Topic 718 apply regardless of whether an entity is required to apply modification accounting under the amendments in this ASU 2017-09.

The Group adopted these amendments to Subtopic 718-10 and there was no impact on the consolidated financial statements for the year ended December 31, 2018.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

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

The Group's share-based awards mainly include share-based awards of YY as well as share-based awards of Huya, details of which are disclosed in Note 26. Fair value determination of these share-based awards is summarized as below:

##### (1) Restricted share units

In determining the fair value of restricted share units granted, the fair value of the underlying shares of YY on the grant dates is applied. The grant date fair value of restricted share units is based on stock price of YY in the NASDAQ Global Market.

The fair value of restricted share units of Huya is determined with reference to stock price of Huya in NYSE.

##### (2) Share options

In determining the fair value of share options granted, a binomial option-pricing model is applied. The determination of the fair value is affected by the stock price of YY in the NASDAQ Global Market, as well as assumptions regarding a number of complex and subjective variables, including risk-free interest rates, exercise multiples, expected forfeiture rates, the expected share price volatility rates, and expected dividends.

The Group uses the similar meth in determining the fair value of share options granted by Huya.

(3) Huya's ordinary shares

Prior to the IPO, in determining the fair value of the ordinary shares of Huya granted, a combination of discounted cash flow method ("DCF") under income approach and guideline companies method ("GCM") under market approach is applied, with a discount for lack of marketability, given that the shares underlying the awards were not publicly traded at the time of grant. DCF method of the income approach involves applying appropriate weighted average cost of capital, or WACC, to discount the future cash flows forecast, based on the Group's best estimates as of the valuation date, to present value. The WACC was determined based on a consideration of the factors including risk-free rate, comparative industry risk, equity risk premium, company size and non-systematic risk factors. GCM was also adopted under the market approach to arrive at an equity valuation for Huya. GCM employs trading multiples method of selected public comparable companies including trailing and leading Enterprise Value/Revenue multiples. Based on the Huya's current stage of development and the conceptual strength of the income approach, 50% weight was assigned to each of the income approach and the market approach for the valuation date.

Upon the completion of Huya's initial public offering, the fair value of Huya's ordinary shares is determined with reference to stock price of Huya in NYSE

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (dd) Other income

Other income primarily consists of government grants which represent cash subsidies received from the PRC government by the Group entities. Government grants are originally recorded as deferred revenue when received upfront. After all of the conditions specified in the grants have been met, the grants are recognized as operating income.

#### (ee) Leases

Each lease is classified at the inception date as either a finance lease or an operating lease. For the lessee, a lease is a finance lease if any of the following conditions exist: a) ownership of the leased property is transferred to the lessee by the end of the lease term, b) there is a bargain purchase option, c) the lease term is at least 75% of the leased property's estimated remaining economic life or d) the present value of the minimum lease payments at the beginning of the lease term is 90% or more of the fair value of the leased property to the lessor at the inception date. A finance lease is accounted for as if there was an acquisition of an asset and an incurrence of an obligation at the inception of the lease. All other leases are accounted for as operating leases. Payments made under operating lease are charged to the consolidated statement of comprehensive income on a straight-line basis over the term of underlying lease. The Group has no finance lease for any of the years presented.

For the sales-and-leaseback transactions where the Group is the buyer-lessor, the transaction is accounted for as a finance lease, details of which are disclosed in Note 2(k).

#### (ff) Income taxes

Current income taxes are provided on the basis of net income for financial reporting purposes, adjusted for income and expense items which are not assessable or deductible for income tax purposes, in accordance with the regulations of the relevant tax jurisdictions. Deferred income taxes are accounted for using an asset and liability method. Under this method, deferred income taxes are recognized for the tax consequences of temporary differences by applying enacted statutory rates applicable to future years to differences between the financial statement carrying amounts and

the tax bases of existing assets and liabilities. The tax base of an asset or liability is the amount attributed to that asset or liability for tax purpose. The effect on deferred taxes of a change in tax rates is recognized in statement of comprehensive income in the period of change. A valuation allowance is provided to reduce the amount of deferred tax assets if it is considered more likely than not that some portion of, or all of the deferred tax assets will not be realized.

*Uncertain tax positions*

The guidance on accounting for uncertainties in income taxes prescribes a more likely than not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Guidance was also provided on derecognition of income tax assets and liabilities, classification of current and deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, accounting for income taxes in interim periods, and income tax disclosures. Significant judgment is required in evaluating the Group's uncertain tax positions and determining its provision for income taxes. The Group recognizes interests and penalties, if any, under accrued expenses and other current liabilities on its balance sheet and under other expenses in its statements of comprehensive income. The Group did not recognize any significant interest and penalties associated with uncertain tax positions for the years ended December 31, 2016, 2017 and 2018. As of December 31, 2017 and 2018, the Group did not have any significant unrecognized uncertain tax positions.

Adoption of ASU 2016-16

In October 2016, the FASB issued ASU 2016-16, Income Taxes: Intra-Entity Transfers of Assets Other Than Inventory (Topic 740). This standard will require entities to recognize the income tax consequences of intra-entity transfers of assets other than inventory at the time of transfer. This standard requires a modified retrospective approach to adoption. The Group adopted ASU 2016-16 from January 1, 2018 using a modified retrospective transition method. There was no material impact to the Company's consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (gg) Statutory reserves

The Group's subsidiaries and VIEs established in the PRC are required to make appropriations to certain non-distributable reserve funds.

In accordance with the laws applicable to China's Foreign Investment Enterprises, the Group's subsidiaries registered as wholly owned foreign enterprises have to make appropriations from its after-tax profit (as determined under the Accounting Standards for Business Enterprises as promulgated by the Ministry of Finance of the People's Republic of China ("PRC GAAP")) to reserve funds including general reserve fund, and staff bonus and welfare fund. The appropriation to the general reserve fund must be at least 10% of the after-tax profits calculated in accordance with PRC GAAP. Appropriation is not required if the reserve fund has reached 50% of the registered capital of the company. Appropriation to the staff bonus and welfare fund is at the company's discretion.

In addition, in accordance with the Company Laws of the PRC, the VIEs of the Company registered as PRC domestic companies must make appropriations from its after-tax profit as determined under the PRC GAAP to non-distributable reserve funds including a statutory surplus fund and a discretionary surplus fund. The appropriation to the statutory surplus fund must be at least 10% of the after-tax profits as determined under the PRC GAAP. Appropriation is not required if the surplus fund has reached 50% of the registered capital of the company. Appropriation to the discretionary surplus fund is made at the discretion of the company.

The use of the general reserve fund, statutory surplus fund and discretionary surplus fund are restricted to the offsetting of losses or increasing capital of the respective company. The staff bonus and welfare fund is a liability in nature and is restricted to fund payments of special bonus to staff and for the collective welfare of employees. All these reserves are not allowed to be transferred to the Company in terms of cash dividends, loans or advances, nor can they be distributed except under liquidation.

During the years ended December 31, 2016, 2017 and 2018, appropriations to general reserve fund and statutory surplus fund amounted to RMB2,350, RMB3,861, and RMB39,007 respectively.





## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (hh) Related parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or significant influence, such as a family member or relative, shareholder, or a related corporation.

#### (ii) Dividends

Dividends are recognized when declared. No dividends on common shares were declared for the years ended December 31, 2016, 2017 and 2018, respectively. The Group does not have any present plan to pay any dividends on common shares in the foreseeable future. The Group currently intends to retain the available funds and any future earnings to operate and expand its business.

#### (jj) Income per share

Basic income per share is computed on the basis of the weighted-average number of common shares outstanding during the period under measurement. Diluted income per share is based on the weighted-average number of common shares outstanding and potential common shares. Potential common shares result from the assumed exercise of outstanding share options, restricted shares and restricted share units or other potentially dilutive equity instruments, when they are dilutive under the treasury stock method or the if-converted method.

#### (kk) Comprehensive income

Comprehensive income is defined as the change in equity of the Company during a period arising from transactions and other events and circumstances excluding transactions resulting from investments by shareholders and distributions to shareholders. Comprehensive income is reported in the consolidated statements of comprehensive income.

As of December 31, 2017, accumulated other comprehensive income/loss of the Group includes the unrealized gain of available-for-sale securities and the foreign currency translation adjustments. As of December 31, 2018, accumulated other comprehensive income/loss of the Group is the foreign currency translation adjustments.

**(II) Segment reporting**

Operating segments are defined as components of an enterprise engaging in businesses activities for which separate financial information is available that is regularly evaluated by the Group's chief operating decision makers ("CODM") in deciding how to allocate resources and assess performance. The Group's chief operating decision maker has been identified as the Chief Executive Officer, who reviews segment results when making decisions about allocating resources and assessing performance of the Group.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 2. Principal accounting policies (continued)

#### (mm) Recently issued accounting pronouncements

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2016-02 (Topic 842) “Leases”. Topic 842 supersedes the lease requirements in Accounting Standards Codification (ASC) Topic 840, “Leases”. Under Topic 842, lessees are required to recognize assets and liabilities on the balance sheet for most leases and provide enhanced disclosures. Leases will continue to be classified as either finance or operating. The Company will adopt the new standard using the optional transition method (from ASU 2018-11, Leases Targeted Improvements) for fiscal years and interim periods within 2019. As permitted under the transition guidance, the Company will carry forward the assessment of whether the existing contracts contain or are leases, classification of the leases and remaining lease terms. Based on the portfolio of leases as of December 31, 2018, lease assets of approximately RMB 145 million and liabilities of approximately RMB141 million will be recognized on the Group’s balance sheet upon adoption, primarily relating to the rental of buildings.

In June 2016, the FASB issued Accounting Standards Update (“ASU”) 2016-13: Financial Instruments-Credit Losses (Topic 326), which requires entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early application will be permitted for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is in the process of evaluating the impact of the standard on its consolidated financial statements.

In January 2017, the FASB issued Accounting Standards Update (“ASU”) 2017-04: Simplifying the Test for Goodwill Impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The guidance should be adopted on a prospective basis for the annual or any interim goodwill impairment tests beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is in the process of evaluating the impact of the standard on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting: The amendments in this Update expand the scope of Topic 718 to include share based payment transactions for acquiring goods and services from nonemployees. An entity should apply the requirements of Topic 718 to nonemployee awards except for specific guidance on inputs to an option pricing model and the attribution of cost (that is, the period of time over which share-based payment awards vest and the pattern of cost recognition over that period). The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606. The amendments in this Update are effective for public business entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company does not expect ASU 2018-07 to have a material impact to the Company's consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. The amendments in this standard will remove, modify and add certain disclosures under ASC Topic 820, Fair Value Measurement, with the objective of improving disclosure effectiveness. ASU 2018-13 will be effective for the Group's fiscal year beginning January 1, 2020, with early adoption permitted. The transition requirements are dependent upon each amendment within this update and will be applied either prospectively or retrospectively. The Company does not expect ASU 2018-13 to have a material impact to the Company's consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 3. Certain risks and concentration

#### (a) PRC regulations

Foreign ownership of internet-based businesses is subject to significant restrictions under the current PRC laws and regulations. The PRC government regulates internet access, the distribution of online information and the conduct of online commerce through strict business licensing requirements and other government regulations. These laws and regulations also limit foreign ownership in PRC companies that provide internet information distribution services. Specifically, foreign ownership in an internet information provider or other value-added telecommunication service providers may not exceed 50%. Foreigners or foreign invested enterprises are currently not able to apply for the required licenses for operating online games in the PRC. The Company is incorporated in the Cayman Islands and accordingly, the Company is considered as a foreign invested enterprise under PRC law.

As mentioned in Note 1(d), in order to comply with the PRC laws restricting foreign ownership in the online business in China, the Group operates the online business in China through contractual arrangements with its principal VIEs, namely Guangzhou Huaduo and Guangzhou Huya. As of December 31, 2018, Beijing Tuda and Guangzhou Huaduo own the majority equity interests of Guangzhou Huaduo and Guangzhou Huya, respectively.

