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

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (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, 2019.

OR

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

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
Date of event requiring this shell company report

Commission file number: 001-35224

Xunlei Limited

(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)

21-23/F, Block B, Building No. 12
No.18 Shenzhen Bay ECO-Technology Park
Keji South Road, Yuehai Street,
Nanshan District, Shenzhen, 518057
The People's Republic of China
(Address of principal executive offices)

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The People's Republic of China
(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

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

Title of each class	Name of each exchange on which registered	Ticker symbol
American depositary shares, each representing five common shares	The NASDAQ Stock Market LLC (The NASDAQ Global Select Market)	XNET
Common shares, par value US$0.00025 per share*	The NASDAQ Stock Market LLC (The NASDAQ Global Select Market)	

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

Securities registered or to be registered pursuant to Section 12(g) of the Act.
NONE
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.
NONE
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 339,165,241 common shares (excluding (i) 20,192,820 common shares that are (a) issued to our depositary bank for the purpose of bulk issuance and (b) repurchased by the company, and (ii) 9,519,144 common shares issued to Leading Advice Holdings Limited, our employee share incentive platform) as of December 31, 2019.

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

Yes ☐ No ☒

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

Yes ☐ No ☒

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 "accelerated filer," "large accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

Yes ☐ No ☐

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

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

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

US 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

In this annual report, except where the context otherwise requires and for purposes of this annual report only:

- "we," "us," "our company," "our," or "Xunlei" refers to Xunlei Limited, a Cayman Islands company, its subsidiaries, its variable interest entity, or VIE, and the VIE's subsidiaries;
- "China" or "PRC" refers to the People's Republic of China, excluding, for the purpose of this annual report only, Hong Kong, Macau and Taiwan;
- "daily active user", refers to a user who accessed to Mobile Xunlei through a mobile device, on a given day;
- "digital media content" refers to videos, music, games, software and documents transmitted in digital form;
- "monthly unique visitors," in relation to our platform, refers to the number of different individual visitors who accessed Xunlei products (including websites and software) on our platform from the same computer at least once within a month; under this method, a user who accessed Xunlei products from two different computers would count as two unique visitors;
- "shares" or "common shares" refers to our common shares, par value US$0.00025 per share;
- "subscriber," refers to users who can access our premium acceleration services, including accounts temporarily suspended, but excluding sub-accounts and accounts on a trial basis.
- "ADSs" refers to our American depositary shares, each representing five common shares, and "ADRs" refers to any American depositary receipts that evidence our ADSs;
- "RMB" or "Renminbi" refers to the legal currency of China; and
- "US$," "dollars" or "U.S. dollars" refers to the legal currency of the United States.

We use U.S. dollar as reporting currency in our financial statements and in this annual report. Transactions in Renminbi are recorded at the rates of exchange prevailing when the transactions occur. Solely for the convenience of the reader, the translations of Renminbi amounts into U.S. dollars contained in this annual report were made at RMB6.9762 to US$1.00, the rate released by the State Administration of Foreign Exchange of the People's Republic of China on December 31, 2019. We make no representation that any Renminbi or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi, as the case may be, at any particular rate, the rates stated below, or at all. The PRC government imposes control over its foreign currency reserves in part through direct regulation of the conversion of Renminbi into foreign exchange and through restrictions on foreign trade.

FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains forward-looking statements that reflect our current expectations and views of future events. These statements are made under the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. You can identify these forward-looking statements by words or phrases such as "may," "could," "should," "would," "will," "expect," "anticipate," "aim," "estimate," "intend," "plan," "believe," "likely to," "project," "continue," "potential," 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 business strategies, including the strategies to streamline our business and continue moving toward mobile internet;
- our future business development, results of operations and financial condition;
- our ability to maintain and strengthen our market position in China;
- our ability to retain subscribers for our premium acceleration and other services;
- our ability to develop new products and services and attract, maintain and monetize user traffic;
- trends and competition in the internet industry in China;
- rules and regulations governing the internet industry in China;
- our ability to handle intellectual property rights-related matters; and
- general economic and business conditions in China.

You should not place undue reliance on these forward-looking statements and you should read these statements in conjunction with other sections of this annual report, in particular the risk factors disclosed in "Item 3. Key Information—D. Risk Factors." 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. Moreover, we operate in a rapidly evolving environment. New risks emerge from time to time and it is impossible 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 from those contained in any forward-looking statement. 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 do not undertake any obligation to update or revise the forward-looking statements except as required under applicable law.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

A. Selected Financial Data

The following selected consolidated statements of operations data and the selected consolidated statements of cash flows data for the years ended December 31, 2017, 2018 and 2019 and the selected consolidated balance sheets data as of December 31, 2018 and 2019 have been derived from our audited consolidated financial statements, which are included in this annual report beginning on page F-1. The selected consolidated statements of operations data and the selected consolidated statements of cash flows data for the years ended December 31, 2015 and 2016 and the selected consolidated balance sheets data as of December 31, 2015, 2016 and 2017 have been derived from our audited consolidated financial statements not included in this annual report.

The selected consolidated statements of operations data and the selected consolidated statements of cash flows data for the years ended December 31, 2015, 2016, 2017, 2018 and 2019 and the selected consolidated balance sheets data as of December 31, 2015, 2016, 2017, 2018 and 2019 have reflected the impact of retrospective adjustments for our divestiture of Xunlei Kankan in July 2015 and web game business in January 2018. Xunlei Kankan and web game business have been classified as discontinued operations. In 2019, we started to operate web game business again under a different business model by cooperating with third parties. Revenues from new web game business has been included in the continuing operations.

Our audited 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 do not necessarily indicate results expected for any future period. You should read the following selected financial data in conjunction with the consolidated financial statements and related notes and "Item 5. Operating and Financial Review and Prospects" included elsewhere in this annual report.

The following table presents our selected consolidated statements of comprehensive income/(loss) data for the years ended December 31, 2015, 2016, 2017, 2018 and 2019.

	For the Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands of US$, except for share, per share and per ADS data)				
Selected Consolidated Statements of Operations Data:					
Revenues, net of rebates and discounts	104,837	140,985	201,911	232,132	181,267
Business tax and surcharges	(316)	(779)	(1,328)	(1,528)	(602)
Net revenues	104,521	140,206	200,583	230,604	180,665
Cost of revenues	(59,250)	(79,928)	(117,876)	(115,667)	(99,913)
Gross profit	45,271	60,278	82,707	114,937	80,752
Operating expenses [(1)]					
Research and development expenses	(35,762)	(61,169)	(66,947)	(76,763)	(68,571)
Sales and marketing expenses	(12,411)	(14,601)	(19,888)	(35,322)	(31,820)
General and administrative expenses	(28,619)	(26,010)	(36,517)	(40,833)	(38,930)
Assets impairment loss, net of recoveries	—	—	(13,556)	(6,348)	2,147
Total operating expenses	(76,792)	(101,780)	(136,908)	(159,266)	(137,174)

	For the Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands of US$, except for share, per share and per ADS data)				
Operating loss	(31,521)	(41,502)	(54,201)	(44,329)	(56,422)
Interest income	5,833	2,158	1,967	1,183	1,897
Interest expense	(239)	(239)	(239)	(239)	(75)
Other income, net	3,627	6,503	7,880	2,810	5,861
Shares of loss from equity investees	(12)	(195)	(1,875)	(307)	—
Loss from continuing operations before income tax	(22,312)	(33,275)	(46,468)	(40,882)	(48,739)
Income tax benefit	3,745	2,469	2,252	89	(4,676)
Loss from continuing operations	(18,567)	(30,806)	(44,216)	(40,793)	(53,415)
Discontinued operations:					
Income from discontinued operations	9,008	7,791	7,538	1,533	—
Income tax expenses	(4,907)	(1,168)	(1,131)	(230)	—
Net income from discontinued operations	4,101	6,623	6,407	1,303	—
Net loss	(14,466)	(24,183)	(37,809)	(39,490)	(53,415)
Less: net loss attributable to the non-controlling interest	(1,299)	(72)	13	(212)	(246)
Net loss attributable to Xunlei Limited's common shareholders	(13,167)	(24,111)	(37,822)	(39,278)	(53,169)
Weighted average number of common shares outstanding					
Basic	335,987,595	334,155,668	331,731,963	334,965,987	337,845,675
Diluted	335,987,595	334,155,668	331,731,963	334,965,987	337,845,675
Net loss per share attributable to Xunlei Limited from continuing operations					
Basic	(0.05)	(0.09)	(0.13)	(0.12)	(0.16)
Diluted	(0.05)	(0.09)	(0.13)	(0.12)	(0.16)
Net income per share attributable to Xunlei Limited from discontinued operations					
Basic	0.01	0.02	0.02	0.00	—
Diluted	0.01	0.02	0.02	0.00	—
Net loss attributable to holders of common shares of Xunlei Limited per ADS [(2)]					
Basic	(0.20)	(0.36)	(0.57)	(0.59)	(0.79)
Diluted	(0.20)	(0.36)	(0.57)	(0.59)	(0.79)

Notes: We sold our Xunlei Kankan business and web game business in July 2015 and January 2018, respectively. As a result, Xunlei Kankan and web game business are accounted for as discontinued operations and our consolidated statements of operations data in this annual report separate the discontinued operations from our remaining business operations for all years presented. In 2019, we started to operate web game business again under a different business model by cooperating with third parties. Revenues from web game business has been included in the continuing operations.

(1) Share-based compensation expenses were allocated in operating expenses as follows:

	For the Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands of US$)				
Research and development expenses	2,896	2,983	2,442	2,645	2,594
Sales and marketing expenses	131	98	88	404	381
General and administrative expenses	6,701	6,267	5,800	2,245	2,453
Total share-based compensation expenses	9,728	9,348	8,330	5,294	5,428

(2) Each ADS represents five common shares. Net income/(loss) attributable to holders of common shares of Xunlei Limited per ADS is calculated based on net income/(loss) per share attributable to Xunlei Limited and multiplied by five.

The following table presents our selected consolidated balance sheet data as of December 31, 2015, 2016, 2017, 2018 and 2019.

	As of December 31,				
	2015	2016	2017	2018	2019
	(in thousands of US$)				
Selected Consolidated Balance Sheets Data:					
Cash and cash equivalents	361,777	199,504	233,479	122,930	162,465
Short-term investments	70,328	181,960	138,915	196,538	102,847
Total current assets	457,669	412,305	430,783	362,899	316,583
Total assets	538,361	509,795	533,437	455,431	424,687
Accounts payable	21,736	33,376	49,819	22,629	24,213
Total current liabilities	76,736	93,405	141,696	108,035	111,286
Total liabilities	93,680	103,545	150,600	111,251	129,144
Total shareholders' equity	446,749	408,238	384,997	345,296	296,878
Non-controlling interest	(2,068)	(1,988)	(2,160)	(1,116)	(1,335)
Total liabilities and shareholders' equity	538,361	509,795	533,437	455,431	424,687

The following table presents our selected consolidated statements of cash flows data for the years ended December 31, 2015, 2016, 2017, 2018 and 2019.

	For the Year Ended December 31,				
	2015	2016	2017	2018	2019
	(in thousands of US$)				
Selected Consolidated Statements of Cash Flows Data:					
Net cash generated from/(used in) operating activities	13,764	16,970	(14,216)	(35,608)	(45,649)
Net cash (used in)/generated from investing activities	(54,982)	(158,335)	35,208	(69,357)	79,260
Net cash generated from/(used in) financing activities	5,030	(11,041)	2,561	929	12,177
Net (decrease)/increase in cash and cash equivalents and restricted cash	(36,188)	(152,406)	23,553	(104,036)	45,788
Effect of exchange rates on cash, cash equivalents and restricted cash	(6,310)	(9,867)	10,422	(6,513)	(3,270)
Cash, cash equivalents and restricted cash at beginning of year	404,275	361,777	199,504	233,479	122,930
Cash, cash equivalents and restricted cash at end of year	361,777	199,504	233,479	122,930	165,448

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

An investment in our ADSs involves significant risks. You should carefully consider all of the information in this annual report, including the risks and uncertainties described below, before making an investment in our ADSs. Any of the following risks could have a material adverse effect on our business, financial condition and results of operations. In any such case, the market price of our ADSs could decline, and you may lose all or part of your investment.

Risks Related to Our Business

Our business model is currently undergoing significant innovation and transition, and our historical growth rate may not be indicative of our future performance and our new business may not be successful.

We launched our then core product, Xunlei Accelerator, in 2004 and cloud acceleration subscription services in 2009 to enable users to quickly access and consume digital media content. Coupled with our core products and services, we also provide a range of internet value-added services. Our cloud acceleration products have maintained nationwide popularity in the past few years. Our business model currently is undergoing significant innovation and continued transition to mobile internet. We have launched several new services and products in recent years, such as cloud computing products and products based on blockchain technology. The evolving business model and expansion into the new services involve new risks and challenges. For example, although our mobile acceleration plug-in has been officially adopted by Xiaomi's operating systems and installed on Xiaomi phones, we cannot assure you that we will be able to form significant business partnerships with major smartphone makers other than Xiaomi so as to achieve broader acceptance of the Xunlei mobile products. We may also not be able to maintain the rapid growth of revenues from our mobile advertising, from which we generated revenues for the first time in the fourth quarter of 2015. There are also substantial uncertainties with respect to our cloud computing business and blockchain business. The technologies supporting our cloud computing business and blockchain business are new and rapidly evolving. If we fail to explore these new technologies and apply them innovatively to keep our products and services competitive, we may experience immediate decline in the growth of our business. In addition, the regulatory environment surrounding these businesses may also be evolving and any unfavorable developments may adversely affect our businesses. Furthermore, the profitability of our new initiatives has yet to be proven. For example, although the blockchain technology is said to be of immeasurable potential, its commercial value is yet to be proved. Despite that we have devoted a significant amount of resources to the development of blockchain technology, we may not be able to realize our expected goals or create sufficient commercial values. As a result, our business, operating results, financial conditions may be significantly and adversely affected.

In addition to uncertainties of our new initiatives, our traditional PC-based download acceleration subscriptions also experienced declines in recent years, partly due to the change of our users' online behaviors and the ongoing and intensified government scrutiny of internet content in China. Although we are continuously improving our existing products and services and rolling out new products and services to attract our subscribers, our efforts may not be successful. Our subscriber base decreased from 4.4 million as of December 31, 2014 to 4.0 million as of December 31, 2019. See "—We may not be able to retain our large user base, convert our users into subscribers of our premium services or maintain our existing subscribers" and "—Risks Related to Doing Business in China—Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform."

Due to the abovementioned factors, our historical growth rate may not be indicative of our future performance and our new business initiatives may not be successful, and we cannot assure you that we will grow at the same rate as we did in the past, if at all.

The blockchain industry in China is an emerging industry. The laws and regulations governing the operation of blockchain products and services in China are developing and evolving and subject to changes. If we fail to comply with existing and future applicable laws, regulations or requirements of local regulatory authorities, our business, financial condition and results of operations may be materially and adversely affected.

We started our blockchain services by creating LinkToken in 2017 and shifted our focus to the development of blockchain infrastructure in 2018. The blockchain industry in China is an emerging industry. The PRC government has yet to establish a comprehensive regulatory framework. The laws and regulations governing the operation of blockchain products and services in China are also rapidly developing and evolving. On January 10, 2019, the Cyberspace Administration of China, or CAC, issued *the Provisions on the Administration of Blockchain Information Services* , or the Blockchain Provisions, which came into effect on February 15, 2019. Pursuant to the Blockchain Provisions, a blockchain information service provider is required to file particulars of such service provider including its name, service category, service form, application field, and server address with the blockchain information service filing management system managed by the CAC and go through filing procedures within ten business days after it starts to provide services. After completing the filing procedure, the blockchain information service provider should display the filing number in a conspicuous position on the service provider's websites and applications through which it provides services. Service providers that had already started to provide blockchain information services before the Blockchain Provisions became effective are required to do make-up filings within 20 business days after the Blockchain Provisions became effective. Our subsidiaries providing blockchain information services have completed the filing procedures with relevant regulatory authorities and obtained the filing numbers. However, the operations of our blockchain services are still at an early stage. We may be required to make additional filings if we make further adjustments to our business operations. We cannot assure you that we will always be able to timely obtain or renew relevant permits, approvals or licenses that may be viewed necessary for our blockchain operations. If we fail to maintain any of these required permits, approvals or licenses in a timely manner, or at all, we may be subject to various penalties, including fines and discontinuation of or restriction on our operations. Any such disruptions in our business operations may have a material and adverse effect on our business, results of operations and financial condition.

We transferred our LinkToken operations to an independent third party, LinkChain, in 2019. As the operation of LinkToken is based on blockchain technology, LinkChain, as the operator of LinkToken, is subject to the record-filing requirement according to the Blockchain Provisions. If LinkChain fails to complete the record-filing procedure and obtain the filing number for the LinkToken operations or violates other current and future blockchain regulations, there is a possibility that relevant PRC government authorities may order LinkChain to suspend its LinkToken operations. If that were to happen, users on our OneThing Cloud platform may not be effectively incentivized to contribute their idle bandwidth, storage space and other resources by participating in our OneThing reward program, which would adversely affect on our OneThing Cloud sales and our cloud computing business. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business—Our cloud computing services may be materially and adversely affected if our cooperation with LinkChain with respect to LinkToken is terminated." In addition, the Blockchain Provisions also imposed an array of obligations to the providers of blockchain information services. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on Blockchain Information Services" for more details. Failure to comply with relevant requirements in the Blockchain Provisions may subject us to administrative penalties such as warning, being ordered to temporarily suspend relevant business operations to rectify within prescribed time period, or fines, or criminal liabilities, depending on which provisions are violated.

Since the blockchain technology and other related technologies are evolving rapidly, new laws, regulations and governmental policies are expected to be adopted from time to time by relevant PRC authorities to impose additional restrictions or require licenses or permits for operating blockchain related business. We are unable to predict with certainty the impact, if any, that future legislation, judicial interpretations or regulations relating to the blockchain industry will have on our business, financial condition and results of operations. To the extent that we are not able to fully comply with any new laws or regulations when they are promulgated, our business, financial condition and results of operations as well as the price of our ADSs may be materially and adversely affected.

Our cloud computing services may be materially and adversely affected if our cooperation with LinkChain with respect to LinkToken is terminated.

We developed LinkToken, a blockchain-based digital ticket associated with our cloud computing services, in 2017 and designed the OneThing reward program for users of our OneThing Cloud device. By voluntarily participating in the OneThing reward program, users of our OneThing Cloud device are able to be rewarded with LinkTokens. The amount of LinkTokens rewarded to users of our OneThing Cloud device depends on a number of factors while using our OneThing Cloud device. These factors include, without limitation, the size of the bandwidth and storage space users contribute, the length of time online, and the usage of computing resources. Users can use LinkTokens to redeem a variety of products and services offered in the LinkToken Mall. LinkTokens have not been allowed to be transferred among users in China. See "Item 4. Information on the Company—B. Business Overview—Our Platform—Cloud Computing" for more information.

In 2018, we entered into an agreement with an independent third party, LinkChain, to transfer of our LinkToken operations and the related assets and liabilities. We completed such transfer in April 2019. After the transfer, LinkChain obtained the exclusive right to operate the LinkToken business inside and outside mainland China, including without limitation, the formulation, amendment and execution of the rules governing the rewarding of LinkToken to users, and the operations of LinkToken Pocket and LinkToken Mall. In connection with the transfer, we also agreed to provide LinkChain with technical support for its LinkToken operations during the transition period. In May 2019, we ceased providing technical support to LinkChain for its LinkToken operations, after which, LinkTokens could no longer be used to exchange for products and services developed by our ThunderChain users on the ThunderChain platform. In June 2019, we entered into supplementary agreements to adjust the considerations LinkChain was obligated to pay. At the same time, we also entered into a service cooperation agreement with LinkChain. Pursuant to such agreement, we agree to pay a monthly service fee to LinkChain for each monthly active user of our OneThing Cloud who participates in OneThing reward program.

We believe that our cooperation with LinkChain after our disposal of LinkToken is able to incentivize LinkChain to design LinkToken rewarding rules in a manner that continuously attracts users of our OneThing Cloud device. However, we have no control over LinkChain and we cannot assure you that LinkChain will certainly be able to operate LinkToken services successfully and continue to attract users of our OneThing Cloud device to contribute bandwidth and computing resources to us. If the user base of our OneThing Cloud device decreases, the amount of bandwidth and computing resources contributed to us will decrease accordingly. If that were to happen, our cloud computing business would be adversely affected.

Even if LinkChain is able to successfully operate LinkToken services on a continuous basis, regulatory uncertainties in connection with LinkToken may also impose potential risks to our cloud computing business. In connection with the LinkToken, two putative shareholder class action lawsuits were filed in the United States District Court for the Southern District of New York against our Company and certain current and former officers and directors of our Company, alleging that certain statements regarding OneCoin, later renamed as LinkToken, in our press releases and on a quarterly investor call were false and misleading because, among other things, we failed to disclose that under the PRC law, OneCoin was a disguised "initial coin offering" and "initial miner offering" and constituted "unlawful financial activity." Plaintiffs' allegations were based on, among other things, *the Announcement on Preventing Financing Risks Involved in Token Offerings* , which was jointly promulgated by seven PRC regulatory agencies on September 4, 2017 and regulates the initial coin offerings activities in China. Pursuant to the announcement, "fundraising through token offerings" is referred to as a type of fundraising activities where an issuer raises "virtual currencies" such as Bitcoin or Ether from investors through the illegal issuance and subsequent circulation of tokens. Pursuant to the announcement, token fundraising activity is essentially an illegal public fundraising activity without obtaining government's approval. It is a suspected illegal offering of tokens, illegal offering of securities, illegal fundraising, financial fraud, pyramid scheme, which are criminal offences under the PRC law. The announcement prohibits fundraising activities through token issuance. In September 2019, the U.S. District Judge for the Southern District of New York. Paul A. Crotty dismissed the two consolidated federal securities class actions with prejudice because Xunlei's use of blockchain technology to reward OneCoin (later named as LinkToken) to customers for sharing excess storage and bandwidth did not amount to an initial coin offering and thus did not violate Chinese law. As our LinkToken rewarding program was not illegal, the court concluded Xunlei did not make a misrepresentation or omit material facts in failing to describe the LinkToken rewarding program as an illegal initial coin offering. The court also ruled that the complaint failed to plead facts giving rise to a strong inference of an intent to deceive, manipulate, or defraud.

We do not think that either we, prior to the transfer of LinkToken services to LinkChain, or LinkChain engaged or is engaging in token fundraising activities by virtue of carrying out LinkToken operations, nor do we believe that either we or LinkChain would be deemed to be a token trading platform, which is operated under a completely different business model. Among other reasons, neither our users before we disposed of our LinkToken operations, nor LinkChain's current users were required, or actually made, financial contributions in any form of virtual currencies to us or LinkChain. LinkTokens have not been allowed to be transferred among users in China. To date, no governmental financial regulators have imposed any administrative penalties against us relating to LinkTokens on the basis that we engaged in token fundraising activities. However, we cannot assure you that relevant PRC authorities would have the same view with us and would not impose regulatory restrictions or penalties on us or on LinkChain. In addition, the laws and regulations governing token fundraising activities in China are still at an early stage. Substantial uncertainties exist regarding the interpretation, implementation and future promulgation of relevant PRC laws and regulations. We cannot rule out the possibility that in the future relevant regulatory authorities would not order LinkChain to terminate LinkToken operation. Were that to happen, our cloud computing services would also be harmed and our results of operations would also be adversely affected.

We may not be able to retain our large user base, convert our users into subscribers of our premium services or maintain our existing subscribers.

Our platform had approximately 88.3 million monthly unique visitors in December 2019 according to our internal record. If we are unable to consistently provide our users with quality services and experience, if users do not perceive our service offerings to be of value, or if we introduce new or adjust existing features or change the mix of digital media content in a manner that is not favorably received by our users, we may not be able to retain our existing user base.

Our number of subscribers experienced a decline in the past partly due to the intensified scrutiny over internet content from the Chinese government, and may experience further downward pressure in the future. With a government campaign against inappropriate internet content launched in April 2014, we have had to increase the monitoring of content on our platform. All the measures we adopt in response to increasing regulatory scrutiny may materially and adversely affect user experience on our platform and make our services less attractive to our subscribers, leading to a decline in the number of subscribers. We saw a reduction in the number of total subscribers of 4.4 million as of December 31, 2014, and permitted temporary suspension of services by about 350,000 existing subscribers as of December 31, 2014. Although the permitted temporary suspension of services gradually reduced to 181,000 existing subscribers as of December 31, 2019, such favorable trends may not sustain, and any increase in the number of subscribers may not necessarily lead to a corresponding increase in revenue. Similar government action or other forces may make it challenging for us to retain our user base, or may contribute to a further decline in our user base, in the future. See "—Risks Related to Doing Business in China—Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform."

In the long term, even without taking into account the abovementioned government restrictions, we cannot assure you that we would be able to retain our large user or subscriber base. For example, our efforts to provide greater incentives for our users to subscribe, including marketing activities to highlight the value of differentiated subscriber-only services, such as Green Channel, may not continue to succeed. Our subscribers may stop their subscriptions or other spending on our products or services because we no longer serve their needs or if we are unable to offer a satisfying user experience or successfully compete with current and new competitors in both retaining our existing subscribers and attracting new subscribers, which would adversely impact our business, results of operations and prospects. In addition, the development of technologies may also render our acceleration technology obsolete. For example, the development of 5G technology significantly increased the speed of wireless mobile communications. Although people generally expect 5G technology would significantly change people's life, when and how it will happen are yet to be fully demonstrated. The new technology will create new business opportunities, but it may also alter people's online habits, which may negatively affect on businesses such as our membership subscription and cloud computing products and services.

We face and expect to continue to face copyright infringement claims and other related claims, including claims based on content available through our services, which could be time-consuming and costly to defend and may result in damage awards, injunctive relief and/or court orders, divert our management's attention and financial resources and adversely impact our business.

Our success depends, in large part, on our ability to operate our business without infringing, misappropriating or otherwise violating third-party rights, including third-party intellectual property rights. Internet, technology and media companies are frequently involved in litigations based on allegations of infringement of intellectual property rights, unfair competition, invasion of privacy, defamation and other violations of other parties' rights.

In the ordinary course of our business, we receive, from time to time, written notices from third parties claiming that certain content and games in our network or on one or more of our websites infringe their copyrights or the copyrights of third parties. These notices may threaten to take legal actions against us or request us to cease distribution, marketing or displaying such content or games on our network or websites. As of the date of this annual report, we were involved in 20 copyright lawsuits in China. Almost all of these claims alleged that contents on our network infringed the plaintiffs copyrights. The total amount of damages claimed in these copyright lawsuits is approximately RMB54.2 million (US$7.8 million). See also "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings." While we believe that none of these pending lawsuits are likely to have a material adverse effect on our business, claims alleging copyright infringement or other claims arising from the content accessible through our distributed computing network, or on our websites or through our other services, with or without merit, may lead to damage awards and/or court orders, diversion of our management's attention and financial resources and negative publicity affecting our brand and reputation, and therefore may adversely affect our results of operations and business prospects.

The premium acceleration services and other value-added services we provide to our subscribers may expose us to additional copyright infringement claims, which could materially and adversely affect our existing business model.

We provide subscribers with limited space to temporarily store content downloaded on our servers for optimal acceleration performance. Subscribers may also request our cloud servers to transmit a file on their behalf and upload it to their properties. See "Item 4. Information on the Company—B. Business Overview—Our Platform—Subscription services." In addition, certain of our services allow users to upload files after they create accounts with us, converting the files into links and sharing such links with designated persons. We may be liable for transmitting or temporarily storing content or creating links representing content on behalf of our subscribers if such content infringes third-party intellectual property rights, and any such potential legal liabilities could materially and adversely affect our business.

If we are unable to successfully capture and retain the growing number of mobile internet users or if we are unable to successfully monetize our mobile products, our business, financial condition and results of operations may be materially and adversely affected.

An increasing number of users access our products and services through mobile devices, and the transition to mobile internet is a key part of our current business strategies. Products such as Xunlei Accelerator are now available to users from PCs as well as mobile devices, and we intend to continue expanding the number of mobile products we offer. An important element of our strategy to transition to mobile internet is to continue to further develop features for our mobile products and to develop new mobile products to capture a greater share of the growing number of users that access internet services such as ours through mobile devices. For example, we developed Mobile Xunlei, which allows users to search, download and consume digital media content on their mobile devices in a user friendly way. As new laptops, mobile devices and operating systems are continually being released, it is difficult to predict the problems we may encounter in developing our products for use on these devices and operating systems, and we may need 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 may result in user dissatisfaction with our products, 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 may 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 products may not work or work properly or be viewable on all devices on which they are installed. Furthermore, new, comparable products which are specifically created to function on mobile operating systems, as compared to some of our products that were originally designed to be accessed from PCs, and such new entrants may operate more effectively on mobile devices than our mobile products do.

In addition, if we are unable to attract and retain the increasing number of users who access our products through mobile devices, 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 users who access our services through mobile devices, we may not be able to successfully monetize them in the future. For example, because of the inherent limitations of mobile devices, we may not be able to provide as many kinds of products on mobile devices as we do on PC, which may limit the monetization potential of our mobile products and services.

We are subject to the risks of overseas expansion.

We established a subsidiary in Thailand in July 2018 and started to expand our business into overseas markets. Operating business internationally may expose us to additional risks and uncertainties. As we have very limited experience in operating our business in overseas markets, we may be unable to attract a sufficient number of users, fail to anticipate competitive conditions or face difficulties in operating effectively in overseas markets. We may also fail to adapt our business models to the local market due to various legal requirements and market conditions. Our international operations and expansion efforts have resulted and may continue to result in increased costs and are subject to a variety of risks, including increased competition, fluctuations in foreign exchange rates, uncertain enforcement of our intellectual property rights, more complex distribution logistics and the complexity of compliance with foreign laws and regulations. Compliance with applicable Chinese and foreign laws and regulations, such as import and export requirements, anti-corruption laws, tax laws, foreign exchange controls and cash repatriation restrictions, data privacy requirements, environmental laws, labor laws, restrictions on foreign investment, and anti-competition regulations, increases the costs and risk exposure of doing business in foreign jurisdictions. Although we have implemented policies and procedures to comply with these laws and regulations, a violation by our employees, contractors or agents could nevertheless occur. In some cases, compliance with the laws and regulations of one country could violate the laws and regulations of another country. Violations of these laws and regulations could materially and adversely affect our brand, international growth efforts and business.

We also could be significantly affected by other risks associated with international activities including, but not limited to, economic and labor conditions, increased duties, taxes and other costs and political instability. Margins on sales of our products in foreign countries, and on sales of products that include components obtained from foreign suppliers, could be materially and adversely affected by international trade regulations, including duties, tariffs and antidumping penalties. We are also exposed to credit and collectability risk on our trade receivables with customers in certain international markets. There can be no assurance that we can effectively limit our credit risk and avoid losses. In addition, political instability may also expose us to additional risks and uncertainties. If any of these economic or political risks materialize and we have failed to anticipate and effectively manage them, we may suffer a material adverse effect on our business and results of operations.

If we fail to keep up with the technological development in the internet industry and users' changing demand, our business, financial condition and results of operations may be materially and adversely affected.

The internet industry is rapidly evolving and subject to continual technological changes. As the internet infrastructure continues to develop, the internet may become more easily accessible through alternative technological innovations in the future, which may make our existing products and services less attractive to our users, and we may lose our existing users and fail to attract new users, which may further adversely impact our business, financial condition and results of operations.

In addition, user demand for internet content may also shift over time. Currently, internet users appear to have significant demand for multimedia acceleration, online games and online streaming services, and we expect such demand to continue. However, we cannot assure you that the behavior of internet users will not change in the future. For example, it is expected that the development of 5G technology may have certain impacts on mobile internet user's behavior. If 5G technology reduces our users' demand for internet acceleration, our membership subscription and cloud computing services will be negatively affected unless we are able to successfully develop alternative products or services to take advantage of new opportunities created by this new technology. If we fail to upgrade our services in response to changes in user demand in an effective and timely manner, the number of our users and advertisers may decrease. Furthermore, changes in technologies and user demand may require substantial capital expenditures in product development and infrastructure. To further expand our user base and offer our users a wider range of access points, we are expanding our business to mobile devices in part through potentially pre-installed acceleration products in mobile phones. In addition, we are continually developing and upgrading products and services, including our cloud computing services, which is expected to utilize the idle capacity of our users, and seeking strategic cooperation with hardware manufacturers such as smartphone makers, which may require significant resources from us. However, if we are not able to perfect our new technologies or to achieve the intended results or if our innovations cannot respond to the needs of our users or if our users are not attracted to our upgraded or new products and services, we may not be able to maintain or expand our user base, and our business, results of operations and prospects may be materially and adversely affected.

Our technologies, business methods and services, including those relating to our resource discovery network, may be subject to third-party patent claims or rights, such as issued patents or pending patent applications, that limit or prevent their use.

We cannot assure you that our technologies, business methods and services, including those relating to our resource discovery network, will be free from claims of patent infringements, and that holders of patents would not seek to enforce such patents against us in China, the United States or any other jurisdictions. For example, we are currently involved in a patent infringement case in China. The plaintiff alleged that our acceleration service infringed the plaintiff's patent rights. The plaintiff prayed in the complaint for a declaration of infringement. In November 2018, the court dismissed the plaintiff's all claims. The plaintiff subsequently appealed but its claims were dismissed by the appellate court as well. In March 2020, the plaintiff filed a petition to retrial case. As of the date of this annual report, the court has not decided whether to retry the case. We are currently not involved in any other patent infringement case in China. We believe that our products do not infringe any third-party patents of which we are aware. However, our analysis may have failed to identify all relevant patents and patent applications. For example, there may be currently pending applications, unknown to us, that may later result in issued patents that are infringed by our products, services or other aspects of our business. There could also be existing patents of which we are not aware that our products may inadvertently infringe. Third parties may attempt to enforce such patents against us. Further, the application and interpretation of China's patent laws and the procedures and standards for granting patents in China are still evolving and are uncertain, and we cannot assure you that PRC courts or regulatory authorities would agree with our analysis. Any patent infringement claims, regardless of their merits, could be time-consuming and costly to us. If we were found to infringe third-party patents and were not able to adopt non-infringing technologies, we may be severely limited in our ability to operate our business, and our results of operations could be materially and adversely affected.

The intellectual property protection mechanism we have implemented may not be effective or sufficient and may subject us to future litigation or result in our inability to continue providing certain of our existing services in China.

We may not have obtained licenses for all digital media content available via our services and the scope of the licenses we obtained for certain content may not be broad enough to cover all the methods we currently employ to distribute, market or display such content. For digital media content we have lawfully obtained from an authorized licensor, we may not be able to timely detect the expiration of the licensing period of certain of the content available via our services and disable access to such content via our services in a timely manner. We have been involved in litigations based on allegations from rights owners that we have infringed their copyright interests in such content. Assisted by our intellectual property team dedicated to copyright protection, for example, we have implemented internal procedures to meet the requirements under relevant PRC laws and regulations to monitor and review the contents available on our platform and remove any infringing content promptly after we receive notice of infringement from the legitimate rights holder. See also "Item 4. Information on the Company—B. Business Overview—Intellectual Property—Digital media data monitoring and copyright protection" for more details. However, due to the significant amount of digital media content accessible through our resource discovery network and other services, we generally do not seek to identify infringing content absent receiving any notice of infringement. We have successfully completed our sale of Xunlei Kankan to a third party buyer in July 2015. As a result, our exposure to claims in relation to intellectual property has significantly decreased, and we have been adjusting our monitoring procedures in relation to intellectual property and we expect to continue to devote significant resources to the monitoring of content accessible via our core services. For details of our sale of Xunlei Kankan, see "Item 4. Information on the Company—A. History and Development of the Company."

In addition, we organize and recommend to our users digital media content accessible through our services and provided on certain reputable audio-visual websites that have cooperation relationships with us. As such, we may be exposed to the risk of copyright infringement liability in the event that such content has not been duly licensed to us or to the operators of those websites. Moreover, some rights owners may not send us a notice before bringing lawsuits against us. Thus, our inability to identify unauthorized content hosted on our website or servers or accessible through our network subjects us to claims of infringement of third-party intellectual property rights or other rights. In addition, we may be subject to administrative actions brought by the National Copyright Administration of the PRC or its local branches for alleged copyright infringement.

The validity, enforceability and scope of protection of intellectual property in internet-related industries, particularly in China, are uncertain and still evolving. As we face increasing competition and as litigation becomes more common in China in resolving commercial disputes, we face a higher risk of intellectual property infringement claims. The Supreme People's Court of China promulgated a judicial interpretation on infringement of the right of internet dissemination in December 2012. This judicial interpretation provides that the courts will require service providers to remove not only links or content that have been specifically mentioned in the notices of infringement from rights holders, but also links or content they "should have known" to contain infringing content. The interpretation further provides that where an internet service provider has directly obtained economic benefits from any content made available by an internet user, it has a higher duty of care with respect to internet users' infringement of third-party copyrights. This interpretation may subject us and other internet service providers to significant administrative burdens and litigation risks. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on Intellectual Property Rights." Interested parties may lobby for more robust intellectual property protection in jurisdictions in which we conduct business or may conduct business, and intellectual property laws in China and other such jurisdictions may become less favorable to our business. Intellectual property litigation may be expensive and time-consuming and could divert management attention and resources. If there is a successful claim of infringement, we may be required to discontinue the infringing activities, pay substantial fines and damages and/or seek royalty or license agreements that may not be available on commercially acceptable terms, if at all. Our failure to obtain the required licenses on a timely basis could harm our business. Any intellectual property litigation and/or any negative publicity by third parties alleging our intellectual property infringement could have a material adverse effect on our business, reputation, financial condition or results of operations. To address the risks relating to intellectual property infringement, we may have to substantially modify, limit or, in extreme cases, terminate some of our services. Any of such changes could materially affect our users' experience and in turn have a material adverse impact on our business.

We may be subject to claims or lawsuits outside of China, which could increase our risk of direct or indirect liabilities for our existing or future service offerings.