Guangzhou Huaduo and Guangzhou Huya hold the licenses and permits necessary to conduct its internet value-added services and online advertising in the PRC. If the Company had direct ownership of the VIE, it would be able to exercise its rights as a shareholder to effect changes in the board of directors, which in turn could affect changes at the management level, subject to any applicable fiduciary obligations. However, under the current contractual arrangements, it relies on the VIE and its shareholders' performance of their contractual obligations to exercise effective control. In addition, the Group's contractual agreements have terms range from 10 to 30 years, which are subject to Beijing Huanju Shidai and Huya Technology's unilateral termination right. Under the respective service agreements, Beijing Huanju Shidai and Huya Technology will provide services including technology support, technology services, business support and consulting services to Guangzhou Huaduo and Guangzhou Huya, respectively, in exchange for service fees. The amount of service fees payable is determined by various factors, including (a) a percentage of Guangzhou Huaduo and Guangzhou Huya's revenues or earnings, and (b) the expenses that Beijing Huanju Shidai and Huya Technology incur for providing such services. Beijing Huanju Shidai and Huya Technology may charge up to 100% of the income in Guangzhou Huaduo and Guangzhou Huya and a multiple of the expenses incurred for providing such services, as determined by Beijing Huanju Shidai and Huya Technology, respectively, from time to time. The service fees payable by Guangzhou Huaduo and Guangzhou Huya to Beijing Huanju Shidai and Huya Technology are determined to be up to 100% of the profits of Guangzhou Huaduo and Guangzhou Huya, with the timing of such payment to be determined at the sole discretion of Beijing Huanju Shidai

and Huya Technology. If fees were incurred, it would be significant to the Company and the operating companies' economic performance because it will be incurred and paid at up to 100% of the earnings of the VIE. Fees incurred would be remitted, subject to further PRC restrictions. None of the VIEs or their shareholders are entitled to terminate the contracts prior to the expiration date, unless under remote circumstances such as a material breach of agreement or bankruptcy as it pertains to the service and business operation agreements and their amendment.

For the years ended December 31, 2016, 2017 and 2018, the Company's wholly owned foreign enterprises determined that service fees of RMB305,792, RMB279,828 and RMB744,339 were charged to the Group's VIEs, respectively.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 3. Certain risks and concentration (continued)

#### (a) PRC regulations (continued)

Further, the Group believes that the contractual arrangements among Beijing Huanju Shidai, Huya Technology and Bilin Changxiang, the VIEs, and their shareholders are in compliance with PRC law and are legally enforceable. However, there are substantial uncertainties regarding the interpretation and application of PRC laws and regulations including those that govern the contractual arrangements, which could limit the Group's ability to enforce these contractual arrangements and if the nominee shareholders of the VIEs were to reduce their interests in the Group, their interest may diverge from that of the Group and that may potentially increase the risk that they would seek to act contrary to the contractual arrangements.

In March 2019, the National People's Congress enacted PRC Foreign Investment Law which would be effective starting from January 1, 2020. The Foreign Investment Law does not explicitly classify contractual arrangements as a form of foreign investment, but it contains a catch-all provision under the definition of "foreign investment," which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Existing laws or administrative regulations remain unclear whether the contractual arrangements with variable interest entities will be deemed to be in violation of the market access requirements for foreign investment under the PRC laws and regulations. However, the possibility that such entities will be deemed as foreign invested enterprise and subject to relevant restrictions in the future shall not be excluded. If VIEs fall within the definition of foreign investment entities, the Group's ability to use the contractual arrangements with its VIEs and the Group's ability to conduct business through the VIEs could be severely limited. The Group's ability to control the VIEs also depends on the power of attorney that the wholly owned subsidiary of the Group has to vote on all matters requiring shareholder approval in the VIEs. As noted above, the Group believes these power of attorney are legally enforceable but may not be as effective as direct equity ownership. In addition, if the Group's corporate structure and the contractual arrangements with the VIEs through which the Group conducts its business in the PRC were found to be in violation of any existing or future PRC laws and regulations, the Group's relevant PRC regulatory authorities could:

- revoke or refuse to grant or renew the Group's business and operating licenses;
- restrict or prohibit related party transactions between the wholly owned subsidiary of the Group and the VIE;
- impose fines, confiscate income or other requirements which the Group may find difficult or impossible to comply with;



- require the Group to alter, discontinue or restrict its operations;
- restrict or prohibit the Group's ability to finance its operations, and;
- take other regulatory or enforcement actions against the Group that could be harmful to the Group's business.

The imposition of any of these restrictions or actions could result in a material adverse effect on the Group's ability to conduct its business. In such case, the Group may not be able to operate or control the VIEs, which may result in deconsolidation of the VIEs in the Group's consolidated financial statements. In the opinion of management, the likelihood for the Group to lose such ability is remote based on current facts and circumstances. The Group's operations depend on the VIEs to honor their contractual arrangements with the Group. These contractual arrangements are governed by PRC law and disputes arising out of these agreements are expected to be decided by arbitration in the PRC. The management believes that each of the contractual arrangements constitutes valid and legally binding obligations of each party to such contractual arrangements under PRC laws. However, the interpretation and implementation of the laws and regulations in the PRC and their application to an effect on the legality, binding effect and enforceability of contracts are subject to the discretion of competent PRC authorities, and therefore there is no assurance that relevant PRC authorities will take the same position as the Group herein in respect of the legality, binding effect and enforceability of each of the contractual arrangements. Meanwhile, since the PRC legal system continues to rapidly evolve, the interpretations of many laws, regulations and rules are not always uniform and enforcement of these laws, regulations and rules involve uncertainties, which may limit legal protections available to the Group to enforce the contractual arrangements should the VIEs or the nominee shareholders of the VIEs fail to perform their obligations under those arrangements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

## 3. Certain risks and concentration (continued)

## (a) PRC regulations (continued)

The following consolidated financial information of the Group's VIEs excluding the intercompany items with the Group's subsidiaries was included in the accompanying consolidated financial statements as of and for the years ended:

	December 31,	
	2017	2018
	RMB	RMB
Assets		
Current assets		
Cash and cash equivalents	1,343,731	4,665,938
Short-term deposits	3,400,000	2,100,000
Restricted short-term deposits	1,000,000	-
Short-term investments	124,550	979,052
Accounts receivable, net	149,958	192,932
Inventory	315	-
Amounts due from related parties	9,309	172,258
Financing receivables, net	-	725,336
Prepayments and other current assets	190,456	663,437
Total current assets	6,218,319	9,498,953
Non-current assets		
Long-term deposits	-	1,000,000
Deferred tax assets	113,017	70,834
Investments	582,775	862,272
Property and equipment, net	359,912	655,402
Intangible assets, net	15,504	57,050
Land use rights, net	1,832,739	1,784,639
Amounts due from related parties	20,000	-
Other non-current assets	133,812	143,240
Total non-current assets	3,057,759	4,573,437
Total assets	9,276,078	14,072,390

## Liabilities

## Current liabilities

Accounts payable	67,817	112,167
Deferred revenue	757,244	950,816
Advances from customers	80,406	101,690
Income taxes payable	142,204	162,118
Accrued liabilities and other current liabilities	1,404,877	2,207,138
Amounts due to related parties	30,502	28,336
Total current liabilities	2,483,050	3,562,265

## Non-current liabilities

Deferred revenue	52,185	86,977
Deferred tax liabilities	8,404	-
Total non-current liabilities	60,589	86,977

Total liabilities	2,543,639	3,649,242
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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**3. Certain risks and concentration (continued)****(a) PRC regulations (continued)**

	<b>For the year ended December 31,</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<b>RMB</b>	<b>RMB</b>	<b>RMB</b>
Net revenues	8,164,100	11,577,104	15,740,097
Net income	1,874,435	2,766,279	3,475,109

	<b>For the year ended December 31,</b>		
	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<b>RMB</b>	<b>RMB</b>	<b>RMB</b>
Net cash provided by operating activities	2,538,836	3,974,085	4,672,879
Net cash used in investing activities	(1,313,002)	(3,571,668)	(1,212,622)
Net cash provided by financing activities	8,508	66,875	-
	1,234,342	469,292	3,460,257

**(b) Foreign exchange risk**

The revenues and expenses of the Group's entities in the PRC are generally denominated in RMB and their assets and liabilities are denominated in RMB. The Group's oversea operation and financing activities are denominated in U.S. dollars. The RMB is not freely convertible into foreign currencies. Remittances of foreign currencies into the PRC or remittances of RMB out of the PRC as well as exchange between RMB and foreign currencies require approval by foreign exchange administrative authorities and certain supporting documentation. The State Administration for Foreign Exchange, under the authority of the People's Bank of China, controls the conversion of RMB into other currencies.

**(c) Credit risk**

Assets that potentially expose the Group to credit risk primarily consist of cash and cash equivalents, short-term deposits, long-term deposits, short-term investments, accounts receivable, financing receivables, amounts due from related parties, prepayments and other current assets.

As of December 31, 2017 and 2018, substantially all of the Group's cash and cash equivalents, short-term deposits, short-term investments and long-term deposits were placed with the PRC and international financial institutions. Management chooses these institutions because of their reputations and track records for stability, and their known large cash reserves, and management periodically reviews these institutions' reputations, track records, and reported reserves. Management expects that any additional institutions that the Group uses for its cash and bank deposits will be chosen with similar criteria for soundness. Nevertheless under the PRC law, it is required that a commercial bank in the PRC that holds third party cash deposits should maintain a certain percentage of total customer deposits taken in a statutory reserve fund for protecting the depositors' rights over their interests in deposited money. PRC banks are subject to a series of risk control regulatory standards; PRC bank regulatory authorities are empowered to take over the operation and management of any PRC bank that faces a material credit crisis. The Group believes that it is not exposed to unusual risks as these financial institutions are either PRC banks or international banks with high credit quality. The Group had not experienced any losses on its deposits of cash and cash equivalents and term deposits during the years ended December 31, 2016, 2017 and 2018 and believes that its credit risk to be minimal.

The risk with respect to accounts receivable is mitigated by credit evaluations the Group performs on the payment platforms, game platforms, customers and the ongoing monitoring process of outstanding balances.

The Group is exposed to default risk on its financing receivables. The Group conducts credit evaluations of customers in finance business, either on an individual or collective basis. The Group also considers the value of collateral assets when assessing the collectability of certain financing receivables. Credit risk is controlled by the application of credit approvals, limits and monitoring procedures.

Amounts due from related parties, prepayments and other current assets are typically unsecured. In evaluating the collectability of the balance, the Group considers many factors, including the related parties and third parties' repayment history and their credit-worthiness. An allowance for doubtful accounts is made when collection of the full amount is no longer probable.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 4. Business combination and disposal of subsidiaries

#### *Disposal of Shanghai Beifu Culture Communication Co., Ltd. (“Beifu”)*

Beifu, a company engaged in the operation of E-commerce, was acquired by the Group in 2015.

In June 2016, the Group disposed of 60% equity interest of Beifu for a total consideration of RMB3,500. After the disposal, the Group retained 10% equity interest of Beifu and accounted for the investment in Beifu as an equity investment as the Group still had significant influence over Beifu. As a result, Beifu ceased to be a subsidiary of the Group. A total loss of RMB23,474 was recognized, which was the difference between (a) the aggregate of the fair value of consideration received, the fair value of the retained non-controlling interests and the carrying amount of non-controlling interests being deconsolidated, amounting to RMB13,236 collectively and (b) the carrying amount of the assets and liabilities being deconsolidated, amounting to RMB36,710. As part of the total loss recognized, the loss related to the remeasurement of the retained non-controlling investment to fair value was RMB3,088.

#### *Disposal of Beijing Huanqiu Xingxue Technology Development Co., Ltd. (“Xingxue”)*

Xingxue, a company engaged in online vocational education, was acquired by the Group in 2014.

In December 2016, the Group disposed of 33.86% equity interest of Xingxue for a total consideration of RMB118,500, which was collected in 2017. After the disposal, the Group retained 31.14% equity interest of Xingxue. As a result, Xingxue ceased to be a subsidiary of the Group. A total income of RMB127,434 was recognized, which is the difference between (a) the aggregate of the fair value of consideration received, the fair value of the retained non-controlling interests and the carrying amount of non-controlling interests being deconsolidated, amounting to RMB282,433 collectively and (b) the carrying amount of the assets and liabilities being deconsolidated, amounting to RMB154,999. As part of the total gains recognized, the gain related to the remeasurement of the retained non-controlling investment to fair value was RMB57,791.

*Disposal of Beijing Yunke Online Technology Development Co., Ltd. (“Yunke Online”)*

Yunke Online, a company engaged in online language education, was acquired by the Group in 2014. In January 2017, the Group disposed of 46% equity interest of Yunke Online. After the disposal, the Group retained 34% equity interest of Yunke Online. As a result, Yunke Online ceased to be a subsidiary of the Group. A total income of RMB37,989 was recognized.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****5. Cash and cash equivalents**

Cash and cash equivalents represent cash on hand, demand deposits placed with banks or other financial institutions and all highly liquid investments with maturities of three months or less. Cash and cash equivalents balance as of December 31, 2017 and 2018 primarily consist of the following currencies:

	December 31, 2017		December 31, 2018	
	<b>RMB</b>		<b>RMB</b>	
Amount	<b>equivalent</b>		Amount	<b>equivalent</b>
RMB	1,627,044	1,627,044	4,707,868	4,707,868
US\$	151,529	990,388	188,869	1,296,284
Others	-	-	N/A	79
Total		2,617,432		6,004,231

**6. Short-term and Long-term deposits**

Short-term deposits represent time deposits placed with banks with original maturities between three months and one year. Long-term deposits represent time deposits placed with banks with original maturities more than one year. The term deposits balance as of December 31, 2017 and 2018 primarily consist of the following currencies:

	December 31, 2017		December 31, 2018	
	<b>RMB</b>		<b>RMB</b>	
Amount	<b>equivalent</b>		Amount	<b>equivalent</b>
Short-term deposits				
RMB	3,400,000	3,400,000	2,100,000	2,100,000
US\$	397,816	2,600,104	761,573	5,226,996
Total		6,000,104		7,326,996

Long-term deposits



RMB	-	-	1,000,000	1,000,000
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**7.Restricted short-term deposits**

As of December 31, 2017, the Group had restricted short-term deposits balance of RMB1,000 million representing pledged deposit with banks in China in order to obtain banking facilities amounting to US\$160 million. As of December 31, 2018, no short-term deposit was restricted.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****8. Short-term investments**

As of December 31, 2017 and 2018, the Group's investments in financial instruments were RMB124,550 and RMB979,053, respectively. Since these investments' maturity dates are within one year, they are classified as short-term investments.

**9. Accounts receivable, net**

	December 31,	
	2017	2018
	RMB	RMB
Accounts receivable, gross	161,300	206,772
Less: allowance for doubtful receivables	(7,356 )	(8,344 )
Accounts receivable, net	153,944	198,428

The following table summarizes the details of the Group's allowance for doubtful accounts:

	For the year ended December 31,		
	2016	2017	2018
	RMB	RMB	RMB
Balance at the beginning of the year	(58,791 )	(55,220 )	(7,356 )
Reversals (additions) charged to general and administrative expenses, net	3,571	(3,049 )	(1,198 )
Write-off during the year	-	50,913	210
Balance at the end of the year	(55,220 )	(7,356 )	(8,344 )

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**10. Financing receivables, net**

Financing receivables consist of the following:

	December 31, 2018 RMB
Financing receivables, gross	
Micro-credit personal loans	734,108
Corporate loans	274,857
Total	1,008,965
Less: allowance for financing receivables	(15,829 )
Financing receivables, net	993,136
Current portion	768,343
Non-current portion	224,793

As of December 31, 2018, micro-credit personal loans amounting to RMB 371,031 were guaranteed by a third party corporation.

The following table presents the aging of financing receivables as of December 31, 2018.

	1-90 days past due	91-180 days past due	181-360 days past due	Total past due	Current	Total financing receivables
Micro-credit personal loans	13,074	6,590	1,411	21,075	713,033	734,108
Corporate loans	-	-	-	-	274,857	274,857
	13,074	6,590	1,411	21,075	987,890	1,008,965

The non-accrual financing receivables related to personal loans as of December 31, 2018 amounted to RMB 8,001, due to the 90 days past due.

A majority of the Group's corporate loan business was in the form of sale-and-leaseback arrangements, under which the Group purchases equipment from third party companies and lease back the equipment to the third party companies. In January 2019, one of the lessees was unable to repay the principal amount of around RMB15 million due in January 2019. The total financing receivable due from this lessee was RMB199 million as of December 31, 2018. The Group has brought a lawsuit against this lessee to the court, claiming the lessee to repay all the outstanding amount due to the Group. Pursuant to the finance lease agreement, the legal titles of the equipment purchased by the Group have been transferred to the Group and the fair value of the equipment exceeds the total financing receivable due from the lessee. The Group also pledged or applied to the court to preserve certain assets of the lessee or the lessee's related entity. The Group believed that the financing receivable due from the lessee can be recovered based on the measures taken and therefore no loss allowance was provided against the receivable. The financing receivable was placed on non-accrual status after the lessee was unable to repay the principal due in January 2019. The Group has decided not to further develop corporate loan business so as to avoid further potential risk arising from such business.

Movement of allowance for financing receivables is as follows:

	For the year ended December 31, 2018 RMB
Balance at the beginning of the year	-
Charge for the year	(15,829 )
Balance at the end of the year	(15,829 )

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**11. Prepayments and other current assets**

	December 31,	
	2017	2018
	RMB	RMB
Interests receivable	78,274	218,553
Prepayments and deposits to vendors and content providers	81,319	183,293
Loans to third parties	-	180,964
Receivables from payment platforms	-	112,061
Amounts receivables from issuance of a subsidiary's preferred shares	-	102,951
Value added taxes to be deducted	-	69,563
Receivables from disposal of subsidiaries and investments	7,986	59,255
Rental and other deposits	14,214	22,457
Employee advances	16,697	11,536
Others	23,449	58,386
Total	221,939	1,019,019

**12. Investments**

	December 31,	
	2017	2018
	RMB	RMB
Equity investments accounted for using the equity method (i)	309,241	378,378
Equity investments with readily determinable fair values (ii)	138,251	238,915
Equity investments without readily determinable fair values (iii)	703,566	3,974,231
Available-for-sale debt securities	1,961	-
Total	1,153,019	4,591,524

In 2017 and 2018, the Group acquired minority stake of a number of privately-held entities with total consideration of RMB21,740 and RMB14,277, respectively. Investments have been accounted for under the equity method where (i) the Group has significant influence on these investments and the investments are considered as in-substance ordinary shares.

In 2018, the Group made an investment in a third party investment fund with total consideration of RMB204,499. The Group does not have the ability to exercise significant influence over the investment. Therefore, it has been precluded from applying the equity method of accounting.

(ii)

In 2018, fair value loss of RMB113,677 related to investments with readily determinable fair values was recognized in gain on fair value changes of investments, all of which was unrealized.

(iii) Equity securities without readily determinable fair values and over which the Company has neither significant influence nor control through investments in common stock or in-substance common stock.

In 2017 and 2018, the Group acquired minority preferred shares or ordinary shares of a number of privately-held entities with total consideration of RMB301,848 and RMB2,118,648, respectively. The ownership interests were less than 20% of the investees' total equities. The Company has neither significant influence nor control in these investees. These equity investments are not considered as debt securities or equity securities that have readily determinable fair values. Accordingly the Company elected to account for these investments at cost less impairments, adjusted by observable price changes.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****12. Investments (continued)**

In 2018, fair value gain of RMB1,803,081 due to the observable price change, was recognized in gain on fair value changes of investments (Note 29). Out of the fair value gain of RMB1,803,081, RMB356,545 was realized and RMB1,446,536 was unrealized.

In 2018, The Group disposed or partially disposed 7 investments and deemed disposed 1 investment. The total consideration of the disposals was RMB780,071. The aggregate gain resulting from the disposals and the deemed disposal is RMB16,178.

The Group assesses the existence of indicators for other-than-temporary impairment of the investments by considering factors including, but not limited to, current economic and market conditions, the operating performance of the entities including current earnings trends and other entity-specific information. In 2016, 2017 and 2018, based on the Group's assessment, an impairment charge of RMB80,104, RMB43,205 and RMB35,348 was recognized in general and administrative expenses, respectively, against the carrying value of the investments due to significant deterioration in earnings or unexpected changes in business prospects of the investees as compared to the original investment plans.

**13. Property and equipment, net**

Property and equipment consists of the following:

	December 31,	
	2017	2018
	RMB	RMB
Gross carrying amount		
Buildings	731,640	857,020
Servers, computers and equipment	588,589	679,735
Construction in progress	44,103	211,657
Decoration of buildings	100,711	103,305
Motor vehicles	27,330	38,407

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Furniture, fixture and office equipment	24,102	26,439
Leasehold improvements	18,651	22,913
Total	1,535,126	1,939,476
Less: accumulated depreciation	(518,128 )	(643,157 )
Property and equipment, net	1,016,998	1,296,319

Depreciation expense for the years ended December 31, 2016, 2017 and 2018 were RMB173,625, RMB176,715, and RMB150,991, respectively.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****14. Land use rights, net**

Land use rights consist of the following:

	December 31, 2018 RMB
Gross carrying amount	1,924,563
Less: accumulated amortization	(139,924 )
Land use rights, net	1,784,639

Amortization expense for the years ended December 31, 2016, December 31, 2017 and 2018 were RMB43,915, RMB47,909, and RMB48,100, respectively.

The estimated amortization expenses for each of the following five years are as follows:

	Amortization expense of land use rights RMB
2019	48,096
2020	48,096
2021	48,096
2022	48,096
2023	48,096

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****15. Intangible assets, net**

The following table summarizes the Group's intangible assets:

	December 31,	
	2017	2018
	RMB	RMB
Gross carrying amount		
Operating rights	47,020	67,080
Software	34,413	39,535
License	-	32,000
Domain names	25,774	26,819
Technology	17,676	18,094
Total of gross carrying amount	124,883	183,528
Less: accumulated amortization		
Operating rights	(40,320 )	(48,451 )
Software	(19,448 )	(28,406 )
License	-	(1,422 )
Domain names	(9,687 )	(11,213 )
Technology	(10,695 )	(11,856 )
Total accumulated amortization	(80,150 )	(101,348 )
Less: accumulated impairment	(7,252 )	(7,495 )
Intangible assets, net	37,481	74,685

Amortization expense for the years ended December 31, 2016, 2017 and 2018 were RMB56,977, RMB14,510 and RMB20,995, respectively.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****15. Intangible assets, net (continued)**

The estimated amortization expenses for each of the following five years are as follows:

	Amortization expense of intangible assets RMB
2019	22,710
2020	13,010
2021	4,563
2022	4,060
2023	3,978

The weighted average amortization periods of intangible assets as of December 31, 2017 and 2018 are as below:

	December 31, 2017	2018
Domain names	15 years	15 years
License	Not applicable	15 years
Software	4 years	4 years
Operating rights	1 year	2 year
Technology	5 years	Not applicable

**16. Goodwill**

The changes in the carrying amount of goodwill for the years ended December 31, 2017 and 2018 are as follows:

YY Live  
RMB

Balance as of December 31, 2016	14,300
Impairment charges (i)	(2,527 )
Foreign currency translation adjustments	(57 )
Balance as of December 31, 2017	11,716
Foreign currency translation adjustments	47
Balance as of December 31, 2018	11,763

(i) The Group performs its annual goodwill impairment test of each reporting unit as of October 1, or more frequently, if certain events or circumstances warrant. Events or changes in circumstances which might indicate potential impairment in goodwill include the entity-specific factors, including, but not limited to, stock price volatility, market capitalization relative to net book value, and projected revenue, market growth and operating results.

In December 2017, the Group has identified impairment indicator for Guangzhou Zhuque Information Technology Co., Ltd. (“Zhuque”). Based on the results of the impairment assessment, an impairment charge of RMB2,527 for Zhuque was recognized.