We may be subject to claims or lawsuits outside China, such as the United States, by virtue of our listing in the United States, the ownership of our ADSs by investors, the extraterritorial application of foreign law by foreign courts or for other reasons. We have attracted and expect to continue to attract attention from intellectual property owners outside of China, despite our efforts to control access to our products and services by users outside China. For example, the Recording Industry Association of America filed a letter with the Office of the United States Trade Representative in November 2010 accusing certain of our divested or discontinued products of facilitating intellectual property infringement. Although we take steps to block users logging in from IP addresses that are located in certain jurisdictions, including the United States, from accessing certain of our services, due to technological limitations, such efforts may not be 100% successful, and any unintended access to our services may increase our risk of becoming subject to copyright laws in such jurisdictions. Even if our efforts to block IP addresses located in the United States or other jurisdictions are successful, the uncertainties surrounding the approach to intellectual property and online service providers that the new U.S. administration will take may increase our risk of becoming impacted by copyright laws in such jurisdictions. If we are ever held to be subject to United States copyright law, that could increase our risk of direct or indirect copyright liability for our resource discovery, acceleration or other services. If a claim of infringement brought against us in the United States or other jurisdictions is successful, we may be required to (i) pay substantial statutory or other damages and fines, (ii) remove relevant content from our website, (iii) discontinue products or services, (iv) disable access through our service to certain sites or content; (v) terminate users; and/or (vi) seek royalty or license agreements that may not be available on commercially reasonable terms or at all.

In addition, as a publicly listed company, we may be exposed to increased risk of litigation. For example, two putative shareholder class action lawsuits were filed in the United States District Court for the Southern District of New York against our company and certain current and former officers and directors of our company: *Dookeran v. Xunlei Limited, et al.* (filed on January 18, 2018, Case No. 18-cv-467 (S.D.N.Y.)), and *Peng Li v. Xunlei Limited, et al.* (filed on January 24, 2018, Case No. 18-cv-646 (S.D.N.Y.)). Purporting to sue on behalf of all investors who purchased or acquired Xunlei stock from October 10, 2017 to January 11, 2018, plaintiffs alleged that certain statements regarding OneCoin, which was later named as LinkToken, in our press releases and on a quarterly investor call, were false and misleading because, among other things, they failed to disclose that OneCoin was a disguised "initial coin offering" and "initial miner offering" and constituted "unlawful financial activity." Plaintiffs seek to recover under Sections 10(b) and 20(a) of the U.S. Securities Exchange Act of 1934 and Rule 10b-5 thereunder. On April 12, 2018, the court consolidated the actions under the caption *In re Xunlei Limited Securities Litigation* , No. 18-cv-467 (PAC) and appointed lead plaintiffs who filed a consolidated amended compliant on June 4, 2018. We filed a motion to dismiss the amended compliant on August 3, 2018. In September 2019, the U.S. District Judge for the Southern District of New York. Paul A. Crotty dismissed the two consolidated federal securities class action with prejudice because Xunlei's use of blockchain technology to reward OneCoin (later named as LinkToken) to customers for sharing excess storage and bandwidth did not amount to an initial coin offering and thus did not violate Chinese law. As our OneCoin rewarding program was not illegal, the court concluded that we did not make a misrepresentation or omit material facts in failing to describe the OneCoin rewarding program as an illegal initial coin offering. The court also ruled that the complaint failed to plead facts giving rise to a strong inference of an intent to deceive, manipulate, or defraud.

As a publicly listed company, we may be involved in more class action lawsuits in the future. While we believe the claims in this lawsuit are without merit, such kinds of lawsuits could divert a significant amount of our management's attention and other resources from our business and operations, which could harm our results of operations and require us to incur significant expenses to defend the lawsuits. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our financial condition and results of operations.

We may not be able to prevent unauthorized use of our intellectual property or disclosure of our trade secrets and other proprietary information, which could reduce demand for our services and have material and adverse impact on our business, financial condition and results of operations.

Our patents, trademarks, trade secrets, copyrights and other intellectual property rights are important assets for us. Events that are outside of our control may pose a threat to our intellectual property rights. For example, effective intellectual property protection may not be available in China and some other jurisdictions in which our services are distributed or made available through the internet. Also, the efforts we have made to protect our proprietary rights may not be sufficient or effective. For example, the legal regimes relating to the recognition and enforcement of intellectual property rights in China and South America are particularly limited. Therefore, legal proceedings to enforce our intellectual property in these jurisdictions may progress slowly, during which time infringement may continue largely unimpeded. Countries that have relatively inefficient intellectual property protection and enforcement regimes represent a significant portion of the demand for our products. These factors may make it more challenging for us to enforce our intellectual property rights against infringement. The infringement of our intellectual property rights, particularly in these jurisdictions, may materially harm our business and competitiveness in these markets and elsewhere by reducing our sales, and adversely affecting our results of operations, and diluting our brand or reputation. Any significant impairment of our intellectual property rights could harm our business or our competitiveness. Also, protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to conduct our business and harm our results of operations.

We seek to obtain patent protection for our innovations. However, it is possible that patent protection may not be available for some of these innovations. In addition, given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. Furthermore, there is always the possibility, despite our efforts, that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable.

We also seek to maintain certain intellectual property as trade secrets. We require our employees, consultants, advisors and collaborators to enter into confidentiality agreements in order to protect our trade secrets and other proprietary information. These agreements might not effectively prevent disclosure of our trade secrets, know-how or other proprietary information and might not provide an adequate remedy in the event of unauthorized disclosure of such confidential information. In addition, others may independently discover our trade secrets and proprietary information, in which case we cannot assert such trade secret rights against such parties. Any unauthorized disclosure or independent discovery of our trade secrets would deprive us of the associated competitive advantages. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive position.

The revenue model for our live streaming may not remain effective and we cannot guarantee that our future monetization strategies will be successfully implemented or generate sustainable revenues and profit.

We launched our live video streaming services in February 2016. In May 2018, we expanded our live streaming business by launching a live audio streaming product, PeiWan. In September 2019, we started to operate another live video streaming product, BuOu Live, by cooperating with a third party. In 2019, revenue from live streaming business was US$ 26.9 million, accounting for 14.9% of our total revenues in 2019. The live streaming industry is highly competitive and there are several well-established and successful players in this market. We may not be able to compete effectively with them and realize the growth of our live streaming business continuously. We are not sure whether our products will be accepted by the market and generate/continue to generate revenues as we expected. The user demand may also change, decrease substantially or dissipate and we may fail to anticipate and serve user demands effectively and timely.

Although we factor in industry standards and expected user demand in determining how to optimize virtual item merchandizing effectively, if we fail to properly manage the supply and timing of our virtual items and their appropriate prices, our users may be less likely to purchase these virtual items from us. In addition, if users' spending habits change and they choose to only access our content for free without additional purchases, we may not be able to continue to successfully implement the virtual items-based revenue model for live streaming, in which case we may have to provide other value-added services or products to monetize our user base. We cannot guarantee 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.

We may fail to offer attractive content for our live streaming services, or attract and retain talented and popular broadcasters, which may materially adversely affect the operation of our live streaming services and its results of operations.

We offer live streaming content. Our content library is constantly evolving and growing to meet users' evolving interests. We actively track viewership growth and community feedback to identify trending content and encourage our broadcasters to create content that caters to users' constantly changing taste. However, if we fail to continue to expand and diversify our content offerings, identify trending and popular genres, or maintain the quality of our content, we may experience decreased viewership and user engagement, which may materially and adversely affect our results of operations and financial conditions.

In addition, we largely rely on our broadcasters to create high-quality and fun live streaming content. Popular broadcasters are key to the success of our living streaming services. We have in place a comprehensive and effective incentive mechanism to encourage broadcasters to supply content that are attractive to our users. We have also entered into multi-year cooperation agreements that contain exclusivity clauses with popular broadcasters and the talent agencies they cooperate with. However, if any of those broadcasters and/or the talent agencies decides to breach the agreement or chooses not to continue the cooperation with us once the term of the agreement expires, or if we fail to attract new talented and productive broadcasters, the popularity of our platform may decline and the number of our users may decrease, which could materially and adversely affect our results of operations and financial condition.

We may be held liable for information or content displayed on, retrieved from or linked to our platforms, or distributed to our users, if such content is deemed to violate any PRC laws or regulations, or for improper or fraudulent activities conducted on our platform, and PRC authorities may impose legal sanctions on us and our reputation may be damaged.

Our live streaming services enable users to exchange information and engage in various other online activities. Although we require our broadcasters to register their real name, we are unable to independently verify the accuracy and authenticity of the identity information provided by them. For the registration of users before they become broadcasters, we rely on third-party organizations to verify their identities through mobile phone numbers or ID card number, which may not always be reliable. In addition, we have put in place measures to monitor content on our platform generated by our users, it is impossible for us to detect every piece of inappropriate or illegal content on our platform due to the immense quantity of user-generated content on our platform. Therefore, it is possible that broadcasters and/or 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. 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. 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, PRC authorities may impose legal sanctions on us, including, in serious cases, suspending or revoking the licenses necessary to operate our platforms if they find that we have not adequately managed the content on our platforms.

We believe that maintaining and enhancing our Xunlei brand is of significant importance to the success of our business. A well-recognized brand is critical to increasing our user base and, in turn, enhancing our attractiveness to advertisers, subscribers and paying users. If we fail to sustain or improve the strength of our brand, we may subsequently experience difficulty in maintaining market share. We have developed our reputation and established a leading position by providing our users with a superior acceleration and video viewing experience. We will continue to conduct various marketing and brand promotion activities. We cannot assure you, however, that these activities will be successful and achieve the brand promotion effects we expect. In addition, any negative publicity in relation to our services or our marketing or promotion practices, regardless of its veracity, could harm our brand image and, in turn, result in a reduced number of users and advertisers. Historically, there has been negative publicity about our company, our products and services and certain key members of our management team, which has adversely affected our brand, public image and reputation. If we fail to maintain and enhance our brand, or if we incur excessive expenses in this effort, our business, financial condition and results of operations may be materially and adversely affected.

System failure, interruptions and downtime, including those caused by cyber-attacks or security breaches, can result in user dissatisfaction, adverse publicity or leakage of confidential information of our users and customers, and our business, financial condition, results of operations may be materially and adversely affected.

Our operations rely on our networks and servers, which can suffer system failures, interruptions and downtime. Our network systems are vulnerable to damage from computer viruses, fires, floods, earthquakes, power losses, telecommunication failures, computer hacking, security breach, and similar events despite our implementation of security measures, which may cause interruptions to the services we provide, degrade the user experience, disclosure of our data or user data, such as personal information, names, accounts, user IDs and passwords, and payment or transaction related information, or cause users to lose confidence in our products. Our efforts to protect our company data and user data may also be unsuccessful due to software bugs or other technical malfunctions, employee error or malfeasance, government surveillance, or other factors.

The satisfactory performance, stability, security and availability of our websites and our network infrastructure are critical to our reputation and our ability to attract and retain users and advertisers. Our network contains information regarding file index, advertising records, premium licensed digital media content and various other facets of the business to assist management and help ensure effective communication among various departments and offices of our company. Any failure to maintain the satisfactory performance, stability, security and availability of our network, website or technology platform, whether such failure results from intentional cyber-attacks by hackers, from issues with our own technology and team or from other factors beyond our control, may cause significant harm to our reputation and impact our ability to attract and maintain users and business partners. We have put in place various measures to prevent such incidents from happening and internal reporting procedures with respect to such incidents. However, such prevention measures may not function in a way as we expect due to the evolution of the sophistication of cyber-attacks, advances in technology, an increased level of sophistication and diversity of our products and services, an increased level of expertise of hackers, new discoveries in the field of cryptography or others, software bugs or other technical malfunctions, or other evolving threats.

From time to time, our users in certain locations may not be able to gain access to our network or our websites for a period of time lasting from several minutes to several hours, due to server interruptions, power shutdowns, internet connection problems or other reasons. Although we have not experienced extended periods of such server interruptions, power shutdowns or internet connection problems across our entire network, we cannot assure you that such instances will not occur in the future. Any server interruptions, break-downs or system failures, including failures which may be attributable to events within or outside our control that could result in a sustained shutdown of all or a material portion of our network or website, could reduce the attractiveness of our service offerings. In addition, any substantial increase in the volume of traffic on our network or website will require us to increase our investment in bandwidth, expand and further upgrade our technology platform. We do not maintain insurance policies covering losses relating to our network systems due to very limited available insurance products in the insurance market in China. As a result, any system failure, interruptions or network downtime for an extended period may have a material adverse impact on our revenues and results of operations.

We rely on information technology systems to process, transmit and cache or store electronic information in our day-to-day operations, including customer, employee and company data. The secure processing, maintenance and transmission of this information is critical to our operations and the legal environment surrounding information security, storage, use, processing, disclosure and privacy is demanding with the frequent imposition of new and changing requirements. We also store certain information with third parties. Our information systems and those of our third-party vendors are subjected to computer viruses or other malicious codes, unauthorized access attempts, and cyber- or phishing-attacks and also are vulnerable to an increasing threat of continually evolving cybersecurity risks and external hazards, as well as improper or inadvertent staff behavior, all of which could expose confidential company and personal data systems and information to security breaches. Any such breach could compromise our networks, and the information stored therein could be accessed, publicly disclosed, lost or stolen. Such attacks could result in our intellectual property and other confidential information being lost or stolen, disruption of our operations, and other negative consequences, such as increased costs for security measures or remediation costs, and diversion of management attention. Any actual or perceived access, disclosure or other loss of information or any significant breakdown, intrusion, interruption, cyber-attack or corruption of customer, employee or company data or our failure to comply with federal, state, local and foreign privacy laws or contractual obligations with customers, vendors, payment processors and other third parties, could result in legal claims or proceedings, liability under laws or contracts that protect the privacy of personal information, regulatory penalties, disruption of our operations, and damage to our reputation, all of which could materially adversely affect our business, revenue and competitive position. While we will continue to implement additional protective measures to reduce the risk of and detect cyber-incidents, cyber-attacks are becoming more sophisticated and frequent, and the techniques used in such attacks change rapidly. Our protective measures may not protect us against attacks and such attacks could have a significant impact on our business and reputation.

In addition, there has been a trend tightening the regulation of privacy and user data protection globally. We may become subject to new laws and regulations applying to the solicitation, collection, processing or use of personal or consumer information that could affect how we store, process and share data with our customers, suppliers and third-party sellers. For example, the National Information Security Standardization Technical Committee issued the latest *Standard of Information Security Technology—Personal Information Security Specification* , which came into effect in March 2020. Under such standard, the personal data controller refers to entities or persons who are authorized to determine the purposes and methods for using and processing personal information. The personal information controller should follow the principles of legality, justification and necessity in handling personal information. The personal information controller should obtain a consent from a personal information provider and provide such personal information provider an independent choice when the product or service offered by the personal information controller has multiple functions. On November 28, 2019, the Secretary Bureau of the Cyberspace Administration of China, the General Office of the Ministry of Industry and Information Technology, the General Office of the Ministry of Public Security and the General Office of the State Administration for Market Regulation jointly promulgated the Identification Method of Illegal Collection and Use of Personal Information Through App, which provides guidance for regulatory authorities to identify illegal collection and use of personal information through mobile apps, for the app operators to conduct self-examination and self-correction, and for other participants to voluntarily monitor compliance. In addition, we may need to comply with increasingly complex and rigorous regulatory standards enacted to protect business and personal data in the U.S., Europe and elsewhere. For example, the European Union adopted the General Data Protection Regulation, or the GDPR, which became effective on May 25, 2018. The GDPR imposes additional obligations on companies regarding the handling of personal data and provides certain individual privacy rights to persons whose data is stored. New privacy laws will continue to come into effect around the world in 2020, with one of the most significant being the California Consumer Privacy Act, or the CCPA, which became effective on January 1, 2020. Compliance with existing, proposed and recently enacted laws, including implementation of the privacy and process enhancements called for under GDPR, CCPA and regulations from other legislations, can be costly. Any failure to comply with these regulatory standards could subject us to legal and reputational risks. Any inability, or perceived inability, to adequately address privacy and data protection concerns, even if unfounded, or comply with applicable laws, regulations, policies, industry standards, contractual obligations, or other legal obligations could result in additional cost and liability to us or company officials, damage our reputation, inhibit sales, and otherwise adversely affect our business.

If we fail to retain existing advertisers or attract new advertisers, our revenues may be materially and adversely affected.

We realized growth of the revenue from our online advertising services from US$16.9 million in 2016 to US$27.8 million in 2018. However, revenue from our online advertising service in 2019 decreased to US$15.6 million, primarily because there was a decreased demand for our online advertising services in the mobile gaming industry in 2019. We cannot assure you that we can continue to retain our advertising agencies and advertisers or attract new advertising agencies and advertisers. The number of advertisers that use our online advertising services, including third-party advertising platforms that we cooperate with, has been decreasing since 2014 and such number further decreased to 71 in 2019. If we cannot retain our existing advertisers or develop new advertisers in the future, our revenues generated from online advertising will be materially and negatively affected. Since our arrangements with third-party advertising agencies are typically one-year framework agreements, such advertising arrangements may be easily amended or terminated without incurring liabilities.

We generate a vast majority of our advertising revenues from a limited number of third-party advertising platforms. If we are unable to maintain our cooperation with these third-party advertising platforms for whatever reasons and we are unable to find a suitable replacement in a timely manner, or at all, our advertising revenue may experience significant declines. As a result, our results of operations and financial condition may also be negatively affected.

A number of our advertisers are online game operators. The online game and e-commerce industries in China are rapidly evolving, and the growth of these industries and their demand for online advertising services is uncertain and may be affected by factors out of our control. We also have significant brand advertising and are seeking to further expand this portion of advertising. However, we cannot assure you that we will be able to retain existing advertising agencies and advertisers or attract more advertising agencies and advertisers for brand advertising, and if we fail to do so, our business, results of operations and prospects may be materially and adversely affected.

We rely on third-party platforms to distribute our mobile applications. If we are unable to maintain a good relationship with such platform providers, if their terms and conditions or pricing were changed to our detriment, if we violate, or if a platform provider believes that we have violated, the terms and conditions of its platform, or if any of these platforms loses market share or falls out of favor or is unavailable for a prolonged period of time, our mobile strategy may suffer.

We are subject to the standard policies and terms of service of third party platforms, which govern the distribution of our mobile application on the platform. Each platform provider has broad discretion to change and interpret its terms of service and other policies with respect to us and other users, and those changes may be unfavorable to us. A platform provider may also change its fee structure, add fees associated with access to and use of its platform, alter how we are able to advertise or distribute on the platform, or change how the personal information of its users is made available to application developers on the platform. Such changes may decrease the visibility or availability of our applications, limit our distribution capabilities, prevent access to our applications, reduce the amount of downloads and revenue we may recognize from the applications, increase our costs to operate on these platforms or result in the exclusion or limitation of our application on such platforms. Any such changes could adversely affect our business, financial condition or results of operations.

If we violate, or a platform provider believes we have violated its terms of service (or if there is any change or deterioration in our relationship with these platform providers), that platform provider could limit or discontinue our access to the platform. A platform provider could also limit or discontinue our access to the platform if it establishes more favorable relationships with one or more of our competitors or it determines that we are a competitor. Any limit of, or discontinuation to, our access to any platform could adversely affect our business, financial condition or results of operations. In September 2016, all of our mobile applications, including Mobile Xunlei, were removed from Apple's iOS App Store as a result of alleged possible violations of the developer license agreement between Apple and us. After a prolonged negotiation, Apple agreed that we can relaunch our mobile applications, including Mobile Xunlei, on Apple's iOS App Store as long as our mobile applications comply with Apple's policies for launching mobile applications on App Store and pass Apple's scrutinization. We are currently testing our mobile applications and will launch our mobile applications after we complete such testing. We cannot assure you that future efforts to re-launch Mobile Xunlei or our other mobile applications on the iOS App Store will be successful. This will most likely prevent prospective users and existing users from accessing or renewing our services through Apple devices. It is impossible for us to predict the impact in the longer run if Apple continues to deny our mobile applications. Furthermore, other app stores also have the right to update their store policies and if we are deemed to violate its policy and our mobile application are removed from other app stores at the same time, this may significantly harm our mobile strategy.