The above goodwill impairment assessments on Zhuque adopted the income approach and considered a combination of factors, including, but not limited to, market conditions, expected future cash flows, growth rates and discount rates, which required the Group to make certain estimates and assumptions regarding industry economic factors and future profitability of the business.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**17. Deferred revenue**

	December 31,	
	2017	2018
	<b>RMB</b>	<b>RMB</b>
Deferred revenue, current		
Live streaming	637,346	842,040
Others	120,698	109,576
Total current deferred revenue	758,044	951,616
Deferred revenue, non-current		
Live streaming	45,267	80,734
Others	12,451	10,976
Total non-current deferred revenue	57,718	91,710

**18. Accrued liabilities and other current liabilities**

	December 31,	
	2017	2018
	<b>RMB</b>	<b>RMB</b>
Revenue sharing fees	839,745	1,318,561
Salaries and welfare	220,539	329,169
Marketing and promotion expenses	109,901	213,216
Bandwidth costs	102,064	131,252
Value added taxes and other taxes payable	23,204	109,040
Deposits from third parties	27,440	82,771
Payables to merchants	15,442	75,471
Other payable to content providers	20,849	30,313
Others	106,779	124,578
Total	1,465,963	2,414,371

**19. Short-term loans**

December 31,	
2017	2018
RMB	RMB

Short-term loans	588,235	-
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The Group entered into agreements with banks, pursuant to which the Group borrowed three loans with total principal amount of US\$90 million (equal to RMB588,235) within a credit facility of US\$160 million in 2017. These loans were all with a maturity of less than one year and the annual interest rates of these loans ranged from 2.0% to 3.0%. Term deposit of RMB1,000 million was pledged as collateral for the banking facilities of US\$160 million. In 2018, the Group repaid the loans.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****20. Convertible bonds**

	December 31,	
	2017	2018
	RMB	RMB
Convertible bonds, current		
2019 Convertible Senior Notes	-	6,863
Convertible bonds, non-current		
2019 Convertible Senior Notes	6,536	-

On March 18, 2014, the Company issued Convertible Senior Notes due 2019 with principal amount of US\$400 million (the “Notes”). The Notes bear interest at a rate of 2.25% per year, payable semi-annually in arrears on April 1 and October 1 of each year, beginning on October 1, 2014. The Notes will mature on April 1, 2019. The value of the Notes is initially measured by the cash received and is subsequently stated at amortized cost.

The Notes are not redeemable prior to the maturity date of April 1, 2019, except that the holders of the Notes (the “Holders”) have a noncontingent option to require the Company to repurchase for cash all or any portion of their Notes on April 1, 2017. The repurchase price will equal 100% of the principal amount of the Notes to be repurchased plus accrued and unpaid interest, if any, to, but excluding, the repurchase date.

US\$399 million aggregate principal amount of the Notes were redeemed on April 1, 2017. Following the repurchase, US\$1 million aggregate principal amount of the Notes remains outstanding and will be due in 2019.

As of December 31, 2017 and 2018, RMB 6.5 million (US\$1.0 million) and RMB 6.9 million (US\$1.0 million) has been accounted for as the value of the Notes in non-current liabilities and current liabilities respectively.

Interest expense recognized during the years ended December 31, 2017 and 2018 was RMB20,820 and RMB149.

The remaining outstanding balance of the Notes was repaid on April 1, 2019.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****21. Cost of revenues**

	For the year ended December 31,		
	2016 RMB	2017 RMB	2018 RMB
Revenue sharing fees and content costs	3,790,624	5,727,081	8,272,696
Bandwidth costs	651,652	695,839	967,436
Salary and welfare	232,497	237,063	323,623
Depreciation and amortization	173,048	128,639	117,293
Payment handling costs	67,474	72,953	104,772
Share-based compensation	15,894	42,759	74,339
Other taxes and surcharges	44,659	48,360	48,724
Other costs	127,582	73,708	108,251
Total	5,103,430	7,026,402	10,017,134

**22. Other income**

	For the year ended December 31,		
	2016 RMB	2017 RMB	2018 RMB
Government grants	128,550	88,873	88,488
Others	954	24,314	29,372
Total	129,504	113,187	117,860

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 23. Income tax

#### (i) 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.

#### (ii) BVI

Duowan BVI is exempted from income tax on its foreign-derived income in the BVI. There are no withholding taxes in the BVI.

#### (iii) Hong Kong profits tax

Under the current Hong Kong Inland Revenue Ordinance, the subsidiaries of the Group in Hong Kong are subject to 16.5% Hong Kong profit tax on its taxable income generated from operations in Hong Kong. Additionally, payments of dividends by the subsidiary incorporated in Hong Kong to the Company are not subject to any Hong Kong withholding tax.

#### (iv) Singapore

The subsidiaries of the Group in Singapore are subject to a tax rate of 17% on its taxable income.

## (v) PRC

The Company's subsidiaries and VIEs in China are governed by the Enterprise Income Tax Law ("EIT Law"), which became effective on January 1, 2008. Pursuant to the EIT Law and its implementation rules, enterprises in China are generally subject to tax at a statutory rate of 25%. Certified High and New Technology Enterprises ("HNTE") are entitled to a favorable statutory tax rate of 15%, but need to re-apply every three years. During this three-year period, an HNTE must conduct a qualification self-review each year to ensure it meets the HNTE criteria and is eligible for the 15% preferential tax rate for that year. If an HNTE fails to meet the criteria for qualification as an HNTE in any year, the enterprise cannot enjoy the 15% preferential tax rate in that year, and must instead use the regular 25% EIT rate.

Enterprises qualified as software enterprises can enjoy an income tax exemption for two years beginning with their first profitable year and a 50% tax reduction to the applicable tax rate for the subsequent three years. An entity that qualifies as a "Key National Software Enterprise" (a "KNSE") is entitled to a further reduced preferential income tax rate of 10%. Enterprises wishing to enjoy the status of a Software Enterprise or a KNSE must perform a self-assessment each year to ensure they meet the criteria for qualification and file required supporting documents with the tax authorities before using the preferential EIT rates. These enterprises will be subject to the tax authorities' assessment each year as to whether they are entitled to use the relevant preferential EIT treatments. If at any time during the preferential tax treatment years an enterprise uses the preferential EIT rates but the relevant authorities determine that it fails to meet applicable criteria for qualification, the relevant authorities may revoke the enterprise's Software Enterprise/KNSE status.

The EIT Law also provides that an enterprise established under the laws of a foreign country or region but whose "de facto management body" is located in the PRC be treated as a resident enterprise for PRC tax purposes and consequently be subject to the PRC income tax at the rate of 25% for its global income. The Implementing Rules of the EIT Law merely define the location of the "de facto management body" as "the place where the exercising, in substance, of the overall management and control of the production and business operation, personnel, accounting, properties, etc., of a non-PRC company is located." Based on a review of surrounding facts and circumstances, the Group does not believe that it is likely that its entities registered outside of the PRC should be considered as resident enterprises for the PRC tax purposes.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 23. Income tax (continued)

(v) PRC (continued)

The Group's PRC entities provided for enterprise income tax are as follows:

Guangzhou Huaduo applied for the renewal of HNTE qualification and received approval in December 2016.

Guangzhou Huaduo is entitled to continue to enjoy the beneficial tax rate of 15% as an HNTE for the years 2016 through 2018, and will need to re-apply for HNTE qualification renewal in 2019.

In 2017, Guangzhou Huanju Shidai was qualified as a KNSE after the relevant government authorities' assessment and was entitled to a preferential income tax rate of 10%. In 2018, Guangzhou Huanju Shidai is expected to enjoy a reduced tax rate of 10% based on its self-assessment.

In June 2017, Guangzhou Juhui Information Technology Co., Ltd. was qualified as a Software Enterprise, and started to enjoy the zero preferential tax rate beginning from 2016 and 12.5% preferential tax rate beginning from 2018.

Huya Technology was qualified as a Software Enterprise, and started to enjoy the zero preferential tax rate starting from 2017 and 12.5% preferential tax rate starting from 2019.

Guangzhou Huya applied for the HNTE qualification and received approval in November 2018. Guangzhou Huya is entitled to enjoy the preferential tax rate of 15% as an HNTE for three years starting from 2018, and will need to apply for HNTE qualification renewal in 2021.

Other PRC subsidiaries and VIEs were subject to 25% EIT for the periods reported.

According to a policy promulgated by the State Tax Bureau of the PRC and effective from 2008 onwards, enterprises engaged in research and development activities are entitled to claim an additional tax deduction amounting to 50% of the qualified research and development expenses incurred in determining its tax assessable profits for that year. The additional tax deducting amount of the qualified research and development expenses have been increased from 50% to

75%, effective from 2018 to 2020, according to a new tax incentives policy promulgated by the State Tax Bureau of the PRC in September 2018 (“Super Deduction”).

Certain subsidiaries and VIEs of the Group successfully claimed the Super Deduction in ascertaining the tax assessable profits for the periods reported.

The EIT Law also imposes a withholding income tax of 10% on dividends distributed by an FIE to its immediate holding company outside of China, if such immediate holding company is considered as a non-resident enterprise without any establishment or place within China or if the received dividends have no connection with the establishment or place of such immediate holding company within China, unless such immediate holding company’s jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. The Cayman Islands, where the Company incorporated, does not have such tax treaty with China. According to the arrangement between the mainland China and Hong Kong Special Administrative Region on the Avoidance of Double Taxation and Prevention of Fiscal Evasion in August 2006, dividends paid by an FIE in China to its immediate holding company in Hong Kong will be subject to withholding tax at a rate of no more than 5% (if the foreign investor owns directly at least 25% of the shares of the FIE). In accordance with accounting guidance, all undistributed earnings are presumed to be transferred to the parent company and are subject to the withholding taxes. All FIEs are subject to the withholding tax from January 1, 2008. The presumption may be overcome if the Group has sufficient evidence to demonstrate that the undistributed dividends will be re-invested and the remittance of the dividends will be postponed indefinitely.

Aggregate undistributed earnings and reserves of the Group entities located in the PRC that are available for distribution to the Company as of December 31, 2017 and 2018 are approximately RMB7,605,499 and RMB11,519,699, respectively.

In 2017, the Group determined to cause one of its PRC subsidiaries, Guangzhou Huanju Shidai, to declare and distribute a cash dividend of part of its stand-alone earnings from 2014 to 2016, amounting to US\$15,000, to its direct oversea parent company, Duowan BVI. Guangzhou Huanju Shidai paid for the withholding tax in the amount of US\$1,500 in 2017.

The Group has a plan to indefinitely reinvest its funds and any future earnings for use in the operation and expansion of its business. Accordingly, no deferred tax liability on 10% withholding tax of aggregate undistributed earnings and reserves of the Company’s subsidiaries located in the PRC has been accrued that would be payable upon the distribution of those amounts to the Company as of December 31, 2017 and 2018.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**23. Income tax (continued)***Composition of income tax expense*

The current and deferred portions of income tax expense included in the consolidated statements of comprehensive income are as follows:

	For the year ended December 31,		
	2016	2017	2018
	RMB	RMB	RMB
Income (loss) before income tax expenses			
PRC entities	1,914,432	2,919,350	3,494,192
Non-PRC entities (a)	(130,621 )	(28,172 )	(959,721 )
Total	1,783,811	2,891,178	2,534,471
Current income tax expenses			
PRC entities	(288,282 )	(402,012 )	(379,130 )
Non-PRC entities	-	(9,880 )	(48,931 )
Total	(288,282 )	(411,892 )	(428,061 )
Deferred income tax benefit (expenses)			
PRC entities	7,768	(3,919 )	(25,081 )
Non-PRC entities	-	-	(24,565 )
Total	7,768	(3,919 )	(49,646 )
Income tax expenses			
PRC entities	(280,514 )	(405,931 )	(404,211 )
Non-PRC entities	-	(9,880 )	(73,496 )
Total	(280,514 )	(415,811 )	(477,707 )

(a) The loss before tax incurred by non-PRC entities for the year ended December 31, 2018 was mainly due to the fair value loss on derivative liabilities amounting to RMB2,285,223. This fair value loss was incurred by Huya whose applicable tax rate is zero, therefore the tax impact related to this fair value loss was included in “effect of different tax

rates available to different jurisdictions” in the reconciliation table below.