We are strictly regulated in China. Any lack of requisite licenses or permits applicable to our businesses or to our third-party services providers and any changes in government policies or regulations may have a material and adverse impact on our businesses, financial conditions and results of operations.

Our business is subject to governmental supervision and regulations by the relevant PRC governmental authorities including the State Council, the Ministry of Industry and Information Technology (formerly the Ministry of Information Industry), or MIIT, the State Administration of Radio and Television, or SAPPRFT, (formerly the General Administration of Press and Publication, Radio, Film and Television (established in March 2013 as a result of institutional reform integrating the State Administration of Radio, Film and Television, and the General Administration of Press and Publication), or GAPPRFT), Ministry of Culture and Tourism (established in March 2018 as a result of institutional reform integrating the Ministry of Culture, and the Ministry of Tourism), or MOCT and other relevant government authorities. Together these government authorities promulgate and enforce regulations that cover many aspects of operation of telecommunications and internet information services, including entry into the telecommunications industry, the scope of permissible business activities, licenses and permits for various business activities and foreign investment.

We are advised by our PRC legal counsel that a license for online transmission of audio-visual programs is required for the display of video content, including live streaming content, on our platform. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on online transmission of audio-visual programs." We used to be a registered owner of such license when we were operating Xunlei Kankan business. However, when we disposed of Xunlei Kankan business to a purchaser in July 2015, the registered owner of such license was also changed to the purchaser. After the disposal, Shenzhen Wangwenhua started to operate a live streaming business and a short video business. As advised by our PRC legal counsel, a license for online transmission of audio-visual programs is required for operating short video business and live streaming business. In June 2018, Shenzhen Wangwenhua acquired 80% of the equity interest of Henan Tourism Information Co., Ltd., or Henan Tourism, from an independent third party. Henan Tourism is a registered owner of the license for online transmission of audio-visual programs. However, Shenzhen Wangwenhua, the entity that operates both license-required businesses, is not a registered owner of the license for online transmission of audio-visual programs. As a result, relevant PRC government authorities may find that we are operating license-required business without obtaining a proper license, and thus may issue warnings, order us to rectify our violating operations and impose fines on us. In the case of serious violations as determined by relevant authorities at its discretion, they may ban the violating operations, seize our equipment in connection with such operations and impose a penalty of one to two times of the amount of the total investment in such operations.

In addition, our cloud computing services provided to the internet users may be deemed to have included the content distribution network (CDN) services. With MIIT's issuance of the Circular on Clearing Up and Regulating the Internet Access Service Market in January 2017, our existing value-added telecommunication services license, or VATS License, must be updated to specifically cover the CDN services, which otherwise was not required in the past. Shenzhen Onething Technologies Co., Ltd., or Shenzhen Onething, a subsidiary of Shenzhen Xunlei has obtained from the relevant PRC authority an updated VATS License covering the CDN services. "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on telecommunications and internet information services."

If the relevant PRC authority decides that we were operating without the proper licenses or approvals, we may be given a warning, ordered to rectify our violations and/or fined, or required to impose restrictions or even discontinue our relevant business. In addition to the above, if the PRC government promulgates new laws and regulations that require additional licenses or imposes additional restrictions on the operation of any part of our business, it has the power to, among other things, levy fines, confiscate our income, revoke our business licenses, and require us to discontinue our business or impose restrictions on the affected portion of our business. Any of these actions by the PRC government may have a material and adverse effect on our results of operations. In addition, the PRC government may promulgate regulations restricting the types and content of advertisements that may be transmitted online, which could have a direct adverse impact on our business.

Furthermore, we cannot assure you that our third-party services providers have obtained or applied for all the permits and licenses required for providing relevant services for us. For example, we cooperated with different third-party services providers to provide Internet Data Center (IDC) and Internet Service Provider (ISP) services for our CDN services. As PRC laws and regulations require the IDC and ISP services providers to obtain the corresponding IDC licenses and ISP licenses, we normally require our relevant third-party services providers to obtain such licenses. However, we cannot assure you that these third-party services providers are able to obtain or maintain the required licenses in a timely manner or at all. If our third-party services providers fail to obtain or maintain relevant approvals, licenses or permits required for operating such businesses, our third-party services providers could be subject to liabilities, penalties and operational disruptions. Even if these service providers are able to maintain proper licenses, it is possible that the services and bandwidth resources they provide may not meet our requirements. As a result, our business could be materially and adversely affected if we are unable to find suitable alternative third-party services providers in a timely manner or at all.

Concerns about collection and use of personal data could damage our reputation, deter current and potential users from using our services and substantially harm our business and results of operations.

Pursuant to the applicable PRC laws and regulations concerning the collection, use and sharing of personal data, our PRC subsidiaries, VIE and its subsidiaries are required to keep our users' personal information confidential and are prohibited from disclosing such information to any third parties without such users' consent. Relevant laws and regulations also require internet operators to take measures to ensure confidentiality of users' information. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on internet privacy." In November 2019, the MIIT issued *the Notice on Carrying Out the Special Rectification of App Infringement on Users' Rights and Interests* . Based on such notice, the MIIT required a number of mobile apps to be removed from application stores as these apps infringed users' rights and interests and rectifications cannot be completed within a specified period of time. In early 2020, the MIIT also notified application stores to suspend downloading three mobile apps as these apps cannot complete rectification within a specified period of time.

To comply with relevant laws and regulations, we periodically review our privacy policies and amend as needed based on the development and changes of our business to ensure that we collect, use or process any of our users' personal information after we obtain users' prior consent. 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 with relevant laws and regulations 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 concerns about the security of personal data could also lead to a decline in general usage of our products and services, which could lead to lower user numbers. For example, if the PRC government authorities require real-name registration by our users, our user numbers may decrease and our business, financial condition and results of operations may be adversely affected. See "—Risks Related to Doing Business in China—We may be adversely affected by the complexity, uncertainties and changes in PRC regulations of internet-related business and companies." In addition, we may become subject to the data protection or personal privacy laws of jurisdictions outside of China, where more stringent requirements may be imposed on us and we may have to allocate more resources to comply with the legal requirements, and our user numbers may further decrease. A significant reduction in user numbers could have a material adverse effect on our business, financial condition and results of operations.

We may not be able to generate sufficient cash from operations or to obtain sufficient capital to meet the additional capital requirements of our changing business.

In order to implement our development strategies, including our strategies to transition to mobile internet and continuing efforts on our cloud computing business, we will make continual capital investments in terms of devoting more research and development efforts into investigating user needs and develop new mobile products and update existing ones, continue enhancing the technologies involved in our cloud computing business and provide more frequent updates to our existing products. Thus, we will continue to incur substantial capital expenditures on an ongoing basis, and it may become difficult for us to meet such capital requirements.

To date, we have financed our operations primarily by using our existing internal cash reserves and borrowing bank loans. If we fail to retain a sufficient number of users and continue to convert such users into paying users or subscribers, we may not be able to generate sufficient revenues to cover our business development strategies, including our continued transition to mobile internet and the continued expansion of our cloud computing business, and our business may be materially and adversely affected.

We may obtain additional financing, including from equity offerings and debt financings in capital markets, to fund the operation and planned expansion of our business. Our ability to obtain additional financing in the future, however, is subject to a number of uncertainties, including:

- our future business development, financial condition and results of operations;
- general market conditions for financing activities by companies in our industry; and
- macroeconomic, political and other conditions in China and elsewhere.

If we cannot obtain sufficient capital to meet our capital expenditure needs, we may not be able to execute our growth strategies and our business, results of operations and prospects may be materially and adversely affected.

Our costs and expenses, such as research and development expenses, may increase and our results of operations may be adversely affected.

The operation of our extensive resource discovery network and cloud computing business require significant upfront capital expenditures as well as continual, substantial investment in content, technology and infrastructure. Since inception, we have invested substantially in research and development to maintain our technology leadership, and in equipment to increase our network capacity. We expect our research and development expenses to increase in the near term as we continue to expand our research and development team to develop new products and update existing products, particularly as we continue devoting resources in the development of our cloud computing business and the development and updating of our mobile products. Most of our capital expenditures, such as expenditures on servers and other equipment, are based upon our estimation of potential future demand and we are generally required to pay the entire purchase price and license fees upfront. As a result, our cash flow may be negatively affected in the periods in which such payments are made. We may not be able to quickly generate sufficient revenue from such expenditures, which may negatively affect our results of operations within certain periods thereafter; and if we over-estimate future demand for our services, we may not be able to achieve expected rates of return on our capital expenditures, or at all.

In addition, bandwidth and other costs are subject to change and are determined by market supply and demand. For example, the market prices for professionally produced digital media content have increased significantly in China during the past few years, and there have been increases in the relevant license fees. In addition, if bandwidth and other providers cease their business with us or raise the prices of their products and services, we will incur additional costs to find alternative service providers or to accept the increased costs in order to provide our services, although we expect that crowdsourced capacity obtained through our cloud computing services may offset some of our bandwidth costs. If we cannot pass on our costs and expenses to our users, or if our costs to deliver our services do not decline commensurate with any future declines in the prices we charge our users, our results of operations may be adversely affected and we may fail to achieve profitability.

If we are unable to collect accounts receivable in a timely manner or at all, our financial condition, results of operations and prospects may be materially and adversely affected.

We generate a vast majority of our advertising revenue from a limited number of third-party advertising platforms such as Guangdiantong. We typically enter into advertising agreements with third-party advertising platforms. Under these agreements, advertising fees are paid to us by the advertising platforms after we deliver our services. In addition to our online advertising services, we also generated a large portion of our revenue from the sales of CDN to our customers in 2019. As of December 31, 2019, we have a considerable portion of accounts receivable arising from the sales of CDN. Thus, the financial soundness of our advertisers and advertising agencies, as well as our customers purchasing CDN from us may affect our collection of accounts receivable. We make a credit assessment of our advertisers, advertising agencies and our CDN purchasers to evaluate the collectability of these service fees before entering into any business contracts. However, we cannot assure you that we will always be able to accurately assess the creditworthiness of each advertising agency, advertiser or CDN purchaser, as applicable. Any inability of advertisers, advertising agencies or CDN purchasers, especially those that accounted for a significant percentage of our amounts receivables in the past, to pay us in a timely manner may adversely affect our liquidity and cash flows. For example, we made a provision for our accounts receivable of US$ 7.6 million in 2018 due to a CDN purchaser's prolonged overdue payment and its shutdown of operation. In addition, the online advertising market in China is dominated by a small number of large advertising agencies. If the large advertising agencies that we have business relationships with demand higher rebates for their agency services, our results of operations will be materially and adversely affected.

We had net operating cash outflows in 2017, 2018, and 2019 and may be subject to liquidity pressure in the future if we cannot generate sufficient cash from our operating activities in the future.

We had net operating cash outflows of US$14.2 million, US$35.6 million and US$ 45.6 million in 2017, 2018 and 2019. See "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Operating activities" for reasons of such net operating cash outflows. We cannot guarantee we will always be able to generate positive and sufficient cash flows from operating activities in the future. If we have negative cash flows from operating activities in the future, our business, results of operations and liquidity may be adversely affected.

In addition, we are constructing a building which will be used as our research and development center and headquarters. We planned to invest a total of RMB600.0 million (US$86.0 million) for this construction project. In 2019, we entered into a loan facility agreement with a commercial bank to finance the construction project. The land use right and the building under construction were mortgaged to the bank and one of our subsidiaries also provided a guarantee to the bank. The maximum amount of loans we are able to take out is RMB400.0 million (US$57.3 million). In 2019, we took out RMB79.0 million (US$11.3 million). We plan to take out the remaining RMB321.0 million (US$46.0 million) in the near future depending on the progress of the construction project. Although we had cash, cash equivalents and short-term investments of US$ 265.3 million as of December 31, 2019, we may be under liquidity pressure if we are unable to generate sufficient cash from our operating activities in the future or if the actual cost of the construction project goes beyond our estimated costs. In addition, we planned to complete the construction by 2021 and relocate to the new building afterwards. However, we cannot assure you that we will definitely be able to complete the construction by then due to a number of factors that are beyond our control including outbreak of pandemic, weather conditions, force majeure, labor disputes and government regulations. For example, the completion of the construction project is subject to government approval. We cannot guarantee you that relevant government authorities will grant us approval in our expected timeline. If we are unable to move into the new building as in our expected timeline, we will have to continue to pay office rental expenses. In addition, we may lease certain floors of the building to other parties and use the rental we receive to pay loan interest. If the new building cannot be put into use in our expected timeline, we will have to pay loan interest from our existing cash, which will increase our liquidity pressure. In the worst case scenario, if we are unable to repay the loan, the bank may foreclose our building. As a result, we may have to rent other office space to continue our business operations and incur additional costs. Furthermore, we engaged a reputable national construction company to construct the building and a professional real estate consulting firm to manage the process. Disputes between construction company/real estate consulting firm/other construction service providers and us may arise during the construction process, which may cause delay to the completion of the construction project. If disputes materialize, we may have to initiate lawsuits or be sued. The lawsuit may divert our management's attention and subject us to additional costs.

We may not be able to successfully address the challenges and risks we face in the online games market, such as a failure to operate popular, high-quality games or to obtain all the licenses required to operate online games, which may subject us to penalties from relevant authorities, including the discontinuance of our online game business.

After we disposed of our web game business and discontinued PC-based MMOGs business in 2018, we only operated mobile games under our online game business. In 2019, we started to cooperate with a third party to operate web game business under a business model different from our previous web game business. Under the new web game business model, we do not engage directly in the operation and maintenance of web games. Instead, we collaborate with a third-party online game provider and grant such online game provider an exclusive right to provide our users with an array of web games on our Xunlei game center website. Our users are able to play these web games by logging into their Xunlei accounts and use the payment channels we provide to make payments when purchasing virtual items in those games. See "Item 4. Information on the Company—B. Business Overview—Our platform—Online game services."

Operating online games in China requires several permits and approvals. For example, as advised by our PRC legal counsel, a VATS License is required for operating online games and an internet publication license is required for operating internet publishing services, which is defined as offering internet publications to the public through the internet. Our online game operating subsidiaries have obtained the VATS License for operating our online games, but have not obtained the internet publishing services license. Based on our consultation with the responsible government authority, since our online game operating subsidiaries are only operators of online games or only provide a platform for online game operations, they are not required to obtain the internet publishing services license. Therefore our online game operating subsidiaries have not obtained the internet publishing services license. However, we cannot rule out the possibility that relevant government authorities may in future take the view that our online game operating subsidiaries are required to obtain the internet publishing services license and thus penalize us for operating online game business without a proper license. If that were to happen, we would be subject to orders to the shut-up the website or delete all relevant online publications, confiscation of illegal income and major equipment or fines. In addition, according to relevant regulations, an online game has to be scrutinized by and obtain an approval number (ISBN number) from the SAPPRFT before it is allowed to be launched online. In our cooperation with online game providers, we require that ISBN numbers have to be obtained for the online games within the scope of our cooperation. However, as we are not the developers or publishers of those online games, we cannot assure you that the ISBN numbers of those online games are obtained strictly in compliance with relevant legal requirements and procedures without any defects or relevant amendment filings are made in compliance with relevant legal requirements. If the ISBN numbers are obtained not in compliance with relevant laws and regulations or amendment filings are not made timely, relevant government authorities may impose fines on us, confiscate our income generated from operating such online games and require us to delete all relevant online publications or discontinue our online game business .

In addition, relevant PRC laws and regulations require that contents of online games are prohibited to advocate cult, superstition, obscenity, pornography, gambling or violence, or abet commission of crime. As we are not the developers of the online games we operate, we cannot assure you that the contents of the online games we operate are fully in compliance with such requirement. Failure to comply with relevant PRC laws and regulations may subject us to liability, administrative actions or penalties imposed by relevant PRC authorities. The imposition of any of these penalties may result in a material and adverse effect on our ability to operate our online game business and our results of operations. As we do not have control over the contents of the online games we operate, we cannot assure you that we will not be subject to any intellectual property infringement claims or misappropriation claims. As of the date of this annual report, we were not involved in any lawsuits relating to the online games we operate. Defending those claims, with or without merits, could be costly and time-consuming, and diverge our management's attention. If we or our third-party online game providers lose the cases, we may be required to compensate a large amount of damages or immediately discontinue the operation of relevant online games. If we are unable to find alternative solutions on commercially reasonable terms on a timely basis, our online game business, reputation and results of operations may be materially and adversely affected.

In October 2019, General Administration of Press and Publication issued the Notice by the General Administration of Press and Publication of Preventing Minors from Indulging in Online Games, or Anti-indulgence Notice, which imposed an array of restrictive measures to prevent underage users to indulge in online games. For example, game operators are not allowed to provide underage users with any form of access to online games during the period from 22:00 p.m. each day to 8:00 a.m. of the next day and the total length of time for game operators to provide underage users with access to online games cannot exceed three hours a day during statutory holidays or 1.5 hours a day on days other than statutory holidays. The Anti-indulgence Notice also requires game operators to implement the real-name registration system for players of online games and take effective measures to restrict underage players from using paid services that are inconsistent with their capacity for civil conduct. We have implemented a real-name registration system for our online games. Game operators or developers of the online games on our platform are able to access to our real-name registration system and implement their anti-indulgence measures based on the identify information in our system. We have also developed our own anti-indulgence system pursuant to the Anti-indulgence Notice and started to implement such system for new mobile games that we offered in collaboration with third parties since April 2020. For mobile games that we offered in collaboration with third parties prior to April 2020, we are currently working with corresponding third parties to implement such system. We cannot rule out the possibility that relevant regulatory authorities may view as failing to implement anti-indulgence measures pursuant to the Anti-indulgence Notice in a timely manner and thus penalize us. With respect to our web game business, we only make those games available on our Xunlei game center website and provide a payment channel for users to make payments when purchasing virtual items in those games, and we are not responsible for daily maintenance and operation of those games. As a result, we normally require third parties cooperating with us to implement anti-indulgence measures pursuant to the Anti-indulgence Notice. If any third-party online game operators or developers fail to implement anti-indulgence measures that meet the requirements of the Anti-indulgence Notice, we may have joint and several liabilities and thus be subject to administrative penalties. Penalties under the Anti-indulgence Notice include fines and other penalties such as taking corrective actions during specified periods, shutting down of our online games operations and license revocation due to the fact that we did not implement those restrictions pursuant to the Anti-indulgence Notice. If any of the above were to happen, our online game business and our results of operations would be negatively affected.