*Reconciliation of the differences between statutory tax rate and the effective tax rate*

The reconciliation of total tax expense computed by applying the respective statutory income tax rate to pre-tax income is as follows:

	For the year ended December 31,		
	2016	2017	2018
PRC Statutory income tax rate	(25.0 )%	(25.0 )%	(25.0 )%
Effect of tax holiday and preferential tax benefit	11.6 %	13.2 %	16.5 %
Effect of different tax rates available to different jurisdictions	(1.7 )%	(0.3 )%	(10.1 )%
Permanent differences (i)	(1.1 )%	(1.8 )%	(3.5 )%
Change in valuation allowance	(1.5 )%	(2.3 )%	(1.6 )%
Effect of Super Deduction available to the Group	2.0 %	1.8 %	4.9 %
Effective income tax rate	(15.7 )%	(14.4 )%	(18.8 )%
Per ADS effect of tax holiday (RMB)	3.52	4.71	5.35
Per share effect of tax holiday (RMB)	0.18	0.24	0.27

(i) Permanent differences mainly arise from expenses not deductible for tax purposes including primarily share-based compensation costs and expenses incurred by subsidiaries and VIEs.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**23. Income tax (continued)***Deferred tax assets and liabilities*

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

	December 31,	
	2017	2018
	RMB	RMB
Deferred tax assets:		
Tax loss carried forward	74,951	148,899
Allowance for doubtful receivable, accrued expense and others not currently deductible for tax purposes	62,177	84,249
Deferred revenue	97,858	36,007
Impairment of investment	12,783	17,180
Others	753	753
Valuation allowance (i)	(135,505)	(175,793)
Amounts offset by deferred tax liabilities	-	(40,461 )
Total deferred tax assets, net	113,017	70,834
Deferred tax liabilities:		
Related to the fair value changes of investments	3,627	61,658
Related to acquired intangible assets	2,406	1,531
Others	4,777	4,777
Amounts offset by deferred tax assets	-	(40,461 )
Total deferred tax liabilities, net	10,810	27,505

(i)



Valuation allowance is provided against deferred tax assets when the Group determines that it is more likely than not that the deferred tax assets will not be utilized in the future. In making such determination, the Group considered factors including future taxable income exclusive of reversing temporary differences and tax loss carry forwards. Valuation allowance was provided for net operating loss carry forward because it was more likely than not that such deferred tax assets would not be realized based on the Group's estimate of its future taxable income. If events occur in the future that allow the Group to realize more of its deferred income tax than the presently recorded amounts, an adjustment to the valuation allowances will result in a decrease in tax expense when those events occur.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****23. Income tax (continued)***Deferred tax assets and liabilities (continued)***Movement of valuation allowance**

	For the year ended December 31,		
	2016	2017	2018
	<b>RMB</b>	<b>RMB</b>	<b>RMB</b>
Balance at beginning of the year	(53,316)	(80,712 )	(135,505 )
Additions	(45,491)	(78,978 )	(113,597 )
Reversals	18,095	24,185	73,309
Balance at end of the year	(80,712)	(135,505 )	(175,793 )

*Tax loss carry forwards*

As of December 31, 2018, total tax loss carry forwards of the Company's subsidiaries and VIEs in the PRC amounted to RMB355,685, which were mainly generated by non-HNTEs and will then expire if not used between 2019 and 2023. The accumulated tax losses of subsidiaries incorporated in Hong Kong and Singapore, subject to the agreement of the relevant tax authorities, of RMB113,645 and RMB242,735, respectively, are allowed to be carried forward to offset against future taxable profits. Such carry forward of tax losses in Hong Kong and Singapore have no time limit.

In accordance with PRC Tax Administration Law on the Levying and Collection of Taxes, the PRC tax authorities generally have up to five years to claw back underpaid tax plus penalties and interest for PRC entities' tax filings. In the case of tax evasion, which is not clearly defined in the law, there is no limitation on the tax years open for investigation. There were no ongoing examinations by tax authorities as of December 31, 2018.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 24. Mezzanine equity

On July 10, 2017, Huya issued 22,058,823 shares of redeemable convertible preferred shares (“Series A Preferred Shares”) at a price of US\$3.4 per share with total cash consideration of US\$75,000 (equivalent to RMB509,730 as of the issuance date).

On March 8, 2018, Huya issued 64,488,235 shares of redeemable convertible preferred shares (“Series B-2 Preferred Shares”) for cash consideration of US\$461,600 (equivalent to RMB2,919,112 as of the issuance date) to Linen Investment Limited, a wholly owned subsidiary of Tencent Holdings Limited (“Tencent”). As holders of the Series B-2 Preferred Shares who exercise the redemption rights are allowed to request Huya to issue a convertible note if the Huya’s assets or funds legally available for redemption are insufficient, the host contract is considered to be a debt host. As the conversion feature is an equity instrument as it results in conversion of preferred shares into equity shares, this feature is not clearly and closely related to the debt host. In addition, net settlement criteria is met for the conversion right given the holder will receive the greater of a fixed amount or the if-converted value in the occurrence of a liquidation or deemed liquidation. Therefore, Huya determined that conversion feature embedded in the Series B-2 Preferred Shares is required to be bifurcated and accounted for as a derivative liability and measured at fair value at the end of each reporting year prior to the completion of Huya’s IPO. Upon the issuance of Series B-2 Preferred Shares, the conversion features of Series A Preferred Shares was also modified to be the same as Series B-2 Preferred Shares. Therefore, the difference between the fair value of the modified Series A Preferred Shares and the carrying value of Series A Preferred Shares on the modification date was recognized as a deemed dividend against retained earnings, amounting to RMB489,284. The initial recognition of the derivative liabilities for Series A Preferred Shares and Series B-2 Preferred Shares amounted to RMB892 million and the fair value loss on derivative liabilities of RMB2,285,223 was recognized in the consolidated statement of comprehensive income for the year ended December 31, 2018.

Prior to the completion of Huya’s IPO, the Group recorded accretion of redemption value in accordance with ASC 480-10. The Group used the interest method to accrete the changes in redemption value over the period from the date of issuance to the earliest redemption date of the redeemable convertible preferred shares. In 2017 and 2018, the accretion charges of redeemable convertible preferred shares to redemption value were RMB19,842 and RMB71,628, respectively.

Upon the completion of Huya’s IPO on May 11, 2018, all the redeemable convertible preferred shares were automatically converted into ordinary share of Huya. As a result, the Group held 44.0% of the outstanding ordinary shares of Huya. However, the Group is able to control Huya under Huya’s dual voting structure by gaining the simple

majority of the voting right of Huya immediately after the IPO. Accordingly, the Group continues to consolidate the operations and the financial results of Huya and provides for non-controlling interests reflecting ordinary shares in Huya held by shareholders other than the Group in the consolidated financial statements. The Group derecognized the derivative liability mentioned above and recognized a one-time credit to additional paid-in capital of RMB4,804,947 in shareholders' equity in the consolidated balance sheets to reflect: 1) the increase in the value of the Group's equity in Huya resulted from the proceeds from Huya's IPO amounting to RMB795,073 and 2) conversion of redeemable convertible preferred shares amounting to RMB4,009,874.

In 2018, another subsidiary of the Group issued 500,000,000 shares of redeemable convertible preferred shares for cash consideration of US\$50,000 (equivalent to RMB345,420 as of the issuance date) to certain third-party investors. The Group classifies the redeemable convertible preferred shares as mezzanine equity and records accretion of redemption value in accordance with ASC 480-10. The Group used the interest method for the changes of redemption value over the period from the date of issuance to the earliest redemption date of the non-controlling interests. In 2018, accretion of redeemable convertible preferred shares to redemption value of RMB5,758 was recognized.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 25. Common shares

During the year ended December 31, 2016, 11,887,180 Class A common shares were issued for the exercised share options, vested restricted shares and restricted share units and 10,000,000 Class B common shares were converted to Class A common shares.

As of December 31, 2016, 10,000,000,000 Class A common shares and 1,000,000,000 Class B common shares had been authorized, 750,115,028 Class A common shares and 359,557,976 Class B common shares had been issued and outstanding, respectively.

On August 21, 2017, the Group completed its follow-on equity offering. The Company issued a total of 132,250,000 Class A common shares at US\$3.5 per share. The net proceeds received by the Company, after deducting commissions and offering expenses, amounted to approximately US\$442.2 million.

During the year ended December 31, 2017, 21,305,880 Class A common shares were issued for the exercised share options, vested restricted shares and restricted share units and 41,575,000 Class B common shares were converted to Class A common shares.

As of December 31, 2017, 10,000,000,000 Class A common shares and 1,000,000,000 Class B common shares had been authorized, 945,245,908 Class A common shares and 317,982,976 Class B common shares had been issued and outstanding, respectively.

During the year ended December 31, 2018, 6,694,940 Class A common shares were issued for the exercised share options, vested restricted shares and restricted share units and 29,800,000 Class B common shares were converted to Class A common shares.

As of December 31, 2018, 10,000,000,000 Class A common shares and 1,000,000,000 Class B common shares had been authorized, 981,740,848 Class A common shares and 288,182,976 Class B common shares had been issued and

outstanding, respectively.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****26. Share-based compensation****(a) YY's share-based awards****(i) Restricted Share Units**

On September 16, 2011, the board of directors of the Company approved the 2011 Share Incentive Scheme. In October 2012, the board of directors of the Company resolved that the maximum aggregate number of Class A common shares which may be issued pursuant to all awards under the 2011 Share Incentive Scheme shall be 43,000,000 plus an annual increase of 20,000,000 on the first day of each fiscal year, or such lesser amount of Class A common shares as determined by the board of directors of the Company.

During the years ended December 31, 2016, 2017 and 2018, the Company granted restricted share units to employees of 1,530,008 , 22,090,030 and 11,977,794 respectively pursuant to the 2011 Share Incentive Plan.

During the years ended December 31, 2016, 2017 and 2018, the Company granted restricted share units to non-employees of nil, 150,000 and nil pursuant to the 2011 Share Incentive Plan.

The following table summarizes the restricted share units activity for the years ended December 31, 2016, 2017 and 2018:

	Number of restricted shares	Weighted average grant-date fair value (US\$)
Outstanding, December 31, 2015	36,283,602	2.3535
Granted	1,530,008	1.8618

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Forfeited	(4,628,202 )	2.7386
Vested	(12,229,688)	2.0151
Outstanding, December 31, 2016	20,955,720	2.4320
Granted	22,090,030	5.3001
Forfeited	(4,007,728 )	2.5561
Vested	(8,163,878 )	2.3227
Outstanding, December 31, 2017	30,874,144	4.4969
Granted	11,977,794	4.7052
Forfeited	(5,115,304 )	4.6843
Vested	(12,507,000)	3.6776
Outstanding, December 31, 2018	25,229,634	4.9639
Expected to vest at December 31, 2018	23,742,895	4.9552

For the years ended December 31, 2016, 2017 and 2018, the Company recorded share-based compensation of RMB143,350, RMB211,189 and RMB372,281 using the graded-vesting attribution method.

As of December 31, 2018, total unrecognized compensation expense relating to the restricted share units was RMB442,094. The expense is expected to be recognized over a weighted average period of 1.11 years using the graded-vesting attribution method.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 26. Share-based compensation (continued)

#### (a) YY's share-based awards (continued)

##### (ii) Share options

###### Pre-2009 Scheme Options

Before the adoption of the Employee Equity Incentive Scheme (the "2009 Incentive Scheme"), 12,705,700 and 8,499,050 share options were granted to employees through individually signed share option agreements, to acquire common shares of Duowan BVI on a one-to-one basis on January 1, 2008 and 2009 respectively. In addition, on January 1, 2008, 3,832,290 share options were granted to one non-employee for the provision of consulting services to the Group (collectively defined as "Pre-2009 Scheme Options").

The vesting of the Pre-2009 Scheme Options has already been completed before January 1, 2016. As of December 31, 2017, the outstanding, vested and exercisable share options was 154,535. As of December 31, 2018, all outstanding, vested and exercisable share options have been exercised.

###### 2011 Share Incentive Scheme

###### *Grant of options*

During the year ended December 31, 2018, the Company granted 10,934,300 share options to employees, pursuant to the 2011 Share Incentive Scheme.

###### *Vesting of options*

There are three types of vesting schedule, which are: i) options will be vested in three equal installments over the following 36 months, ii) 50% of the options will be vested after 24 months of the grant date and the remaining 50% will be vested in two equal installments over the following 24 months, and iii) 50% of the options will be vested after 24 months of the grant date and the remaining 50% will be vested in one installments over the following 12 months.