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

We face significant competition in different areas of our business. Some of our existing or potential competitors have a longer operating history and significantly greater financial resources than we do, and in turn may be able to attract and retain more users and advertisers. Our competitors may compete with us in a variety of ways, including by conducting brand promotions and other marketing activities and making acquisitions. For example, in the cloud computing sector, we face existing intensive competition from leading Chinese internet companies such as Alibaba and Tencent. They generally have a stronger competitive position and have more resources and technological capability to compete in this sector. We cannot guarantee you that we will certainly be able to compete effectively with them and continuously increase our market share or maintain our existing market share. In the cloud acceleration sector, although we currently have a niche market in China for cloud acceleration products and services, we cannot guarantee that we will be able to maintain our established position in the future. We may face competition from leading Chinese internet companies if they start to allocate resources and focus on the development in this business sector or from startups who may develop similar or alternative products. With more entrants into the cloud acceleration business, aggressive price cutting by competitors may result in the loss of our existing subscribers. We may have to take actions to retain our user base and attract more subscribers at significant cost, including upgrading and developing existing and new products and services in order to meet users' changing demand, but we cannot assure you that such efforts will succeed, especially given the tightening control over internet content by the Chinese government. See "—If we fail to keep up with the technological development in the internet industry and users' changing demand, our business, financial condition and results of operations may be materially and adversely affected" and "—Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform." If we are unable to effectively compete in any aspect of our business, our business, financial condition and results of operations may be materially and adversely effected.

Undetected programming errors or flaws or failure to maintain effective customer service could harm our reputation or decrease market acceptance of our services, particularly our resource discovery network, which would materially and adversely affect our results of operations.

Our programs may contain programming errors that may only become apparent after their release, especially in terms of upgrades to, for example, Xunlei Accelerator or cloud acceleration subscription services. We receive user feedback in connection with programming errors affecting their user experience from time to time, and such errors may also come to our attention during our monitoring process. However, we cannot assure you that we will be able to detect and resolve all these programming errors effectively or in a timely manner. Undetected programming errors or defects may adversely affect user experience and cause our users to stop using our services and our advertisers to reduce their use of our services, any of which could materially and adversely affect our business and results of operations.

Advertisements we display may subject us to penalties and other administrative actions.

Under PRC advertising laws and regulations, advertisement channels such as us are obligated to monitor the advertising content they display to ensure that such content is true, accurate and in full compliance with applicable laws and regulations. PRC advertising laws and regulations set forth certain content requirements for advertisements in the PRC 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. In April 2015 and October 2018, the SCNPC subsequently issued the amended Advertisement Law, which took effect on September 1, 2015 and October 26, 2018, to further strengthen the supervision and management of advertisement services. Pursuant to the Advertisement Law, any advertisement that contains false or misleading information to deceive or mislead consumers shall be deemed false advertising. Furthermore, the Advertisement Law explicitly stipulates detailed requirements for the content of several different kinds of advertisement, including advertisements for medical treatment, pharmaceuticals, medical instruments, health food, alcoholic drinks, education or training, products or services having an expected return on investment, real estate, pesticides, feed and feed additives, and some other agriculture-related advertisement. On July 4, 2016, SAIC issued the Interim Measures for the Administration of Internet Advertising to specifically regulate internet advertising activities. See “Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on advertising business” for details. In providing advertising services, we are required to review the supporting documents provided to us by advertising agencies or advertisers for the relevant 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, we 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 eliminate the effect of illegal advertisement and cessation of publishing the advertisement. In circumstances involving serious violations, the State Administration for Industry and Commerce, or the SAIC, or its local branches may revoke violators’ licenses or permits for their advertising business operations.

To fulfill these monitoring functions specified by the PRC laws and regulations set forth above, we have taken several measures. In almost all of our advertising agreements, we require the advertising agencies or advertisers that entered into agreements with us: (i) ensure the advertising content provided to us is true, accurate and in full compliance with PRC laws and regulations; (ii) ensure such content does not infringe any third-party’s rights and interests; and (iii) indemnify us for any liabilities arising from such advertising content. In addition, a team of our employees reviews advertising materials to ensure the content does not violate relevant laws and regulations before displaying such advertisements. If we find that any advertisement is not in compliance with relevant legal requirements, we will not place those advertisements on our websites and platform. However, we cannot assure you that all the content contained in such advertisements is true and accurate as required by the advertising laws and regulations, especially given the uncertainty in the application of these laws and regulations. If we are found to be in violation of applicable PRC advertising laws and regulations in the future, we may be subject to penalties and our reputation may be harmed, which may have a material and adverse effect on our business, financial condition and results of operations.

We face risks relating to third parties' billing and payment systems.

The billing and payment systems of third parties such as online third-party payment processors help us maintain accurate records of payments of sales proceeds by certain subscribers and other paying users and collect such payments. Our business and results of operations could be adversely affected if these third parties fail to accurately account for or calculate the revenues generated from the sales of our products and services. Moreover, if there are security breaches or failure or errors in the payment process of these third parties, user experience may be affected and our business results may be negatively impacted.

The channels for the payment of our services and products typically comprise third-party online system, fixed phone line and mobile phone payment. A significant portion of the payments have been made through our online payment system since 2014. Although we have been able to control our payment handling charges by encouraging our subscribers to use the third-party online system which charges relatively lower levels of handling fees compared with other payment channels, the subscribers may change their habits to make payments through mobile phones or other distribution channels with higher costs. If more and more subscribers use the mobile phone as their payment channels and the cost remains unchanged or even increases in the future, or if we fail to minimize the associated payment handling charges, our results of operations may be adversely affected.

We also do not have control over the security measures of our third-party payment service providers, and security breaches of the online payment systems that we use could expose us to litigation and possible liability for failing to secure confidential customer information and could, among other things, damage our reputation and the perceived security of all of the online payment systems we use. In addition, there may be billing software errors that would damage customer confidence in these payment systems. If any of the above were to occur, we may lose paying users and users may be discouraged from purchasing our products, which may have an adverse effect on our business and results of operations.

We have granted, and may continue to grant, share awards under our share incentive plans, which may result in increased share-based compensation expenses.

We have granted share-based compensation awards, including share options and restricted shares, to various employees, key personnel and other non-employees to incentivize performance and align their interests with ours. We adopted a share incentive plan on December 30, 2010, or the 2010 Plan, a second share incentive plan on November 18, 2013, as supplemented, or the 2013 Plan, and a third share incentive plan on April 24, 2014, as supplemented, or the 2014 plan. Under the 2010 Plan, we are authorized to issue a maximum number of 26,822,828 common shares of our company upon exercise of the options or other types of awards (excluding an aggregate of 8,410,200 shares already issued to the directors who are our founders upon exercise of founder options, which were not granted pursuant to the 2010 Plan). Under the 2010 Plan, we have granted to certain executive officers and other employees options (excluding those forfeited) to purchase a total of 10,978,050 common shares as of March 31, 2020, among which 10,000 were outstanding as of the same date. In addition, we have also granted 7,369,315 restricted shares (excluding those forfeited) under the 2010 Plan as of March 31, 2020. Under the 2013 Plan, we are authorized to issue a maximum number of 9,073,732 common shares to members of our senior management, counsel or consultant to our company. As of March 31, 2020, 7,067,230 restricted shares (excluding those forfeited) have been granted to certain executive officers and other employees under the 2013 Plan. Under the 2014 Plan, we are authorized to issue a maximum number of 14,195,412 common shares to our directors, officers, employees and advisors or consultants to our company. As of March 31, 2020, 9,263,350 restricted shares (excluding those forfeited) have been granted to certain executive officers and other employees under the 2014 Plan. As of March 31, 2020, our unrecognized share-based compensation expenses relating to the awards granted under each of the 2010 Plan, the 2013 Plan and the 2014 Plan amounted to US$8.0 million, nil and US$0.4 million, respectively. See "Item 6. Directors, Senior Management and Employees—B. Compensation—Share incentive plans" for details.

We will issue the equivalent number of common shares upon the vesting and exercise of these options. The amount of these expenses is based on the fair value of the share-based compensation award we granted. The expenses associated with share-based compensation have affected our net income and may reduce our net income in the future, and any additional securities issued under share-based compensation schemes will dilute the ownership interests of our shareholders, including holders of our ADSs. We believe the granting of incentive awards is of significant importance to our ability to attract and retain key personnel and employees, and we will continue to grant stock options, restricted shares and other share awards to employees in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

The continuing and collaborative efforts of our senior management and key employees are crucial to our success, and our business may be harmed if we were to lose their services.

Our success depends on the continual efforts and services of our senior management team. If one or more of our executives or other key personnel are unable or unwilling to continue to provide services to us for whatever reasons, we may not be able to find suitable replacements easily or at all. Competition for management and key personnel in our industry is intense and the pool of qualified candidates is limited. We may not be able to retain the services of our executives or key personnel, or attract and retain experienced executives or key personnel in the future. If any of our executive officers or key employees joins a competitor or forms a competing company, we may lose advertisers, know-how and key professionals and staff members. Each of our executive officers has entered into an employment agreement (including a non-compete provision) with us. However, if any dispute arises between us and our executives or key employees, these agreements may not be enforceable in China, where these executives and key employees reside, in light of uncertainties with China's legal system.

In addition, while we often grant additional incentive shares to management personnel and other key employees after their hire dates, the initial grants are usually much larger than subsequent grants. Employees may be more likely to leave us after their initial incentive share grant fully vests, especially if the value of the incentive shares has significantly appreciated in value relative to the exercise price. If any member of our senior management team or other key personnel leaves our company, our ability to successfully operate our business and execute our business strategy could be impaired.

Any misconduct of our employees may negatively affect our reputation and corporate image, which in turn may adversely affect our business and prospects.

We believe that maintaining and enhancing our reputation and corporate image is of significant importance to the success of our business. If any of our employees engaged in any misconduct, whether or not related to the employee's work at our company, it may negatively affect our reputation and corporate image. Historically, there has been negative publicity about our company and our management, which adversely affected our brand, public image and reputation. A member of our senior management team who is also our director was subject to certain legal sanctions in China in the past due to copyright infringement activities when working at another company unrelated to us. Even though the infringement activities took place a number of years before the executive joined our company and had nothing to do with us, the past misconduct of the executive and the sanctions he was subject to may negatively affect our reputation and corporate image, which in turn may adversely affect our business and prospects. As part of our internal compliance procedures, we routinely conduct internal audits and inspections, including exit interviews and audits, on current and former employees. Any misconduct by our current or former employees uncovered from such compliance procedures, whether the misconduct relates to the employees' work with us, would potentially have material adverse impact on our reputation, results of operations, financial performance or future prospectus. In addition, we may also face disputes with former or current disgruntled employees. Any allegations against us, with or without merits, may negatively affect our reputation and corporate image.

We may not be able to effectively identify or pursue targets for acquisitions or investment, even if we complete such transactions, we may be unable to successfully integrate the acquired businesses into, or realize anticipated benefits to, our business, and our equity investments may suffer impairment loss as a result of unsatisfactory target company performance, each of which may adversely affect our growth and results of operations.

We have in the past and may in the future selectively acquire or invest in other businesses, including those that complement our existing business. We may not, however, be able to identify suitable targets for acquisitions or investments in the future. Even if we are able to identify suitable candidates, we may be unable to complete a transaction on terms commercially acceptable to us. If we fail to identify appropriate candidates or complete the desired transactions, our growth may be impeded. If the target companies we invest in produce unsatisfactory results, we may suffer impairment loss in our equity investment.

Even if we complete the desired acquisitions or investment, such acquisitions and investment may expose us to new operational, regulatory, market and geographic risks and challenges, including:

- diversion of our management's attention and other resources from our existing business;
- our inability to maintain the key business relationships and the reputation of the businesses we acquire or invest in;
- our inability to retain key personnel of the acquired or invested company;
- uncertainty of entry into markets in which we have limited or no prior experience and in which competitors have stronger market positions;
- failure to comply with laws and regulations as well as industry or technical standards of the markets into which we expand;
- our dependence on unfamiliar affiliates and partners of the companies we acquire or invest in;

- unsatisfactory performance of the businesses we acquire or invest in;
- our responsibility for the liabilities associated with the businesses we acquire, including those that we may not anticipate;
- goodwill impairment risks associated with the businesses that we acquire;
- our inability to integrate acquired technology into our business and operations;
- our inability to develop and maintain a successful business model and to monetize and generate revenues from the businesses we acquire; and
- our inability to maintain internal standards, controls, procedures and policies.

Any of these events could disrupt our ability to manage our business. These risks could also result in our failure to derive the intended benefits of the acquisitions or investments, and we may be unable to recover our investment in such initiatives or may have to recognize impairment charges as a result.

Furthermore, the financing and payment arrangements we use in any acquisition could have a negative impact on you as an investor, because if we issue shares in connection with an acquisition, your holdings could be diluted. Moreover, if we take on significant debt to finance such acquisitions, we would incur additional interest expenses, which would divert resources from our working capital and potentially have a material adverse impact on our results of operations.

Strategic alliances, investments or acquisitions may have a material and adverse effect on our business, reputation, results of operations and financial condition.

We may enter into strategic alliances with various third parties to further our business purposes from time to time. Strategic alliances with third parties could subject us to a number of risks, including risks associated with sharing proprietary information, non-performance by the counterparty, and an increase in expenses incurred in establishing new strategic alliances, any of which may materially and adversely affect our business. We may have little ability to control or monitor their actions. To the extent the third parties suffer negative publicity or harm to their reputations from events relating to their business, we may also suffer negative publicity or harm to our reputation by virtue of our association with such third parties.

We have in the past invested in or acquired additional assets, technologies or businesses that are complementary to our existing business. If we are presented with appropriate opportunities, we may continue to do so in the future. Investments or acquisitions and the subsequent integration of new assets and businesses into our own would 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. The costs of identifying and consummating investments and acquisitions may be significant. We may also incur significant expenses in obtaining necessary approvals from relevant government authorities in China and elsewhere in the world. In addition, investments and acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities and exposure to potential unknown liabilities or legal risks of the acquired business. The cost and duration of integrating newly acquired businesses could also materially exceed our expectations. Any such negative developments could have a material adverse effect on our business, financial condition and results of operations.

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

The industries in which we operate, including the mobile internet industry, may be affected by economic downturns. For example, a prolonged slowdown in the world economy, including in the Chinese economy, may lead to a reduced amount of mobile internet advertising, which could materially and adversely affect our business, financial condition and results of operations. In addition, certain of our products and services may be viewed as discretionary by our users, who may choose to discontinue or reduce spending on such products and services during an economic downturn. In such an event, our ability to retain existing users and increase new users will be adversely affected, which would in turn negatively impact our business and results of operations.

Moreover, a slowdown or disruption in the global or Chinese economy may have a material and adverse impact on financings available to us. In addition, COVID-19 had a severe and negative impact on the Chinese and the global economy in the first quarter of 2020. Whether this will lead to a prolonged downturn in the economy is still unknown. Even before the outbreak of COVID-19, the global macroeconomic environment was facing numerous challenges. The growth rate of the Chinese economy had already been slowing since 2010. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies which had been adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China, even before 2020. The weakness in the economy could erode investor confidence, which constitutes the basis of the credit market. Unrest, terrorist threats and the potential for war in the Middle East and elsewhere may increase market volatility across the globe. There have also been concerns about the relationship between China and other countries, including the surrounding Asian countries, which may potentially have economic effects. In particular, there is significant uncertainty about the future relationship between the United States and China with respect to trade policies, treaties, government regulations and tariffs. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China. The unstable economy affecting the financial markets and banking system may significantly restrict our ability to obtain financing in the capital markets or from financial institutions on commercially reasonable terms, or at all. Although we are uncertain about the extent to which the global financial and economic fluctuations and slowdown of Chinese economy may impact our business in the short-term and long-term, there is a risk that our business, results of operations, financial condition, and prospects would be materially and adversely affected by any severe or prolonged slowdown in the global or Chinese economy.

Our operations depend on the performance of the internet infrastructure in China.

The successful operation of our business depends on the performance of the internet infrastructure and telecommunications networks in China. In China, almost all access to the internet is maintained through state-owned telecommunications operators under the administrative control and regulatory supervision of the MIIT. Moreover, we have entered into contracts with various subsidiaries of a limited number of telecommunications service providers in each province for network-related services. On the one hand, if the internet industry in China does not grow as quickly as expected, our business and operations will be negatively affected. We have limited access to alternative networks or services in the event of disruptions, failures or other problems with China's internet infrastructure or the telecommunications networks provided by telecommunications service providers. In addition, our network and website regularly serve a large number of users and advertisers. With the expansion of our business, we may be required to upgrade our technology and infrastructure to keep up with the increasing traffic on our website. However, we have no control over the costs of the services provided by telecommunications service providers. If the prices we pay for telecommunications and internet services rise significantly, our results of operations may be materially and adversely affected. If internet access fees or other charges to internet users increase, our user traffic may decline and our business may be harmed. On the other hand, if the internet industry grows faster than expected and we cannot react to the market demand in a timely manner in terms of our research and development effort, the user experience and the attractiveness of our services may be harmed, which will negatively impact our business and results of operations.

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 or fail to meet our reporting obligations, and investor confidence in our company and the market price of our ADSs may be adversely affected.

We are subject to reporting obligations under the U.S. securities laws. The SEC, as required under Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring every public company 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 our internal control over financial reporting. As we are not an emerging growth company anymore, we are now subject to the requirement to provide attestation by our independent registered public accounting firm on effectiveness of internal control over financial reporting.

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this annual report, as required by Rule 13a-15(b) under the Exchange Act. Our management has concluded that our internal control over financial reporting was effective as of December 31, 2019. Our independent registered public accounting firm, PricewaterhouseCoopers Zhong Tian LLP, also attested that our internal control over financial reporting is effective. However, if we fail to maintain effective internal control over financial reporting in the future, we could suffer material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our ADSs. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from the stock exchange on which we list, regulatory investigations and civil or criminal sanctions. We may also be required to restate our financial statements from prior periods.

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

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

Our operations may be vulnerable to interruption and damage from natural and other types of catastrophes, including earthquakes, fire, floods, hail, windstorms, severe winter weather (including snow, freezing water, ice storms and blizzards), environmental accidents, power loss, communications failures, explosions, man-made events such as terrorist attacks and similar events. Due to their nature, we cannot predict the incidence, timing and severity of catastrophes. If any such catastrophe or extraordinary event occurs in the future, our ability to operate our business could be seriously impaired. Such events could make it difficult or impossible for us to deliver our services and products to our users and could decrease demand for our products. As we do not carry property insurance and significant time could be required to resume our operations, our financial position and results of operations could be materially and adversely affected in the event of any major catastrophic event.

In addition, our business could be materially and adversely affected by the outbreak of pandemics such as influenza A (H1N1), avian influenza, H7N9, severe acute respiratory syndrome (SARS) or other epidemics. Any occurrence of these pandemic diseases or other adverse public health developments in China or elsewhere could severely disrupt our staffing or the staffing of our business partners, including our advertisers, and otherwise reduce the activity levels of our work force and the work force of our business partners, causing a material and adverse effect on our business operations. During the outbreak of COVID-19, the Chinese government took a number of actions in an effort to contain the virus, including extending the Chinese New Year holiday, quarantining and otherwise treating individuals in China who had the coronavirus, asking people to remain at home and to avoid gathering in public. The COVID-19 has also resulted in temporary closure of many corporate offices, retail stores, and manufacturing facilities and factories across China. In response to the epidemic, we also made remote working arrangement and suspended our offline work and all our business travels to ensure the safety and health of our employees. As a result, our customer service capacity was compromised which might have adversely affected our users' experience. In addition, we strictly followed the prophylactic measures and guidelines issued by the local government authorities. As of the date of this annual report, we had resumed offline work, but we still could not travel as freely as we did prior to the pandemic for business development.