Movements in the number of share options granted and their related weighted average exercise prices are as follows:

	Number of options	Weighted average exercise price (US\$)	Weighted average remaining contractual life (years)	Aggregate intrinsic value (US\$)
Outstanding, January 1, 2018	-	-	-	-
Granted	10,934,300	4.7025	5.29	-
Outstanding, December 31, 2018	10,934,300	4.7025	5.29	-
Expected to vest at December 31, 2018	10,934,300	4.7025	5.29	-
Exercisable at December 31, 2018	-	-	-	-

Forfeitures are estimated at the time of grant. If necessary, forfeitures are revised in subsequent periods if actual forfeitures differ from those estimates.

The aggregate intrinsic value in the table above represents the difference between the Company's common shares as of December 31, 2017 and 2018 and the exercise price.

The total intrinsic value of options exercised during the year ended December 31, 2018 is nil. For the year ended December 31, 2018, the Company recorded share-based compensation of RMB41,739 using the graded vesting attribution method.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****26. Share-based compensation (continued)****(a) YY's share-based awards (continued)****(ii) Share options (continued)**

The Company has used binomial option-pricing model to determine the fair value of the share options as of the grant dates. Key assumptions are set as below:

Weighted average fair value per option granted	US\$2.6425
Weighted average exercise price	US\$4.7025
Weighted average Risk-free interest rate <sup>(1)</sup>	2.77 %
Expected term (in year) <sup>(2)</sup>	5-6
Expected volatility <sup>(3)</sup>	57 %
Dividend yield <sup>(4)</sup>	-

(1) The risk-free interest rate of periods within the contractual life of the share option is based on US Treasury Bonds of similar tenor at the valuation dates.

(2) The expected term is the contract life of the option.

(3) Expected volatility is estimated based on the average of historical volatilities of the Company at the valuation dates.

(4) The Company has no history or expectation of paying dividend on its ordinary shares. The expected dividend yield was estimated based on the Company's expected dividend policy over the expected term of the option.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 26. Share-based compensation (continued)

#### (b) Huya's share-based awards

On July 10, 2017, the Board of Directors of Huya approved the establishment of 2017 Share Incentive Plan ("Huya's 2017 Share Incentive Plan"), the purpose of which is to provide an incentive for employees contributing to Huya. Huya's 2017 Share Incentive Plan shall be valid and effective for 10 years from the establishment date. The maximum number of shares that may be issued pursuant to all awards under 2017 Share Incentive Plan shall be 17,647,058 shares. On March 31, 2018, the Board of Directors of Huya approved to increase the maximum number of shares, that may be issued, from 17,647,058 shares to 28,394,117 shares, including incentive share options and restricted share units.

#### (i) Share options

##### *Grant of options*

During the year ended December 31, 2017, Huya granted 11,737,705 share options to employees.

During the year ended December 31, 2018, Huya granted 5,918,353 and 220,000 share options to employees and non-employees, respectively.

##### *Vesting of options*

There are three types of vesting schedule, which are: i) 50% of the options will be vested after 24 months of the grant date and the remaining 50% will be vested in two equal installments over the following 24 months, ii) options will be vested in four equal installments over the following 48 months, and iii) options will be vested in four equal installments over the following 24 months.

These options shall (i) be exercisable during its term cumulatively according to the vesting schedule set out in the grant notice and with the applicable provisions of Huya's 2017 Share Incentive Plan, provided that the performance conditions otherwise agreed by the parties (if any) to which the option is subject have been fulfilled upon each corresponding vesting date; (ii) be deemed vested and exercisable immediately in the event of a change of control, regardless of the vesting schedule; (iii) be exercisable upon any arrangement as otherwise agreed by the parties based on their discussion in good faith.

Movements in the number of share options granted and their related weighted average exercise prices are as follows:

	Number of options	Weighted average exercise price (US\$)	Weighted average remaining contractual life (years)	<b>Aggregate intrinsic value (US\$)</b>
As at January 1, 2016 and December 31, 2016	-	-	-	-
Granted	11,737,705	2.5500		
Forfeited	(18,000 )	2.5500		
As at December 31, 2017	11,719,705	2.5500	9.75	2,227
Granted	6,138,353	2.4672		
Forfeited	(75,000 )	2.5500		
Cancelled	(262,503 )	2.5500		
As at December 31, 2018	17,520,555	2.5210	8.82	227,049
Expected to vest at December 31, 2018	13,982,830	2.5338	8.87	181,024
Exercisable as of December 31, 2018	2,736,927	2.4572	8.63	35,642

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****26. Share-based compensation (continued)****(b) Huya's share-based awards (continued)****(i) Share options (continued)***Vesting of options (continued)*

Huya has used binomial option-pricing model to determine the fair value of the share options as of the grant dates. Key assumptions are set as below:

	2017	2018
Weighted average fair value per option granted	US\$1.3798	US\$5.2130
Weighted average exercise price	US\$2.55	US\$2.47
Risk-free interest rate <sup>(1)</sup>	2.25 %	2.83 %
Expected term (in year) <sup>(2)</sup>	10	10
Expected volatility <sup>(3)</sup>	55 %	55 %
Dividend yield <sup>(4)</sup>	-	-

(1) The risk-free interest rate of periods within the contractual life of the share option is based on the China Government Bond yield as at the valuation dates.

(2) The expected term is the contract life of the option.

(3) Expected volatility is estimated based on the average of historical volatilities of the comparable companies in the same industry as at the valuation dates.

(4) Huya has no history or expectation of paying dividend on its ordinary shares. The expected dividend yield was estimated based on Huya's expected dividend policy over the expected term of the option.

For the years ended December 31, 2016, 2017 and 2018, the Group recorded share-based compensation of nil, RMB19,473 and RMB151,242, using the graded-vesting attribution method, including accelerated compensation cost amounted to RMB1,869 due to that 262,503 share options were cancelled without concurrent grant of replacement awards, which is treated as a settlement for no consideration at the time of cancellation under ASC 718. The

share-based compensation above also included the share options granted to non-employees, amounting to nil, nil and RMB20,980, recognized in general and administrative expenses, for the years ended December 31, 2016, 2017 and 2018, respectively.

As of December 31, 2018, there was RMB169,604 unrecognized share-based compensation expense of options relating to Huya 2017 Share Incentive Plan. The expense is expected to be recognized over a weighted-average remaining vesting period of 1.14 years using the graded vesting attribution method.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****26. Share-based compensation (continued)****(b) Huya's share-based awards (continued)****(ii) Restricted share units***Grant of restricted share units*

During the year ended December 31, 2018, Huya granted 4,183,685 and 10,000 restricted share units to employees and non-employees, respectively.

*Vesting of restricted share units*

There are two types of vesting schedule for employees, which are: i) 50% of the restricted share units will be vested after 24 months of the grant date and the remaining 50% will be vested in two equal installments over the following 24 months, and ii) restricted share units will be vested in four equal installments over the following 48 months.

The following table summarizes the activity of restricted share units for the year ended December 31, 2018:

	Number of restricted share units	<b>Weighted average grant-date fair value (US\$)</b>
Outstanding, January 1, 2016, December 31, 2016 and 2017	-	-
Granted	4,193,685	9.0242
Forfeited	(76,500 )	7.1600



Vested	(10,000 )	19.5900
Outstanding, December 31, 2018	4,107,185	9.0331
Expected to vest at December 31, 2018	3,795,535	8.9944

For the years ended December 31, 2016, 2017 and 2018, Huya recorded share-based compensation of nil, nil and RMB69,620 using the graded vesting attribution method. The share-based compensation above also included the restricted share units granted to non-employees, amounting to nil, nil and RMB1,076, recognized in general and administrative expenses, for the years ended December 31, 2016, 2017 and 2018, respectively.

As of December 31, 2018, total unrecognized compensation expense relating to the restricted share units was RMB166,010. The expense is expected to be recognized over a weighted average period of 1.21 year using the graded-vesting attribution method.

### **(iii) Ordinary shares awards**

In October 2017, the Company transferred, at nominal consideration, 1,551,495 ordinary shares of Huya to the management of the Group, for their service provided. The share awards were immediately vested and the Company recorded a share-based compensation charge of RMB28,226 for the year ended December 31, 2017.

In 2018, the Company transferred 367,870 ordinary shares of Huya to the management of the Group, for the service provided. The shares awards will be vested over 5 years. For the year ended December 31, 2018, the Company recorded share-based compensation of RMB5,227.

The fair value of the ordinary shares of Huya was determined at the grant date by the Company.

### **(c) Other subsidiaries' share-based awards**

For the years ended December 31, 2016, 2017 and 2018, the Company recorded share-based compensation of RMB13,936, a reversal of RMB1,227 and RMB 7,916 for restricted shares to the founders or management of the subsidiaries of a variable interest entity.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**27. Basic and diluted net income per share**

Basic and diluted net income per share for the years ended December 31, 2016, 2017 and 2018 are calculated as follows:

	For the year ended December 31,		
	2016	2017	2018
	<b>RMB</b>	<b>RMB</b>	<b>RMB</b>
Numerator:			
Net income attributable to common shareholders of the Company	1,523,918	2,493,235	1,641,958
Interest expenses of convertible notes	81,085	20,820	149
Numerator for diluted income per share	1,605,003	2,514,055	1,642,107
Denominator:			
Denominator for basic calculation—weighted average number of Class A and Class B common shares outstanding	1,127,343,312	1,186,460,144	1,280,847,795
Dilutive effect of share options	684,455	376,918	94,254
Dilutive effect of restricted share units	15,816,362	11,598,378	12,966,689
Dilutive effect of convertible bonds	72,267,200	18,202,301	180,668
Denominator for diluted calculation	1,216,111,329	1,216,637,741	1,294,089,406
Basic net income per Class A and Class B common share	1.35	2.10	1.28
Diluted net income per Class A and Class B common share	1.32	2.07	1.27
Basic net income per ADS*	27.04	42.03	25.64
Diluted net income per ADS*	26.40	41.33	25.38

\*Each ADS represents 20 common shares.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**

**(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)**

**28. Related party transactions**

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

<b>Major related parties</b>	<b>Relationship with the Group</b>
Guangzhou Sunhongs Corp., Ltd. (“Guangzhou Sunhongs”) (Formerly known as Guangzhou Shanghang Information Technology Co., Ltd.)	Significant influence exercised by a principal shareholder of the Company
Kingsoft Corporation Limited (“Kingsoft Group”)	Significant influence exercised by a principal shareholder of the Company
Bigo Inc. (“Bigo”)	Investment with significant influence
Shanghai Ansha Network Technology Co., Ltd.(“Shanghai Ansha”)	Investment with significant influence
Guangzhou Chenjun Equity Investment Limited Partnership(“Guangzhou Chenjun”)	Investment with significant influence
Guangzhou Kuyou Information Technology Co., Ltd.(“Guangzhou Kuyou”)	Investment with significant influence
Beijing Huanqiu Xingxue Technology Development Co., Ltd.(“Xingxue”)	Investment with significant influence
Yunke Online	Investment with significant influence

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****28. Related party transactions (continued)**

During the years ended December 31, 2016, 2017 and 2018, significant related party transactions are as follows:

	For the year ended December 31,		
	2016 RMB	2017 RMB	2018 RMB
Loan to related parties	44,500	24,962	188,000
Bandwidth service provided by Guangzhou Sunhongs	96,224	92,068	103,439
Online games revenue shared from related parties	100,078	87,414	31,366
Repayment of loans from related parties	-	35,462	20,000
Bandwidth service provided by Kingsoft Group	-	711	11,314
Payments on behalf of related parties, net of repayments	10,699	(23,116 )	(2,543 )
Partial disposal of investments to Guangzhou Chenjun	33,750	35,160	-
Partial disposal of a subsidiary to Guangzhou Chenjun	24,394	-	-
Others	13,573	14,276	11,833

As of December 31, 2017 and 2018, the amounts due from/to related parties are as follows:

	December 31,	
	2017 RMB	2018 RMB
Amounts due from related parties, current		
Due from Bigo <sup>(1)</sup>	9,831	191,800
Others	1,359	1,759
Total	11,190	193,559
Amounts due from related parties, non-current		
Due from Yunke Online	20,000	-
Amounts due to related parties		
Due to Guangzhou Sunhongs	8,432	11,062

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Due to Guangzhou Kuyou	7,583	4,144
Due to Shanghai Ansha	6,178	5,364
Due to Kingsoft Group	-	5,239
Others	8,309	2,527
Total	30,502	28,336

(1) The amounts due from Bigo mainly consisted of unsecured loans provided to Bigo. The maturities of the loans were all within one year.

Other receivables and payables from/to related parties are unsecured and payable on demand.

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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 29. Fair value measurements

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

The Group applies a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. This guidance specifies a hierarchy of valuation techniques, which is based on whether the inputs into the valuation technique are observable or unobservable. The hierarchy is as follows:

Level 1—Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

Level 2—Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs and significant value drivers are observable in active markets are Level 2 valuation techniques.

Level 3—Valuation techniques in which one or more significant inputs or significant value drivers are unobservable. Unobservable inputs are valuation technique inputs that reflect the Group's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

The fair value guidance describes three main approaches to measure the fair value of assets and liabilities: (1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses

valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

When available, the Group uses quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, the Group will measure fair value using valuation techniques that use, when possible, current market-based or independently sourced market parameters, such as interest rates and currency rates.

The Group did not have any other financial instruments that were required to be measured at fair value on a recurring basis as of December 31, 2018 except for short-term investments and equity investment with readily determinable fair values.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**29. Fair value measurements (continued)**

The following table summarizes the Company's assets that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy as of December 31, 2017 and December 31, 2018:

	As of December 31, 2017			
	Level 1	Level 2	Level 3	Total
Assets				
Short-term investments	29,570	94,980	-	124,550
Equity investment with readily determinable fair values	138,251	-	-	138,251
Available-for-sale debt securities	-	-	1,961	1,961
	167,821	94,980	1,961	264,762
	As of December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets				
Short-term investments (i)	78,605	900,448	-	979,053
Equity investment with readily determinable fair values (ii)	238,915	-	-	238,915
	317,520	900,448	-	1,217,968
Liabilities				
Derivative liabilities (iii)	-	-	-	-

Short-term investments represented the investments issued by commercial banks or other financial institutions with a variable interest rate indexed to the performance of underlying assets within one year. For the instruments whose fair value is provided by banks at the end of each period, the Company classifies the valuation techniques that use these inputs as Level 1 of fair value measurements. For the instruments whose fair value is estimated based on quoted prices of similar products provided by banks at the end of each period, the Company classifies the valuation techniques that use these inputs as Level 2 of fair value measurements.

Equity investments with readily determinable fair values are valued using the market approach based on the quoted (ii) prices in active markets at the reporting date. The Group classifies the valuation techniques that use these inputs as Level 1 of fair value measurements.



The Company has determined that conversion feature embedded in the Huya's Series B-2 Preferred Shares is required to be bifurcated and accounted for as a derivative liability which would be measured at fair value (Note (iii) 24). Upon the completion of Huya's IPO, the derivative liabilities were derecognized and the balance was transferred to additional paid-in capital accordingly.

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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**29. Fair value measurements (continued)**

The following table presents the changes in Level 3 liabilities for the year ended December 31, 2018.

	Conversion feature embedded in Series A Preferred Shares <b>RMB</b>	Conversion feature embedded in Series B-2 Preferred Shares <b>RMB</b>	Total  <b>RMB</b>
Balance as of January 1, 2018	-	-	-
Initial recognition upon the extinguishment of Huya's Series A Preferred Shares and the issuance of Huya's Series B-2 Preferred Shares as of March 8, 2018	572,237	320,097	892,334
Fair value loss on derivative liabilities	628,298	1,656,925	2,285,223
Foreign exchange	4,573	6,697	11,270
Derecognition of derivative liabilities upon the completion of Huya's IPO	(1,205,108	) (1,983,719	) (3,188,827)
Balance as of December 31, 2018	-	-	-

In determining the fair value of these preferred shares, the Group has adopted the equity allocation model. For purposes of determining the conversion features of Huya's Pre-IPO Preferred Shares as of March 8, 2018 and May 10, 2018, the Company has re-performed the equity allocation model for Huya's Pre-IPO Preferred Shares in scenarios assuming the conversion feature is removed, the difference between the with embedded conversion features scenario and the without embedded conversion features scenario is considered to be value of the conversion features of Huya's Pre-IPO Preferred Shares. The Company assumed Huya's Pre-IPO Preferred Shares would not be converted to common shares in neither the IPO scenario, the liquidation scenario nor the redemption scenario. Such approach involves certain significant estimates which are as follows:

Valuation Date	March 8, 2018		May 10, 2018	
Volatility	50	%	50	%
Risk-free rate (3 months)	1.66	%	1.58	%
Risk-free rate (4 years)	2.52	%	2.46	%
Dividend yield	0	%	0	%

### **Fair value measurement on a non-recurring basis**

The Company measures investments without readily determinable fair value on a nonrecurring basis when impairment charges and fair value change due to observable price change are recognized. These nonrecurring fair value measurements use significant unobservable inputs (Level 3). The Company uses a combination of valuation methodologies, including market and income approaches based on the Company's best estimate to determine the fair value of these investments. An observable price change is usually resulting from new rounds of financing of the investees. The Company determines whether the securities offered in new rounds of financing are similar to the equity securities held by the Company by comparing the rights and obligations of the securities. When the securities offered in new rounds of financing are determined to be similar to the securities held by the Company, the Company adjusts the observable price of the similar security to determine the amount that should be recorded as an adjustment in the carrying value of the security to reflect the current fair value of the security held by the Company by using the back-solve method based on the equity allocation model with adoption of some key parameters such as risk-free rate and equity volatility. Inputs used in these methodologies primarily include discount rate, the selection of comparable companies operating in similar businesses and etc. In 2018, fair value gain of RMB1,803,081 due to the observable price change of the investment without readily determinable fair value, was recognized in gain on fair value changes of investments.

Apart from the short-term investments, equity investment measured at fair value through earnings and derivative liabilities, the Company's other financial instruments principally consist of cash and cash equivalent, short-term deposits, long-term deposits, accounts receivable, financing receivables, other receivables, amounts due to/from related parties, accounts payable, certain accrued expenses and convertible bonds. The recorded values of cash, short-term deposits, long-term deposits, accounts receivable, financing receivables, other receivables, amounts due to/from related parties, accounts payable, certain accrued expenses and convertible bonds are recorded at cost which approximates fair value. The fair value of convertible bonds is within Level 2 of the fair value hierarchy.

**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****30. Commitments and contingencies****(a) Operating lease commitments**

The Group leases facilities 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 office rental expenses under all operating leases were RMB76,753, RMB62,211 and RMB50,206 for the years ended December 31, 2016, 2017 and 2018, respectively.

As of December 31, 2018, future minimum payments under non-cancellable operating leases consist of the following:

	Office rental RMB
2019	84,689
2020	53,609
2021	35,871
2022 and after	47,726
	221,895

**(b) Capital commitments**

As of December 31, 2018, the Group had outstanding capital commitments totaling RMB193,412 which consisted of capital expenditures related to properties and additional investments in equity investments.

**(c) Litigation**

In October 2014, Guangzhou NetEase Computer System Co., Ltd. (“Guangzhou NetEase”) brought a copyright infringement claim against the Group in the Intermediate People’s Court of Guangzhou, alleging that the Group’s live game broadcasting program has infringed the copyright of one of their online games called Fantasy Westward Journey. The claimant is seeking RMB100 million for their potential damages, requesting YY to cease the copyright infringement practices and apologize publicly.

In November 2017, the local court passed a judgment requesting the Company to compensate such game publisher for its loss amounting to RMB20 million, as a result of the alleged copyright infringement. Based on its estimate as of December 31, 2017, the Company recorded an estimated loss contingency of RMB20 million in its financial statements. Up to the date of this report, there has been no judgment from the appellate court yet and the Group’s estimate on the loss contingency remained the same as last year.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 31. Subsequent events

(a) In 2019, the Group entered into a share purchase agreement with Bigo and its shareholders. Under the agreement, the Group agreed to purchase all outstanding shares of Bigo which were not yet owned by the Group. Pursuant to the agreement, the Company paid US\$343.1 million in cash and issued 313,888,496 Class A common shares and 38,326,579 Class B common shares of the Company. Bigo is principally engaged in video and audio broadcast through its live-streaming applications and platforms all over the world. The transaction was completed on March 4, 2019. The Company's previously held interests in Bigo before this transaction will be remeasured. The Group is in the process of evaluating the accounting treatment on the acquisition and the major outstanding item to complete is the valuation and purchase price allocation.

(b) In 2019, the Group signed an agreement with a third party company to dispose its game business in exchange of certain equity interests of this third party company. The completion of the transaction is subject to customary closing conditions and the Group expects a gain will be recognized from the transaction. The Group is in the process of the valuation related to the consideration and evaluating the accounting treatment of this acquisition.

(c) In September 2018, the Company entered into a loan agreement with a commercial bank, under which the Company obtained credit facility amounting to HK\$700 million. The interest rate of the loan was HIBOR plus 0.67% per annum. As of the date of the issuance of the financial statements, the Company has borrowed a short-term loan amounting to HK\$320 million from the bank. Term deposit of RMB300 million was pledged as collateral for the loan borrowed.

(d) On February 28, 2019, the Company entered into a facility agreement with Goldman Sachs Lending Partners LLC ("the Lender"). Subject to the terms of this agreement, the Lender agreed to make available to the Company a US\$ term loan facility in an aggregate amount of up to US\$100,250. In March 2019, the Company has borrowed a loan amounting to US\$100,250 under this facility agreement. The interest rate of the loan is LIBOR plus a margin per annum. The margin ranges from 1.25% to 3.65% subject to the actual term of the loan. The loan was repaid on April 16, 2019.

(e) Huya completed a follow-on public offering of ADSs on April 12, 2019. As a result of these transactions, Huya issued and sold an aggregate of 13,600,000 ADSs and the Company, as selling shareholder, sold an aggregate of 4,800,000 Huya's ADSs it held at a price of US\$24.00 per ADS. The underwriters' options granted by Huya and the

Company to purchase additional ADSs have not been exercised yet until April 26, 2019.

The net proceeds received by Huya, after deducting underwriter commissions and estimated offering expenses, amounted to approximately US\$313.8 million. The net proceeds received by the Company, after deducting underwriter commissions, amounted to approximately US\$111.2 million.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 32. Restricted net assets

Relevant PRC laws and regulations permit payments of dividends by the Group's subsidiaries and VIEs incorporated in the PRC only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. In addition, the Company's subsidiaries and VIEs in the PRC are required to annually appropriate 10% of their net after-tax income to the statutory general reserve fund prior to payment of any dividends, unless such reserve funds have reached 50% of their respective registered capital. As a result of these and other restrictions under PRC laws and regulations, the Group's subsidiaries and VIEs incorporated in the PRC are restricted in their ability to transfer a portion of their net assets to the Company either in the form of dividends, loans or advances, which restricted portion as calculated under U.S. GAAP amounted to approximately RMB3,559,861 and RMB5,057,086 as of December 31, 2017 and 2018, respectively. There are no differences between U.S. GAAP and PRC accounting standards in connection with the reported net assets of the legally owned subsidiaries in the PRC and the VIEs. Even though the Company currently does not require any such dividends, loans or advances from the PRC entities for working capital and other funding purposes, the Company may in the future require additional cash resources from them due to changes in business conditions, to fund future acquisitions and development, or merely to declare and pay dividends or distributions to our shareholders. Except for the above, there is no other restriction on use of proceeds generated by the Group's subsidiaries and VIEs to satisfy any obligations of the Company.

The Company performed a test on the restricted net assets of subsidiaries and VIEs in accordance with Securities and Exchange Commission Regulation S-X Rule 4-08 (e) (3), "General Notes to Financial Statements" and concluded that the restricted net assets exceeded 25% of the consolidated net assets of the Company as of December 31, 2018 and the condensed financial information of the Company are required to be presented (Note 34).