The measures we took to cope with the COVID-19 reduced our business operation capacity and may also negatively affect our business operations in the future. As the COVID-19 has become a global health crisis and caused huge negative impact on the Chinese economy and the global economy, our users and business partners may be negatively affected, and thus there might be decreases in demand for our products or services. For example, if the COVID-19 results in higher unemployment, people's disposable income may reduce, which in turn will result in their unwillingness or inability to pay for our products and services. Further, we have equity investments in a number of private companies and COVID-19 may make some or all of them insolvent and hence lead to investment write-offs by us. There are many uncertainties regarding the COVID-19 pandemic, including the anticipated duration of the pandemic, and the extent of local and worldwide social, political, and economic disruption it may cause. It is also uncertain whether or not COVID-19 or a mutated version of the coronavirus will return in the future. While, to our knowledge, the COVID-19 pandemic has not materially and adversely impacted our business, operations, or financial results as of the date of this annual report, it may have far-reaching impact, directly and indirectly, on many aspects of our operations, including potential impact on our customers, product users, suppliers, employees, cooperation partners, and the market in general, and the scope and nature of the impact continue to evolve. While many of the restrictions on movement within China have been relaxed as of the date of this annual report, there is great uncertainty as to the future progress of the disease. Currently, there is no vaccine or specific anti-viral treatment for COVID-19. Relaxation of restrictions on economic and social life may lead to new cases which may lead to the reimposition of restrictions. We will continue to monitor and assess the development of the COVID-19 pandemic and intend to make adjustments to our business accordingly.

Risks Related to Our Corporate Structure

If the PRC government finds that the agreements that establish the structure for operating our businesses in China do not comply with PRC governmental restrictions on foreign investment in internet-related business and foreign investors' mergers and acquisition activities in China, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.

Current PRC laws and regulations place certain restrictions on foreign ownership of companies that engage in internet businesses, including the provision of online game and online advertising services. For example, foreign investors' equity interests in value-added telecommunication service providers, other than e-commerce service providers, may not exceed 50%, and the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises (2016 Revision) requires that the major foreign investor in a value-added telecommunication service provider in China must have experience in providing value-added telecommunications services overseas and maintain a good track record. In addition, foreign investors are prohibited from investing in or operating entities engaged in, among others, internet cultural operating service, internet news service, and online transmission of audio-visual programs service. We are a Cayman Islands company and Giganology (Shenzhen) Ltd., or Giganology Shenzhen and Xunlei Computer (Shenzhen) Co., Ltd., or Xunlei Computer, our PRC subsidiaries, are considered foreign-invested enterprises. Accordingly, neither of these two PRC subsidiaries is eligible to provide value-added telecommunication services and the aforementioned internet related services in China. As a result, we conduct our operations in China principally through contractual arrangements among Giganology Shenzhen and Shenzhen Xunlei and its shareholders. Shenzhen Xunlei or its subsidiaries hold the licenses and permits necessary to conduct our resource discovery network, online advertising, online games, cloud computing and related businesses in China, and Shenzhen Xunlei hold various operating subsidiaries that conduct a majority of our operations in China. Our contractual arrangements with Shenzhen Xunlei and its shareholders enable us to exercise effective control over Shenzhen Xunlei and Shenzhen Xunlei's operating subsidiaries and hence treat them as our consolidated entities and consolidate their results. For a detailed discussion of these contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure."

We cannot assure you, however, that we will be able to enforce these contracts. Although we have been advised by King & Wood Mallesons, our PRC legal counsel, that each contract under these contractual arrangements with Shenzhen Xunlei and its shareholders is valid, binding and enforceable under current PRC laws and regulations, we cannot assure you that the PRC government would agree that these contractual arrangements comply with PRC licensing, registration or other regulatory requirements, with existing policies or with requirements or policies that may be adopted in the future. PRC laws and regulations governing the validity of these contractual arrangements are uncertain and the relevant government authorities have broad discretion in interpreting these laws and regulations. If the PRC government determines that we do not comply with applicable laws and regulations, it could revoke our business and operating licenses, require us to discontinue or restrict our operations, impose fines, restrict our right to collect revenues, block our website, require us to restructure our operations, impose additional conditions or requirements with which we may not be able to comply, or take other regulatory or enforcement actions against us that could be harmful to our business. The imposition of any of these penalties would result in a material and adverse effect on our ability to conduct our business.

We rely on contractual arrangements with our variable interest entity in China and its shareholders for our operations, which may not be as effective as direct ownership in providing operational control the variable interest entity and its subsidiaries.

Since PRC laws restrict foreign equity ownership in companies engaged in internet business in China, we rely on contractual arrangements with Shenzhen Xunlei, our VIE, and the shareholders of Shenzhen Xunlei to operate our business in China. If we had direct ownership of Shenzhen Xunlei, we would be able to exercise our rights as a shareholder to effect changes in the board of directors of Shenzhen Xunlei, which in turn could effect changes at the management level, subject to any applicable fiduciary obligations. However, under the current contractual arrangements, we rely on Shenzhen Xunlei and its shareholders' performance of their contractual obligations to exercise effective control. In addition, our operating contract with Shenzhen Xunlei has an initial term of ten years and an extended term of ten years since 2016. The operating contract is subject to Giganology Shenzhen's unilateral termination right and may be extended as requested by Giganology Shenzhen. In general, none of Shenzhen Xunlei or its shareholders may terminate the contracts prior to the expiration date. However, the shareholders of Shenzhen Xunlei may not act in the best interests of our company or may not perform their obligations under these contracts, including the obligation to renew these contracts when their initial contract term expires. Such risks exist throughout the period in which we intend to operate our business through the contractual arrangements with Shenzhen Xunlei. We may replace the shareholders of Shenzhen Xunlei at any time pursuant to our contractual arrangements with Shenzhen Xunlei and its shareholders. However, if any dispute relating to these contracts remains unresolved, we will have to enforce our rights under these contracts through the operations of PRC law and courts and therefore will be subject to uncertainties in the PRC legal system. See "—Any failure by Shenzhen Xunlei or its shareholders to perform their obligations under our contractual arrangements with them may have a material adverse effect on our business" and "Item 4. Information on the Company—C. Organizational Structure." Therefore, these contractual arrangements may not be as effective as direct ownership in providing us with control over Shenzhen Xunlei.

Any failure by Shenzhen Xunlei or its shareholders to perform their obligations under our contractual arrangements with them may have a material adverse effect on our business.

Shenzhen Xunlei or its shareholders may fail to take certain actions required for our business or follow our instructions despite their contractual obligations to do so. If they fail to perform their obligations under their respective agreements with us, we may have to rely on legal remedies under PRC law, including seeking specific performance or injunctive relief, which may not be effective. As of the date of this annual report, Mr. Sean Shenglong Zou, our co-founder and director, owned 76% of the equity interest in Shenzhen Xunlei, our variable interest entity. Under the equity pledge agreement among Giganology Shenzhen and the shareholders of Shenzhen Xunlei, as amended, the shareholders of Shenzhen Xunlei have pledged all of their equity interests in Shenzhen Xunlei to Giganology Shenzhen to guarantee Shenzhen Xunlei and its shareholders' performance of their respective obligations under the related contractual arrangements. In addition, the shareholders of Shenzhen Xunlei have completed the registration of equity pledge under the equity pledge agreement with the competent governmental authority. Pursuant to the contractual arrangements, we have the right to replace any shareholders of Shenzhen Xunlei at any time. For example, if any of the shareholders of Shenzhen Xunlei refuses or fails to perform his or her obligations under the contractual arrangements due to his or her significant equity interest in Shenzhen Xunlei and his or her relatively smaller percentage of equity interest in our Company, we can enforce the contractual arrangements and transfer his or her equity interests to another appointee of Giganology Shenzhen. However, we cannot assure you that such transfer can be implemented successfully. As a result, there are risks that we might not be able to have an effective control over our variable interest entity in the future.

Moreover, the exercise of call options under the equity interest disposal agreement, the intellectual properties purchase option agreement and certain other contractual arrangements will be subject to the review and approval of competent governmental authorities and incur additional expenses.

All of these contractual arrangements are governed by PRC law and provide for the resolution of disputes through arbitration in the PRC. Accordingly, these contracts would be interpreted in accordance with PRC law and any disputes would be resolved in accordance with PRC legal procedures. The legal environment in the PRC is not as developed as in certain other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements, which may make it difficult to exert effective control over our variable interest entity and its subsidiaries, and our ability to conduct our business may be adversely affected.

Contractual arrangements with our variable interest entity may result in adverse tax consequences to us.

Under applicable PRC tax laws and regulations, arrangements and transactions among related parties may be subject to audit or scrutiny by the PRC tax authorities within ten years after the taxable year when the arrangements or transactions are conducted. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on tax—PRC enterprise income tax." We could face material and adverse tax consequences if the PRC tax authorities were to determine that the contractual arrangements among Giganology Shenzhen, our wholly-owned subsidiary in China, and Shenzhen Xunlei, our variable interest entity in China and its shareholders, as well as the intellectual property framework agreement between Xunlei Computer and Shenzhen Xunlei were not entered into on an arm's-length basis and therefore constituted unfavorable transfer pricing arrangements. Unfavorable transfer pricing arrangements could, among other things, result in an upward adjustment on taxation, and the PRC tax authorities may impose interest on late payments on Shenzhen Xunlei, for the adjusted but unpaid taxes. Our results of operations may be materially and adversely affected if Shenzhen Xunlei's tax liabilities increase significantly or if it is required to pay interest on late payments.

The shareholders of Shenzhen Xunlei may have potential conflicts of interest with us, which may materially and adversely affect our business.

Sean Shenglong Zou, Hao Cheng, Fang Wang, Jianming Shi and Guangzhou Shulian Information Investment Co., Ltd. are shareholders of Shenzhen Xunlei. We provide no incentives to the shareholders of Shenzhen Xunlei for the purpose of encouraging them to act in our best interests in their capacity as the shareholders of Shenzhen Xunlei. We may replace the shareholders of Shenzhen Xunlei at any time pursuant to the currently effective equity option agreements between us and these shareholders.

As a director and/or executive officer of our company, Mr. Zou and Mr. Cheng each has a duty of loyalty and care to us under Cayman Islands law. We are not aware that other publicly listed companies in China with a similar corporate and ownership structure as ours have brought conflicts of interest claims against the shareholders of their respective variable interest entities. However, we cannot assure you that when conflicts arise, the shareholders of Shenzhen Xunlei will act in the best interests of our company or that conflicts will be resolved in our favor. If we cannot resolve any conflicts of interest or disputes between us and the shareholders of Shenzhen Xunlei, we would have to rely on legal proceedings, which may be expensive, time-consuming and disruptive to our operations. There is also substantial uncertainty as to the outcome of any such legal proceedings.

We may rely principally on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have. Any limitation on the ability of Giganology Shenzhen and Xunlei Computer to pay dividends to us could have a material adverse effect on our ability to conduct our business.

We are a holding company and we may rely principally on dividends and other distributions on equity paid by our wholly-owned PRC subsidiaries including Giganology Shenzhen and Xunlei Computer, for our cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders and service any debt we may incur. If Giganology Shenzhen incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us. In addition, the PRC tax authorities may require us to adjust our taxable income under the contractual arrangements Giganology Shenzhen currently has in place with Shenzhen Xunlei, our variable interest entity, as well as the intellectual property framework agreement between Xunlei Computer and Shenzhen Xunlei, in a manner that would materially and adversely affect its ability to pay dividends and other distributions to us. As of December 31, 2019, we had cash or cash equivalents of approximately RMB 322.9 million (US$46.3 million) and US$106.2 million located within the PRC, of which RMB169.5 million (US$24.3 million) and US$10.5 million is held by Shenzhen Xunlei and its subsidiaries. We also have restricted cash of RMB 20.8 million (US$3.0 million) as of December 31, 2019. The transfer of all the cash or cash equivalents is subject to PRC government's restrictions on currency conversion.

Under PRC laws and regulations, Giganology Shenzhen and Xunlei Computer, as wholly foreign-owned enterprises in the PRC, may pay dividends only out of its accumulated after-tax profits as determined in accordance with PRC accounting standards and regulations. In addition, wholly foreign-owned enterprises such as Giganology Shenzhen and Xunlei Computer are required to set aside at least 10% of their accumulated after-tax profits each year, if any, to fund certain statutory reserve funds, until the aggregate amount of such a fund reaches 50% of their respective registered capital. At their discretion, wholly foreign-owned enterprises may allocate a portion of their after-tax profits based on PRC accounting standards to staff welfare and bonus funds. These reserve funds and staff welfare and bonus funds are not distributable as cash dividends. Any limitation on the ability of Giganology Shenzhen and Xunlei Computer to pay dividends or make other distributions to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business. See also "—Risks related to doing business in China—Our global income may be subject to PRC taxes under the PRC EIT Law, which may have a material adverse effect on our results of operations."

PRC regulation of loans to, and direct investment in, PRC entities by offshore holding companies and governmental control of currency conversion may restrict or prevent us from making loans to our PRC subsidiaries and variable interest entity and its subsidiaries or making additional capital contributions to our PRC subsidiaries, which may materially and adversely affect our liquidity and our ability to fund and expand our business.

We may (i) make additional capital contributions to our PRC subsidiaries, (ii) establish new PRC subsidiaries and make capital contributions to these new PRC subsidiaries, (iii) make loans to our PRC subsidiaries or variable interest entity and its subsidiaries, or (iv) acquire offshore entities with business operations in China in an offshore transaction. However, most of these uses are subject to PRC regulations and approvals. For example:

- loans by us to our PRC subsidiaries, which are foreign-invested enterprises, to finance their respective activities cannot exceed statutory limits and must be registered with the PRC State Administration of Foreign Exchange, or SAFE, or its local branches; and

- loans by us to our variable interest entity, which is a domestic PRC entity, may not exceed the statutory limit, and any medium or long-term loan we extend to our variable interest entity must be recorded and registered by the National Development and Reform Commission and SAFE or its local branches.

On August 29, 2008, SAFE promulgated 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 No. 142, regulating the conversion by a foreign-invested enterprise of foreign currency registered capital into Renminbi by restricting how the converted Renminbi may be used. SAFE Circular No. 142 provides that the Renminbi 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 governmental authority and unless otherwise provided by law, such Renminbi capital may not be used for equity investments within the PRC. SAFE also strengthened its oversight of the flow and use of the Renminbi capital converted from foreign currency registered capital of a foreign-invested company. The use of such Renminbi capital may not be altered without SAFE approval, and such Renminbi capital may not in any case be used to repay Renminbi loans if the proceeds of such loans have not been used. Violations of SAFE Circular No. 142 could result in severe monetary or other penalties. On March 30, 2015, SAFE issued SAFE Circular No. 19, which took effect and replaced SAFE Circular No. 142 as of June 1, 2015 and the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Policy on the Management of Foreign Exchange Settlement under Capital Account, or SAFE Circular No. 16, which became effective on June 9, 2016. Although SAFE Circular No. 19 and SAFE Circular No. 16 allow for the use of RMB converted from the foreign currency denominated capital for equity investments in the PRC, the restrictions will continue to apply as to foreign-invested enterprises' use of the converted RMB for purposes beyond the business scope, for the loans to non-associated companies or issuing inter-company RMB loans.

We may lose the ability to use and enjoy assets held by our variable interest entity and its subsidiaries that are important to the operation of our business if any of such entities goes bankrupt or becomes subject to a dissolution or liquidation proceeding.

As part of our contractual arrangements with our variable interest entity, our variable interest entity and its subsidiaries hold certain assets that are important to the operation of our business, including patents for the proprietary technology and related domain names and trademarks. If any of our variable interest entity or its subsidiaries 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. Under the contractual arrangements, our variable interest entity and its subsidiaries may not, in any manner, sell, transfer, mortgage or dispose of their assets or legal or beneficial interests in the business without our prior consent. If our variable interest entity 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.

Uncertainties exist with respect to the interpretation and implementation of the newly enacted PRC 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 National People's Congress enacted the Foreign Investment Law, which came into effect on January 1, 2020 and 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 Foreign Investment Law embodies an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. However, since it is relatively new, uncertainties still exist in relation to its interpretation and implementation. For instance, under the Foreign Investment Law, "foreign investment" refers to the investment activities directly or indirectly conducted by foreign individuals, enterprises or other entities in China. Though it does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition in the future. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. In any of these cases, it will be uncertain whether our contractual arrangements will be deemed to be in violation of the market access requirements for foreign investment under the PRC laws and regulations. Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

Risks Related to Doing Business in China

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

Substantially all of our assets and operations are located in China. Accordingly, our business, financial condition, results of operations and prospects may be influenced to a significant degree by political, economic and social conditions in China generally 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 government. In addition, the Chinese government continues to play a significant role in regulating industry development by imposing industrial policies. The Chinese government also exercises significant control over China's economic growth through allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment to particular industries or companies, such as those qualified to operate in free trade zones designated in certain major cities in China.

While the Chinese economy has experienced significant growth over the past decades, growth has been uneven, both geographically and among various sectors of the economy and the rate of growth has been slowing. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall Chinese economy, but may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations. The growth rate of the Chinese economy has gradually slowed since 2010, and the impact of COVID-19 on the Chinese economy in 2020 is likely to be severe. Any prolonged slowdown in the Chinese economy may reduce the demand for our products and services and materially and adversely affect our business and results of operations.

Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform.

China has strict regulations governing telecommunication service providers, internet and wireless access and the distribution of news and other information. Under these regulations, internet content providers, or ICPs, like us are prohibited from posting or displaying over the internet or wireless networks content that, among other things, violates PRC laws and regulations. If an ICP finds that prohibited content is transmitted on its website or stored in its system, it must terminate the transmission of such information or delete such information immediately and keep records and report to relevant authorities. Failure to comply with these requirements could lead to the revocation of the VATS License, which is required for our ICP services and other required licenses and the closure of the offending websites, and cloud network operators or website operators may also be held liable for prohibited content displayed on, retrieved from or linked to such network or website. We monitor digital media contents on our platform and periodically review and inspect whether there are contents that violate relevant PRC laws and regulations. However, we cannot assure you that we will always be able to identify and remove in a timely manner all digital media contents on our platform that violate relevant PRC laws and regulations. If we fail to timely remove relevant contents, we may be subject to relevant legal liabilities. In addition, efforts to constantly self-monitor in order to comply with these requirements could negatively impact user experience and lead to a decline in user numbers.

The Chinese government intensified its efforts to remove inappropriate content disseminated over the internet and wireless networks, and our efforts to monitor content on our platform and website led to a decline in subscriber numbers in the past few years. In April 2014, the Chinese government initiated a campaign to enhance and enforce its scrutiny on internet content in China, particularly for pornographic content, and various websites were subject to penalties and in some cases outright suspension of website operations. In December 2018, the Office of the Central Cyberspace Affairs Commission of China, or CAC, launched a campaign against illegal activities and inappropriate content on mobile apps and undertook restrictive measures against thousands of mobile apps, including suspension of mobile app operations for an indefinite period of time or permanently shutting down the mobile app operations. We regularly conducted internal compliance investigation to ensure that the content transmitted by our products is in compliance with the standards set out by the authorities. To date, we have deleted millions of cached files, blocked over one million digital files and added thousands of key words to our automatic keyword filtration system. In addition, we permitted temporary suspension of services by about 181,000 existing subscribers as of the end of 2019. We may experience still further decline in user and subscriber numbers as we continue in our efforts to comply with the rules and regulations of the Chinese government.

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

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

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

Uncertainties with respect to the PRC legal system could adversely affect us.

We conduct our business primarily through our PRC subsidiaries and variable interest entity and its subsidiaries in China. Our operations in China are governed by PRC laws and regulations. Giganology Shenzhen is a foreign-invested enterprise and is subject to laws and regulations applicable to foreign investment in China and, in particular, laws applicable to foreign-invested enterprises. The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions under the civil law system may be cited for reference but have limited precedential value.

Over the past three decades, the PRC government has enacted legislation that has significantly enhanced the protections afforded to various forms of foreign investments in China. However, China has not developed a fully integrated legal system, and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. In particular, the interpretation and enforcement of these laws and regulations involve uncertainties. Since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy. These uncertainties may affect our judgment on the relevance of legal requirements and our ability to enforce our contractual or tort rights. In addition, the regulatory uncertainties may be exploited through unmerited or frivolous legal actions or threats in attempts to extract payments or benefits from us.

Furthermore, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all and may have retroactive effect. As a result, we may not be aware of our violation of any of these policies and rules until sometime after the violation. In addition, any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention.

We believe that our patents, trademarks, trade secrets, copyrights, and other intellectual property are important to our business. We rely on a combination of patent, trademark, copyright and trade secret protection laws in China and other jurisdictions, as well as confidentiality procedures and contractual provisions to protect our intellectual property and our brand. Protection of intellectual property rights in China may not be as effective as in the United States or other jurisdictions, and as a result, we may not be able to adequately protect our intellectual property rights, which could adversely affect our revenues and competitive position.

We may be adversely affected by the complexity, uncertainties and changes in PRC regulations of internet-related 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 resource discovery network and cloud computing. We do not own the resource discovery network and cloud computing due to the restriction of foreign investment in businesses providing value-added telecommunication services in China, including internet content provision or CDN services. 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. This means that permits, licenses or operations at some of our companies 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. If we fail to maintain any of these required licenses or approvals, we may be subject to various penalties, including fines and discontinuation of or restriction on our operations. Any such disruption in our business operations may have a material and adverse effect on our results of operations.

- New laws and regulations may be promulgated that will regulate internet activities, including live streaming, online games and online advertising businesses. If these new laws and regulations 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.

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. For example, in September 2009, GAPPRFT and the National Office of Combating Pornography and Illegal Publications jointly published a notice, or Circular 13, which expressly prohibits foreign investors from participating in online game operating business via wholly owned, equity joint venture or cooperative joint venture investments in China, and from controlling and participating in such businesses directly or indirectly through contractual or technical support arrangements. Other government agencies with substantial regulatory authority over online game operations and foreign investment entities in China, such as MIIT and MOCT, did not join GAPPRFT in issuing Circular 13. While Circular 13 is applicable to us and our online game business on an overall basis, to date, GAPPRFT or SAPPRFT has not issued any interpretation of Circular 13 and, to our knowledge, has not taken any enforcement action under Circular 13 against any company that relies on contractual arrangements with affiliated entities to operate online games in China. We cannot assure you that we have obtained all the permits or licenses required for conducting our business in China or will be able to maintain our existing licenses or obtain any new licenses required under any new laws or regulations. 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.

Subject to interpretation by the relevant authorities, it may not be possible for us to determine in all cases the type of content that could result in liability for us, especially if the Chinese government continues to maintain or strengthen its heightened scrutiny on internet content in China. We may not be able to control or restrict all of the digital media content generated. transmitted or placed on our network by our users, despite our attempt to monitor and filter such content. To the extent that regulatory authorities find any portion of our content on our network or website objectionable or requiring any license or permit that we have not obtained, they may require us to limit or eliminate the dissemination of such information or otherwise curtail the nature of such content, and keep records and report to relevant authorities, which may reduce our user traffic. In addition, we may be subject to significant penalties for violations of those regulations arising from prohibited content displayed on, retrieved from or uploaded to our network or website, including a suspension or shutdown of our operations. The enforcement activities may be intensified in connection with any ongoing government campaigns. In addition, while we maintain a regular internal monitoring and compliance protocol, we cannot ascertain that we would not fall foul of any changing or new government regulations or standards in the future. If we receive a public warning from the relevant government authorities or our licenses for acceleration services are revoked, our reputation would be harmed and if the operation of our acceleration services or other products is suspended or shut down entirely or in part, our revenues and results of operation may be materially and adversely affected. Furthermore, the internal compliance investigation and the removal of content may have a material impact on our cloud acceleration services, which in turn may lead to a decrease in users and have an adverse effect on our revenues and results of operations. To date, we have not been able to quantify the magnitude and extent of such impact.

We may be sued by our game players and held liable for losses of virtual assets by such players, which may negatively affect our reputation and business, financial condition and results of operations.

While playing online games or participating in other online activities, players acquire and accumulate some virtual assets, such as special equipment and other accessories. Such virtual assets may 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.

Under the General Provisions of Civil Law, effective in October 2017, data and virtual assets are listed as civil rights protected by laws and must be protected according to specific rules governing such matters. However, 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, as well as required the game operators to provide well-developed security systems to protect such virtual assets owned by game players. 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.

Non-compliance with the laws or regulations governing virtual currency may result in penalties that could have a material adverse effect on our live streaming business and results of operations.

The Notice on the Reinforcement of the Administration of Online Games issued by the Ministry of Culture and other governmental authorities on February 15, 2007 directs the People's Bank of China to strengthen the administration of virtual currency to avoid any adverse impact on the PRC economic and financial system. This notice provides that the total amount of virtual currency issued by an operator and the amount of purchased by individual users should be strictly limited, with a strict and clear division between virtual transactions and real transactions carried out by way of electronic commerce. This notice also provides that virtual currency should only be used to purchase virtual items. We created virtual currency "Golden Coins" for the operation of our live streaming services. Users can purchase "Golden Coins" from us so that they can purchase virtual gifts on our living streaming platforms to reward broadcasters they like. "Golden Coins" can also be used to purchase other value-added services on our live streaming platforms. Other than virtual gifts and value-added services, "Golden Coins" cannot be used for any other purposes.

On June 4, 2009, the Ministry of Culture and the MOFCOM jointly issued the Notice on Strengthening the Administration of Online Game Virtual Currency, or the Virtual Currency Notice. The Virtual Currency Notice requires that the operators who engage in issuance of online game virtual currency or offering of online game virtual currency transaction services shall apply for approval from the MOC through its provincial branches. The term "virtual currency" is widely used in the live streaming industry, such term as used in the live streaming industry does not fall under the definition under the Virtual Currency Notice. Although we do not think Virtual Currency Notice applies to the operation of our live streaming platform, given the wide discretion of relevant governmental authorities and uncertainties in the regulatory environment, we cannot assure you that relevant governmental authorities will not in the future interpret the Virtual Currency Notice in a different way and subject our operation to the scope of the Virtual Currency Notice or issue new rules to regulate the virtual currency in our industry. In that case, our operation may be adversely affected.

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

The PRC government has, in recent years, intensified regulation on various aspects of the internet industry in China. For example, in January 2011, MIIT and seven other PRC central government authorities jointly issued a circular entitled Implementation Scheme regarding Parental Guardianship Project for Minors Playing Online Games, under which online game operators are required to adopt various measures to maintain a system to communicate with the parents or other guardians of minors playing their online games and are required to monitor online game activities of minors and suspend the accounts of minors if so required by their parents or guardians. In October 2019, General Administration of Press and Publication issued the Anti-indulgence Notice which imposed an array of restrictions on online game operators to prevent underage users from indulging in online games. The Anti-indulgence Notice also requires online game operators to take effective measures to restrict minors from using paid services that are inconsistent with their capacity for civil conduct. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on anti-fatigue system, real-name registration system and parental guardianship project." While we support these measures, these restrictions could also limit our ability to grow our user base for our online game business. Furthermore, if these restrictions are expanded to apply to adult game players in the future, our ability to grow our user base could be further limited and online games business could be materially and adversely affected.

Further, the PRC government has tightened its regulation of internet cafes in recent years. In particular, a large number of unlicensed internet cafes have been closed. The PRC government has imposed higher capital and facility requirements for the establishment of internet cafes. Furthermore, the PRC government's policy, which encourages the development of a limited number of national and regional internet cafe chains and discourages the establishment of independent internet cafes, may slow down the growth of internet cafes in China. In June 2002, the Ministry of Culture, together with other government authorities, issued a joint notice, and in February 2004, the State Administration for Industry and Commerce issued another notice, suspending the issuance of new internet cafe licenses. In May 2007, the State Administration for Industry and Commerce reiterated its position not to register any new internet cafes in 2007. In 2008, 2009 and 2010, the Ministry of Culture, the State Administration for Industry and Commerce and other relevant government authorities, individually or jointly, issued several notices that provide various ways to strengthen the regulation of internet cafes, including investigating and punishing internet cafes that accept minors, cracking down on internet cafes without sufficient and valid licenses, limiting the total number of internet cafes and approving internet cafes within the planning made by relevant authorities, screening unlawful and adverse games and websites, and improving the coordination of regulation over internet cafes and online games. Although currently most of our users access and consume our products and services from their own devices, if internet cafes become one of the main venues for our users to access our website or online games, any reduction in the number, or any slowdown in the growth, of internet cafes in China could limit our ability to maintain or increase our user base.

In addition, the Chinese government has in recent years intensified its efforts to remove inappropriate content disseminated over the internet and wireless networks. In April 2014, the Chinese government initiated a campaign to enhance and enforce its scrutiny over internet content in China, particularly for pornographic content, and various websites were subject to penalties and in some cases outright suspension of website operations. In August 2017, the CAC promulgated the Provisions on the Administration of Internet Comments Posting Services, and the Provisions on the Administration of Internet Forum and Community Services, both of which require providers of relevant services to establish information review and inspection mechanism. As we implemented programs to comply with these regulations, we saw our subscriber numbers decline and may see more subscriber or user decline in the future. See "—Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform."

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

Fluctuation in the value of the Renminbi may have a material adverse effect on the value of your investment. The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by changes in political and economic conditions and by China's foreign exchange policies, among other things. We cannot assure you that Renminbi will not appreciate or depreciate significantly in value against 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 Renminbi and the U.S. dollar in the future.

Our financial statements are expressed in U.S. dollars, and most of our assets, costs and expenses are denominated in Renminbi. Substantially all of our revenues were denominated in Renminbi. Any significant appreciation or depreciation of the RMB may materially and adversely affect our revenues, earnings and financial positions, and the value of, and any dividends payable on, our ADSs in U.S. dollars. For example, to the extent that we need to convert U.S. dollars into RMB to pay our operating expenses, 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, if we decide to convert our RMB 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 RMB would have a negative effect on the U.S. dollar amount available to us. In addition, a significant appreciation or depreciation in the value of the RMB relative to U.S. dollars would significantly reduce the U.S. dollar equivalent of our earnings regardless of any underlying change in our business or results of operations, which in turn could adversely affect the price of our ADSs.

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 RMB 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 controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of China. We receive substantially all of our revenues in Renminbi. Under our current corporate structure, our Cayman Islands holding company primarily relies on dividend payments from our wholly-owned PRC subsidiaries, to fund any cash and financing requirements we may have. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior SAFE approval by complying with certain procedural requirements. However, approval from or registration with appropriate government authorities is required where the Renminbi is to be converted into foreign currency and remitted out of China to pay capital expenses such as the repayment of loans denominated in foreign currencies. Specifically, under the existing exchange restrictions, without prior approval of SAFE, cash generated from the operations of our PRC subsidiaries in China may be used to pay dividends by our PRC subsidiaries to our company and pay employees of our PRC subsidiaries who are located outside China in a currency other than the Renminbi. With prior approval from or registration with SAFE, cash generated from the operations of our PRC subsidiaries and affiliated entity may be used to pay off debt in a currency other than the Renminbi owed by our PRC subsidiaries and variable interest entity and its subsidiaries to entities outside China, and make other capital expenditures outside China in a currency other than the Renminbi. If any of our variable interest entity or its subsidiaries liquidates, the proceeds from the liquidation of its assets may be used outside of the PRC or be given to investors who are not PRC nationals. The PRC government may at its discretion restrict access to foreign currencies for current account transactions in the future. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demand, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of our ADSs.

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

Among other things, the M&A Rules and certain regulations and rules concerning mergers and acquisitions established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex. For example, the M&A Rules require that the Ministry of Commerce be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise 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 by the State Council on September 18, 2018, are triggered. Moreover, the Anti-Monopoly Law promulgated by the SCNPC on August 30, 2007 and took effect on August 1, 2008 requires that transactions which are deemed concentrations and involve parties with specified turnover thresholds (i.e., during the previous fiscal year, (i) the total global turnover of all operators participating in the transaction exceeds RMB10 billion and at least two of these operators each had a turnover of more than RMB400 million within China, or (ii) the total turnover within China of all the operators participating in the concentration exceeded RMB2 billion, and at least two of these operators each had a turnover of more than RMB400 million within China) must be cleared by the Ministry of Commerce before they can be completed. In addition, according to the Implementing Rules Concerning Security Review on the Mergers and Acquisitions by Foreign Investors of Domestic Enterprises issued by the Ministry of Commerce in August 2011, mergers and acquisitions by foreign investors involved in an industry related to national security are subject to strict review by the Ministry of Commerce. These rules also prohibit any transactions attempting to bypass such security review, including by controlling entities through contractual arrangements. We believe that our business is not in an industry related to national security. However, we cannot preclude the possibility that the Ministry of Commerce or other government agencies may publish interpretations contrary to our understanding or broaden the scope of such security review in the future. Although we have no current definitive plans to make any acquisitions, we may elect to grow our business in the future in part by directly acquiring complementary businesses in China. Complying with the requirements of these regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the Ministry of Commerce, may delay or inhibit our ability to complete such transactions.

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

SAFE has promulgated several regulations that require PRC residents and PRC corporate entities to register with local branches of SAFE in connection with their direct or indirect offshore investment activities. These regulations apply to our shareholders who are PRC residents and may apply to any offshore acquisitions that we make in the future. SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE No. Circular No. 37, on July 4, 2014. SAFE Circular No. 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular No. 37 as a "special purpose vehicle." The term "control" under SAFE Circular No. 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular No. 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. If the shareholders of an offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries of the offshore holding company may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. In addition, on February 13, 2015, SAFE issued SAFE Circular No. 13, which took effect on June 1, 2015. SAFE Circular No. 13 delegates to the qualified banks the authority to register all PRC residents' investment in "special purpose vehicle" pursuant to SAFE Circular No. 37, except that those PRC residents who have failed to comply with SAFE Circular No. 37 will continue to fall within the jurisdiction of the relevant local SAFE branches and must continue to make their supplementary registration applications with the such local SAFE branches.

We have requested PRC residents holding direct or indirect interest in our company to our knowledge to make the necessary applications, filings and amendments as required under SAFE regulations. Mr. Sean Shenglong Zou, Mr. Hao Cheng and Ms. Fang Wang have completed the initial registration with the local SAFE branch as required by the SAFE regulations. However, we cannot assure you that these PRC resident shareholders have completed and will complete all subsequent amendment registrations as required by the SAFE regulations as we do not have control over these PRC resident shareholders. We may also not be informed of the identities of all the PRC residents holding direct or indirect interest in our company, and we cannot provide any assurances that these PRC residents will comply with our request to make or obtain any applicable registrations or comply with other requirements required by SAFE regulations since we do not have control over these the PRC resident shareholders. The failure or inability of our PRC resident shareholders or our future PRC resident shareholders to make any required registrations or comply with other requirements under SAFE regulations may subject such PRC residents or our PRC subsidiaries to fines and legal sanctions and may also limit our ability to raise additional financing and contribute additional capital into or provide loans to (including using the proceeds from our initial public offering) our PRC subsidiaries, limit our PRC subsidiaries' ability to pay dividends or otherwise distribute profits to us, or otherwise adversely affect us.

Furthermore, because of the uncertainty over how the SAFE regulations will be interpreted and implemented, and how SAFE will apply them to us, we cannot predict how these regulations will affect our business operations or future strategies. For example, we may be subject to a more stringent review and approval process with respect to our foreign exchange activities, such as remittance of dividends and foreign-currency-denominated borrowings, which may adversely affect our financial condition and results of operations. In addition, if we decide to acquire a PRC domestic company, we cannot assure you that we or the owners of such company, as the case may be, will be able to obtain the necessary approvals or complete the necessary filings and registrations required by the foreign exchange regulations. This may restrict our ability to implement our acquisition strategy and could adversely affect our business and prospects.

Failure to comply with PRC regulations regarding the registration requirements for employee stock ownership plans or share option plans may subject the PRC plan participants or us to fines and other legal or administrative sanctions.

In December 2006, the People's Bank of China promulgated the Administrative Measures of Foreign Exchange Matters for Individuals, which set forth the respective requirements for foreign exchange transactions by individuals (both PRC or non-PRC citizens) under either the current account or the capital account. 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, which 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. 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 are subject to these regulations. Failure by us or our PRC stock option holders to comply with the SAFE regulations may subject us or these PRC residents to fines and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries, limit our PRC subsidiaries' ability to distribute dividends to us, or otherwise materially adversely affect our business.

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

The State Administration of Taxation, or the SAT, has issued several rules and notices to tighten its scrutiny over acquisition transactions in recent years, including the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises issued in December 2009, or SAT Circular 698, the Notice on Several Issues Regarding the Income Tax of Non-PRC Resident Enterprises issued in March 2011, or SAT Circular 24, and the Notice on Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-PRC Resident Enterprises issued in February 2015, or SAT Circular 7. Pursuant to these rules and notices, if a non-PRC resident enterprise indirectly transfers PRC taxable properties, which refer to properties of an establishment or a place in the PRC, real estate properties in the PRC or equity investments in a PRC tax resident enterprise, by disposing of equity interest in an overseas non-public holding company without a reasonable commercial purpose and resulting in the avoidance of PRC enterprise income tax, such indirect transfer should be deemed a direct transfer of PRC taxable properties, and gains derived from such indirect transfer may be subject to the PRC withholding tax at a rate of up to 10%. SAT Circular 7 sets out several factors to be taken into consideration by tax authorities in determining whether an indirect transfer has a reasonable commercial purpose. An indirect transfer satisfying all the following criteria will be deemed to lack reasonable commercial purpose and be taxable under PRC law: (i) 75% or more of the equity value of the intermediary enterprise being transferred is derived directly or indirectly from the PRC taxable properties; (ii) at any time during the one-year period before the indirect transfer, 90% or more of the asset value of the intermediary enterprise (excluding cash) is comprised directly or indirectly of investments in the PRC, or 90% or more of its income is derived directly or indirectly from the PRC; (iii) the functions performed and risks assumed by the intermediary enterprise and any of its subsidiaries that directly or indirectly hold the PRC taxable properties are limited and are insufficient to prove their economic substance; and (iv) the foreign tax payable on the gain derived from the indirect transfer of the PRC taxable properties is lower than the potential PRC enterprise income tax on the direct transfer of such assets. Nevertheless, the indirect transfer falling into the safe harbor available under SAT Circular 7 may not be subject to PRC tax and the scope of the safe harbor includes qualified group restructuring, public market trading and tax treaty exemptions. On October 17, 2017, the SAT issued the Public Notice on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Public Notice 37, which took effect on December 1, 2017. SAT Public Notice 37 replaced a series of important circulars, including but not limited to SAT Circular 698 and amended the rules governing the administration of withholding tax on China-source income derived by the non-resident enterprise. SAT Public Notice 37 also introduced certain key changes to the current withholding regime, such as (i) non-resident enterprise's withholding obligation for dividend was changed to arise on the date the payment is actually made as opposed to dividend declaration date; and (ii) non-resident enterprise's obligation to self-report tax within seven days upon withholding agent's failure to withhold was removed.