### 33. Segment Reporting

There are three segments in the Group, including YY Live, Huya and 100 Education, for the year ended December 31, 2016. The Company has disposed of a great majority of its online education business before the end of 2016 and 100 Education ceased to be an operating segment starting from the first quarter of 2017. The Company remained two segments, YY Live and Huya.



In addition, the Company revamped its internal organization and one sub-business stream previously presented and reviewed under YY Live was changed to be presented and reviewed under Huya from the first quarter of 2017. Segment information of comparative periods has been restated accordingly.

Starting from the three months ended December 31, 2017, the Company reviews the financial performance of the operating segments up to the net income of each segment. Segment information for comparative periods has been revised to be presented on the same basis as the year ended December 31, 2017.

As the Group's long-lived assets and revenue are substantially located in and derived from the PRC, no geographical segments are presented.

The Group currently does not allocate assets to all of its segments, as its CODM does not use such information to allocate resources or evaluate the performance of the operating segments.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**33. Segment Reporting (continued)**

The following table presents summary information by segment:

For the year ended December 31, 2018:

	YY Live RMB	Huya RMB	Elimination RMB	Total RMB
Net revenues				
Live streaming	10,434,822	4,442,845	-	14,877,667
Others	667,350	220,595	(2,055)	885,890
Total net revenues	11,102,172	4,663,440	(2,055)	15,763,557
Cost of revenues <sup>(1)</sup>	(6,083,487)	(3,933,647)	-	(10,017,134)
Gross profit	5,018,685	729,793	(2,055)	5,746,423
<b>Operating expenses<sup>(1)</sup></b>				
Research and development expenses	(926,900)	(265,152)	-	(1,192,052)
Sales and marketing expenses	(962,164)	(189,207)	2,055	(1,149,316)
General and administrative expenses	(595,515)	(287,710)	-	(883,225)
Total operating expenses	(2,484,579)	(742,069)	2,055	(3,224,593)
Other income	78,922	38,938	-	117,860
Operating income	2,613,028	26,662	-	2,639,690
Interest expense	(8,616)	-	-	(8,616)
Interest income and investment income	329,003	156,549	-	485,552
Foreign currency exchange (losses) gains, net	(565)	51	-	(514)
Gain on deemed disposal and disposal of investments	16,178	-	-	16,178
Gain on fair value changes of investment	1,487,405	-	201,999	1,689,404
Fair value loss on derivative liabilities	-	(2,285,223)	-	(2,285,223)

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Other non-operating expenses	(2,000 )	-	-	(2,000 )
Income before income tax expenses	4,434,433	(2,101,961)	201,999	2,534,471
Income tax (expenses) benefits	(501,683 )	50,943	(26,967 )	(477,707 )
<b>Income before share of loss in equity method investments, net of income taxes</b>	3,932,750	(2,051,018)	175,032	2,056,764
Share of income in equity method investments, net of income taxes	120,636	113,329	(175,032 )	58,933
Net income	4,053,386	(1,937,689)	-	2,115,697

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****33. Segment Reporting (continued)**

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

	YY Live RMB	Huya RMB	Total RMB
Cost of revenues	63,867	10,472	74,339
Research and development expenses	194,530	30,643	225,173
Sales and marketing expenses	3,891	1,832	5,723
General and administrative expenses	159,042	183,748	342,790

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**33. Segment Reporting (continued)**

The following table presents summary information by segment:

For the year ended December 31, 2017:

	YY Live RMB	Huya RMB	Total RMB
Net revenues			
Live streaming	8,601,418	2,069,536	10,670,954
Others	808,558	115,280	923,838
Total net revenues	9,409,976	2,184,816	11,594,792
Cost of revenues <sup>(1)</sup>	(5,096,538)	(1,929,864)	(7,026,402)
Gross profit	4,313,438	254,952	4,568,390
<b>Operating expenses<sup>(1)</sup></b>			
Research and development expenses	(611,726)	(170,160)	(781,886)
Sales and marketing expenses	(603,989)	(87,292)	(691,281)
General and administrative expenses	(442,646)	(101,995)	(544,641)
Goodwill impairment	(2,527)	-	(2,527)
Total operating expenses	(1,660,888)	(359,447)	(2,020,335)
Gain on deconsolidation and disposal of subsidiaries	37,989	-	37,989
Other income	103,558	9,629	113,187
Operating income (loss)	2,794,097	(94,866)	2,699,231
Interest expense	(32,122)	-	(32,122)
Interest income and investment income	166,335	14,049	180,384
Foreign currency exchange losses, net	(2,176)	-	(2,176)
Gain on deemed disposal and disposal of investments	45,861	-	45,861

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Income (loss) before income tax expenses	2,971,995	(80,817 )	2,891,178
Income tax expenses	(415,811 )	-	(415,811 )
Income (loss) before share of income (loss) in equity method investments, net of income taxes	2,556,184	(80,817 )	2,475,367
Share of income (loss) in equity method investments, net of income taxes	33,175	(151 )	33,024
<b>Net income (loss)</b>	<b>2,589,359</b>	<b>(80,968 )</b>	<b>2,508,391</b>

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****33. Segment Reporting (continued)**

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

	YY Live RMB	Huya RMB	Total RMB
Cost of revenues	39,882	2,877	42,759
Research and development expenses	113,174	9,174	122,348
Sales and marketing expenses	3,626	791	4,417
General and administrative expenses	60,871	27,266	88,137

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

**33. Segment Reporting (continued)**

For the year ended December 31, 2016:

	YY Live RMB	Huya RMB	100 Education RMB	Total RMB
Net revenues				
Live streaming	6,235,249	791,978	-	7,027,227
Others	1,011,170	4,926	160,727	1,176,823
Total net revenues	7,246,419	796,904	160,727	8,204,050
Cost of revenues <sup>(1)</sup>	(3,900,814)	(1,094,644)	(107,972)	(5,103,430)
Gross profit (loss)	3,345,605	(297,740)	52,755	3,100,620
<b>Operating expenses<sup>(1)</sup></b>				
Research and development expenses	(456,375)	(188,334)	(30,521)	(675,230)
Sales and marketing expenses	(259,040)	(68,746)	(59,482)	(387,268)
General and administrative expenses	(375,958)	(71,325)	(35,154)	(482,437)
Goodwill impairment	(3,861)	-	(13,804)	(17,665)
Total operating expenses	(1,095,234)	(328,405)	(138,961)	(1,562,600)
Gain on deconsolidation and disposal of subsidiaries	103,960	-	-	103,960
Other income	129,504	-	-	129,504
Operating income (loss)	2,483,835	(626,145)	(86,206)	1,771,484
Interest expense	(81,085)	-	-	(81,085)
Interest income and investment income	66,631	518	44	67,193
Foreign currency exchange gains, net	1,158	-	-	1,158
Gain on deemed disposal and disposal of investments	25,061	-	-	25,061
Income (loss) before income tax expenses	2,495,600	(625,627)	(86,162)	1,783,811
Income tax (expenses) benefits	(294,529)	-	14,015	(280,514)



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Income (loss) before share of income (loss) in equity method investments, net of income taxes	2,201,071	(625,627 )	(72,147 )	1,503,297
Share of income (loss) in equity method investments, net of income taxes	8,390	-	(111 )	8,279
Net income (loss)	2,209,461	(625,627 )	(72,258 )	1,511,576

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)****33. Segment Reporting (continued)**

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

	YY Live RMB	Huya RMB	100 Education RMB	Total RMB
Cost of revenues	9,893	5,677	324	15,894
Research and development expenses	53,085	19,538	6,193	78,816
Sales and marketing expenses	2,781	326	-	3,107
General and administrative expenses	19,523	26,557	13,389	59,469

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

### 34. Additional information – condensed financial statements

The condensed financial statements of YY Inc. have been prepared in accordance with SEC Regulation S-X Rule 5-04 and Rule 12-04.

The Company records its investments in subsidiaries and VIEs under the equity method of accounting. Such investments to subsidiaries and VIEs are presented on the balance sheet as “Interests in subsidiaries and VIEs” and the profit of the subsidiaries and VIEs is presented as “Share of profit of subsidiaries and VIEs” in the statement of comprehensive income.

The footnote disclosures contain supplemental information relating to the operations of the Company and, as such, these financial statements should be read in conjunction with the notes to the consolidated financial statements of the Company. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted.

As of December 31, 2017 and 2018, there were no material contingencies, significant provisions for long-term obligations, or guarantees of the Company, except for those, if any, which have been separately disclosed in the consolidated financial statements.

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

## 34. Additional information – condensed financial statements (continued)

## (a) Condensed balance sheets of YY Inc. as of December 31, 2017 and 2018

	As of December 31,		2018
	2017	2018	US\$
	RMB	RMB	(Note 2(e))
Assets			
Current assets			
Amounts due from a subsidiary	2,671,590	2,592,009	376,992
Non-current assets			
Interests in subsidiaries and VIEs	8,535,113	15,935,185	2,317,677
Total assets	11,206,703	18,527,194	2,694,669
Liabilities and shareholders' equity			
Current liabilities			
Interests payable	777	39	6
Convertible bonds	-	6,863	998
Short-term loans	588,235	-	-
Total current liabilities	589,012	6,902	1,004
Non-current liabilities			
Convertible bonds	6,536	-	-
Total liabilities	595,548	6,902	1,004
Shareholders' equity			
Class A common shares (US\$0.00001 par value; 10,000,000,000 shares authorized, 945,245,908 shares issued and outstanding as of December 31, 2017 and 981,740,848 shares issued and outstanding as of December 31, 2018)	57	59	9
Class B common shares (US\$0.00001 par value; 1,000,000,000 shares authorized, 317,982,976 shares issued and outstanding as of December 31, 2017 and 288,182,976 shares issued and outstanding as of December 31, 2018)	23	21	3

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Additional paid-in capital	5,339,844	11,168,866	1,624,444
Retained earnings	5,280,828	7,015,194	1,020,318
Accumulated other comprehensive (loss) income	(9,597 )	336,152	48,891
Total shareholders' equity	10,611,155	18,520,292	2,693,665
Total liabilities and shareholders' equity	11,206,703	18,527,194	2,694,669

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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(All amount in thousands, except share, ADS, per share and per ADS data, unless otherwise stated)

## 34. Additional information – condensed financial statements (continued)

## (b) Condensed statements of comprehensive income of YY Inc. for the years ended December 31, 2016, 2017 and 2018

	For the year ended December 31,			
	2016 RMB	2017 RMB	2018 RMB	2018 US\$ (Note2(e))
Share of profit of subsidiaries and VIEs	1,605,003	2,545,045	2,211,452	321,642
Interest expense	(81,085 )	(32,122 )	(2,445 )	(357 )
Net income attributable to controlling interest of the Company	1,523,918	2,512,923	2,209,007	321,285
Other comprehensive income (loss) :				
Unrealized gain (loss) of available-for-sale securities	134,768	(41,150 )	-	-
Foreign currency translation adjustments, net of nil tax	(5,317 )	(61,513 )	434,080	63,134
Total comprehensive income	1,653,369	2,410,260	2,643,087	384,419

## (c) Condensed statements of cash flows of YY Inc. for the years ended December 31, 2016, 2017 and 2018

	For the year ended December 31,			
	2016 RMB	2017 RMB	2018 RMB	2018 US\$ (Note2(e))
Cash flows from operating activities	-	-	-	-
Cash flows from investing activities				
Repayment of loans from a subsidiary	-	2,132,512	195,091	28,375
Loans to a subsidiary	-	(2,950,607)	-	-
Net cash (used in) provided by investing activities	-	(818,095 )	195,091	28,375

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Cash flows from financing activities				
Proceeds from bank borrowings	-	621,118	-	-
Proceeds from issuance of common shares, net of issuance cost	-	2,950,607	(4,473 )	(651 )
Partial disposal of subsidiary's interests to non-controlling interest shareholders	-	-	378,548	55,058
Repayment of bank borrowings	-	-	(569,166)	(82,782 )
Repayment of convertible bonds	-	(2,753,630)	-	-
Net cash provided by (used in) financing activities	-	818,095	(195,091)	(28,375 )
Net increase in cash and cash equivalents	-	-	-	-
Cash and cash equivalents at the beginning of the year	-	-	-	-
Cash and cash equivalents at the end of the year	-	-	-	-

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