Under SAT Circular 7 and SAT Public Notice 37, the entities or individuals obligated to pay the transfer price to the transferor are the withholding agents and must withhold the PRC enterprise income tax from the transfer price. If the withholding agent fails to do so, the transferor should report to and pay the PRC enterprise income tax to the PRC tax authorities. In the event that neither the withholding agent nor the transferor fulfills their obligations under SAT Circular 7 and SAT Public Notice 37, apart from imposing penalties such as late payment interest on the transferor, the tax authority may also hold the withholding agent liable and impose a penalty of 50% to 300% of the unpaid tax on the withholding agent. The penalty imposed on the withholding agent may be reduced or waived if the withholding agent has submitted the relevant materials in connection with the indirect transfer to the PRC tax authorities in accordance with SAT Circular 7.

However, there is a lack of clear statutory interpretation of these rules and notices, we face uncertainties on the reporting and consequences on future private equity financing transactions, share exchange or other transactions involving the transfer of shares in our company by investors that are non-PRC resident enterprises, or sale or purchase of shares in other non-PRC resident companies or other taxable assets by us. Our Cayman Islands holding company and other non-resident enterprises in our company may be subject to filing obligations or may be taxed if our Cayman Islands holding company and other non-resident enterprises in our company are transferors in such transactions, and may be subject to withholding obligations if our Cayman Islands holding company and other non-resident enterprises in our company are transferees in such transactions. For the transfer of shares in our Cayman Islands holding company by investors that are non-PRC resident enterprises, our PRC subsidiaries may be requested to assist in the filing under the rules and notices. As a result, we may be required to expend valuable resources to comply with these rules and notices or to request the relevant transferors from whom we purchase taxable assets to comply, or to establish that our Cayman Islands holding company and other non-resident enterprises in our company should not be taxed under these rules and notices, which may have a material adverse effect on our financial condition and results of operations. There is no assurance that the tax authorities will not apply the rules and notices to our offshore restructuring transactions where non-PRC resident investors were involved if any of such transactions were determined by the tax authorities to lack reasonable commercial purpose. As a result, we and our non-PRC resident investors may be at risk of being taxed under these rules and notices and may be required to comply with or to establish that we should not be taxed under such rules, which may have a material adverse effect on our financial condition and results of operations or such non-PRC resident investors' investments in us. We have conducted acquisition transactions in the past and may conduct additional acquisition transactions in the future. We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing obligations on us or require us to provide assistance for the investigation of PRC tax authorities with respect thereto. Heightened scrutiny over acquisition transactions by the PRC tax authorities may have a negative impact on potential acquisitions we may pursue in the future.

Discontinuation or reduction of any of the preferential tax treatments or other government incentives available to us in the PRC, or imposition of any additional PRC taxes could adversely affect our financial condition and results of operations.

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 which became effective in January 2008 and last amended in December 2018, or the EIT Law, the statutory enterprise income tax rate is 25%. The EIT Law permits companies established before March 16, 2007 to continue to enjoy their existing tax incentives, adjusted by certain transitional phase-out rules set forth in the Circular to Implementation of the Transitional Preferential Policies for the Enterprise Income Tax promulgated by the State Council on December 26, 2007, and provides tax incentives, subject to various qualification criteria. Pursuant to the circular, the income tax rates for us and our wholly-owned subsidiary established in the Shenzhen Special Economic Zone before March 16, 2007 were 24% for 2011 and are 25% starting from 2012. The EIT Law and its implementation rules also permit qualified "high and new technology enterprises," or HNTEs, to enjoy a preferential enterprise income tax rate of 15% upon filing with relevant tax authorities. The qualification as a HNTE generally has a valid term of three years and the renewal of such qualification is subject to review by the relevant authorities in China. Shenzhen Xunlei, our variable interest entity, Shenzhen Wangwenhua, a subsidiary of Shenzhen Xunlei, and Shenzhen Onething currently hold a HNTE certificate and are entitled to enjoy a preferential enterprise income tax rate of 15% for the next three years ended August 2020 (for Shenzhen Xunlei and Shenzhen Wangwenhua) and October 2020 (for Shenzhen Onething). In addition, the PRC government has provided various incentives to accredited "software enterprise" incorporated in the PRC in order to encourage development of the software industry. In 2018, Shenzhen Xunlei obtained the certificate of the National Key Software Enterprise for the year ended December 31, 2017, which entitled Shenzhen Xunlei to a preferential tax rate of 10% for the 2017 fiscal year. In 2018, Xunlei Computer obtained the Hi-Tech Enterprise certification and thus entitled to enjoy a preferential tax rate of 15% for the 2018, 2019 and 2020 fiscal years. Moreover, local governments have adopted incentives to encourage the development of technology companies. Shenzhen Xunlei, Shenzhen Onething, Shenzhen Wangwenhua and Xunlei Computer currently benefit from the tax incentives. See "Item 5. Operating and Financial Overview and Prospects—A. Operating Results—Taxation."

Preferential tax treatment and other government incentives granted to Xunlei Computer, Shenzhen Xunlei, Shenzhen Wangwenhua and Shenzhen Onething by the local governmental authorities are subject to review and may be adjusted or revoked at any time. The discontinuation or reduction of any preferential tax treatment currently available to us and our wholly-owned PRC subsidiaries will cause our effective tax rate to increase, which could have a material adverse effect on our financial condition and results of operations. We cannot assure you that we will be able to maintain our current effective tax rate in the future.

Our global income may be subject to PRC taxes under the PRC EIT Law, which may have a material adverse effect on our results of operations.

Under the EIT Law and its implementation rules, an enterprise established outside of the PRC with a "de facto management body" within the PRC is considered a resident enterprise and will be subject to the enterprise income tax at the rate of 25% on its global income. The implementation rules define the term "de facto management 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." On April 22, 2009, the SAT issued a circular, 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. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on Tax—PRC enterprise income tax." Although SAT Circular 82 applies only to offshore enterprises controlled by PRC enterprises or PRC enterprise groups and not to those controlled by PRC individuals or foreigners, the determining criteria set forth in the SAT Circular 82 may reflect the SAT's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises.

According to SAT Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China and will be subject to PRC enterprise income tax on its worldwide income only if all of the following conditions set forth in the SAT Circular 82 are met: (i) the primary location of the day-to-day operational management is in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitually reside in the PRC.

Xunlei Limited is not controlled by a PRC enterprise or PRC enterprise group and we do not believe that Xunlei Limited meets all of the conditions above. Xunlei Limited is a company incorporated outside the PRC. As a holding company, certain of Xunlei Limited's key assets, including a significant amount of cash, are located, and records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside the PRC. Therefore, we do not believe Xunlei Limited should be treated as a "resident enterprise" for PRC tax purposes if the criteria for "de facto management body" as set forth in the relevant SAT Circular 82 were deemed applicable to us. However, as the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body" as applicable to Xunlei Limited, we may be considered a resident enterprise and may therefore be subject to the enterprise income tax at 25% on our global income. If we are considered a resident enterprise and earn income other than dividends from our PRC subsidiaries, a 25% enterprise income tax on our global income could increase our tax burden and adversely affect our cash flow and profitability. In addition to the uncertainty regarding how the new "resident enterprise" classification may apply, it is also possible that the rules may change in the future, possibly with retroactive effect.

Dividends paid by us to our foreign investors and gains on the sale of our ADSs or common shares by our foreign investors may be subject to taxes under PRC tax laws.

Under the EIT Law and its implementation regulations issued by the State Council, a 10% PRC withholding tax is applicable to dividends paid to investors that are "non-resident enterprises," which do not have an establishment or place of business in the PRC or which have such establishment or place of business but the dividends are not effectively connected with such establishment or place of business, to the extent such dividends are derived from sources within the PRC. Any gain realized on the transfer of ADSs or common shares by such investors is subject to PRC tax, at a rate of 10% unless otherwise reduced or exempted by relevant tax treaties, if such gain is regarded as income derived from sources within the PRC. If we are deemed a "PRC resident enterprise," dividends paid on our common shares or ADSs, and any gain realized from the transfer of our common shares or ADSs, may be treated as income derived from sources within the PRC and may as a result be subject to PRC taxation (which in the case of dividends would be withheld at source). It is unclear whether our non-PRC individual investors would be subject to any PRC tax in the event we are deemed a "PRC resident enterprise." If any PRC tax were to apply to such dividends or gains of non-PRC individual investors, it would generally apply at a rate of 20% (unless a reduced rate is available under an applicable tax treaty). It is also unclear whether, if we are considered a PRC "resident enterprise," holders of our ADSs or common shares would be able to claim the benefit of income tax treaties or agreements entered into between China and other countries or areas (and we do not expect to withhold at treaty rates if any withholding is required). If dividends payable to our non-PRC investors, or gains from the transfer of our common shares or ADSs by such investors are subject to PRC tax, the value of your investment in our common shares or ADSs may be adversely affected.

Increases in labor costs and enforcement of stricter labor laws and regulations in the PRC may adversely affect our business and our profitability.

China's overall economy and the average wage in China have increased in recent years and are expected to continue to grow. The average wage level for our employees has also increased in recent years. We expect that our labor costs, including wages and employee benefits, will continue to increase. Unless we are able to pass on these increased labor costs to our users by increasing prices for our products or services, our profitability and results of operations may be materially and adversely affected.

In addition, we have been subject to stricter regulatory requirements in terms of entering labor contracts with our employees and paying various statutory employee benefits, including pensions, housing fund, medical insurance, work-related injury insurance, unemployment insurance and childbearing insurance to designated government agencies for the benefit of our employees. Pursuant to the PRC Labor Contract Law, or the Labor Contract law, that became effective in January 2008, as amended on December 28, 2012 and effective as of July 1, 2013, and its implementation rules that became effective in September 2008, 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. 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 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 SCNPC promulgated the PRC Social Insurance Law, or the Social Insurance Law, which became effective on July 1, 2011. 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.

As the interpretation and implementation of labor-related laws and regulations are still evolving, we cannot assure you that our employment practice do not and will not violate 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.

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

Auditors of companies that are registered with the Securities and Exchange Commission, or the SEC, and traded publicly in the United States, including our independent registered public accounting firm, must be registered with the Public Company Accounting Oversight Board, or the PCAOB, and are required by the laws of the United States to undergo regular inspections by PCAOB to assess their compliance with the laws of the United States and professional standards. Because we have substantiated operations within the Peoples' Republic of China and the PCAOB is currently unable to conduct inspections of the work of our auditors as it relates to those operations without the approval of the Chinese authorities, our auditor's work related to our operations in China is not currently inspected by the PCAOB. On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statement reflects a heightened interest in an issue that has vexed U.S. regulators in recent years. However, it remains unclear what further actions the SEC and PCAOB will take to address the problem. On April 21, 2020, the SEC and the PCAOB issued another joint statement reiterating the greater risk that disclosures will be insufficient in many emerging markets, including China, compared to those made by U.S. domestic companies. In discussing the specific issues related to the greater risk, the statement again highlights the PCAOB's inability to inspect audit work paper and practices of accounting firms in China, with respect to their audit work of U.S. reporting companies.

This lack of PCAOB inspections of audit work performed in China prevents the PCAOB from regularly evaluating audit work of any auditors that was performed in China including that performed by our independent registered public accounting firm. As a result, investors may be deprived of the full benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of audit work performed in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures as compared to auditors in other jurisdictions that are subject to PCAOB inspections on all of their work. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements.

If additional remedial measures are imposed on certain PRC-based accounting firms in administrative proceedings brought by the SEC, we could be unable to file future financial statements on a timely basis in compliance with the requirements of the Exchange Act.

In December 2012, the SEC instituted administrative proceedings against certain PRC-based accounting firms, including our independent registered public accounting firm, alleging that these firms had violated U.S. securities laws and the SEC's rules and regulations thereunder by failing to provide to the SEC the firms' work papers related to their audits of certain PRC-based companies that are publicly traded in the United States. On January 22, 2014, an initial administrative law decision was issued, sanctioning these accounting firms and suspending them from practicing before the SEC for a period of six months. On February 12, 2014, four of these PRC-based accounting firms appealed to the SEC against this sanction. In February 2015, each of the four PRC-based accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms' audit documents via the CSRC. If the firms do not follow these procedures or if there is a 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.

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

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

Risks Related to Our ADSs

The market price for our ADSs may be volatile.

The trading prices of our ADSs are 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 the internet 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. In addition, securities markets may from time to time experience significant price and volume fluctuations that are not related to our operating performance, which may have a material adverse effect on the market price of our ADSs.

The market price for our ADSs is likely to be highly volatile and subject to wide fluctuations in response to factors including the following:

- regulatory developments affecting us, our advertisers or our industry;
- announcements of studies and reports relating to our services or those of our competitors;
- changes in the economic performance or market valuations of other internet companies in China;
- actual or anticipated fluctuations in our quarterly results of operations and changes of our expected results;
- changes in financial estimates by securities research analysts;
- conditions in the internet or online advertising industry in China;
- announcements by us or our competitors of new services, acquisitions, strategic relationships, joint ventures or capital commitments;
- additions to or departures of our senior management;
- fluctuations of exchange rates between the Renminbi and the U.S. dollar;
- release or expiry of lock-up or other transfer restrictions on our outstanding shares or ADSs; and
- sales or perceived potential sales of additional shares or ADSs.

In addition, the securities market has from time to time experienced significant price and volume fluctuations that are not related to the operating performance of any particular companies. These market fluctuations may also have a material adverse effect on the market price of our ADSs.

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

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

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

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. Subject to our ongoing financial performance, cash position, budget and business plan and market conditions, we may consider paying special dividends. However, we do not plan to pay dividends in the foreseeable future and you should not rely on an investment in our ADSs as a source for any future dividend income.

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

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

Sales of our ADSs in the public market, or the perception that these sales could occur, could cause the market price of our ADSs to decline. As of March 31, 2020, we had 339,814,941 common shares outstanding, which excludes (i) 9,519,144 common shares issued to Leading Advice Holdings Limited for grants under our 2013 Plan and 2014 Plan that remained then unexercised or unvested, and (ii) 19,543,120 common shares, consisting of shares issued to our depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plans and shares repurchased by the company from 2015 to 2017 but not yet cancelled. All our outstanding common shares represented by ADSs were freely transferable by persons other than our "affiliates" without restriction or additional registration under the Securities Act of 1933, as amended, or Securities Act. The remaining common shares will be available for sale subject to volume and other restrictions as applicable under Rules 144 and 701 under the Securities Act. Certain holders of our common shares have the right to cause us to register under the Securities Act the sale of their shares. Registration of these shares under the Securities Act would result in ADSs representing these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. Sales of these registered shares in the form of ADSs, in the public market could cause the price of our ADSs to decline.

Your right to participate in any future rights offerings may be limited, which may cause dilution to your holdings, and you may not receive cash dividends if it is impractical to make them available to you.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. However, we cannot make rights available to you in the United States unless we register both the rights and the securities to which the rights relate under the Securities Act or an exemption from the registration requirements is available. Under the deposit agreement, the depositary will not make rights available to you unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the Securities Act or exempt from registration under the Securities Act. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective and we may not be able to establish a necessary exemption from registration under the Securities Act. Accordingly, you may be unable to participate in our rights offerings and may experience dilution in your holdings.

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

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

Your ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deems it 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.

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

Holders of ADSs do not have the same rights as our registered shareholders. As a holder of the ADSs, you will not have any direct right to attend general meetings of our shareholders or to cast any votes at such meetings. You will only be able to exercise the voting rights which are carried by the underlying common shares represented by your ADSs indirectly by giving voting instructions to the depositary in accordance with the provisions of the deposit agreement. Under the deposit agreement, you may vote only by giving voting instructions to the depositary. If we instruct the depositary to ask for your instructions, then upon receipt of your voting instructions, the depositary will try, as far as is practicable, to vote the underlying common shares which are represented by your ADSs in accordance with your instructions. If we do not instruct the depositary to ask for your instructions, the depositary may still vote in accordance with instructions you give under specific circumstances when it is not required to do so. You will not be able to directly exercise your right to vote with respect to the underlying common shares represented by your ADSs unless you withdraw such common shares and become the registered holder of such common shares prior to the record date for the general meeting. When a general meeting is convened, you may not receive sufficient advance notice of the meeting to withdraw the underlying common shares represented by your ADSs and become the registered holder of such common shares to allow you to attend the general meeting and to vote directly with respect to any specific matter or resolution to be considered and voted upon at the general meeting. In addition, under our memorandum and articles of association, for the purposes of determining those shareholders who are entitled to attend and vote at any general meeting, our directors may close our register of members and/or fix in advance a record date for such meeting, and such closure of our register of members or the setting of such a record date may prevent you from withdrawing the common shares underlying your ADSs and becoming the registered holder of such shares prior to the record date, so that you would not be able to attend the general meeting or to vote directly. If we ask for your instructions, the depositary will, at the sole discretion of the depositary and as soon as practicable, notify you of the upcoming vote and will arrange to deliver our voting materials to you. We have agreed to give the depositary at least 30 days' prior notice of shareholder meetings. Nevertheless, we cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote the underlying common shares represented by your ADSs.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited because we are incorporated under Cayman Islands law, we conduct substantially all of our operations in China and substantially all of our directors and officers reside outside the United States.

We are incorporated in the Cayman Islands and conduct substantially all of our operations in China through our PRC subsidiaries and variable interest entity and its subsidiaries. Substantially all of our directors and officers reside 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 Cayman Islands or in the United States in the event that you believe that your rights have been infringed under the U.S. 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 is uncertainty as to whether Cayman Islands courts or PRC courts would:

- recognize or enforce judgments of courts of the United States obtained against us based on certain civil liability provisions of U.S. securities laws; or

- entertain original actions brought in the Cayman Islands or the PRC against us, based on certain civil liability provisions of U.S. securities laws.

Although there is no statutory enforcement in the Cayman Islands of judgments obtained in the federal or state courts of the United States, (and the Cayman Islands are not a party to any treaties for the reciprocal enforcement or recognition of such judgments), the courts of the Cayman Islands will, at common law, recognize and enforce a foreign money judgment of a foreign court of competent jurisdiction without any re-examination of the merits of the underlying dispute based on the principle that a judgment of a competent foreign court imposes upon the judgment debtor an obligation to pay the liquidated sum for which such judgment has been given, provided such judgment (i) is final and conclusive, (ii) is not in respect of taxes, a fine or a penalty; and (iii) 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. However, the Cayman Islands courts are unlikely to enforce a judgment obtained from the U.S. courts under civil liability provisions of the U.S. federal securities law if such judgment is determined by the courts of the Cayman Islands to give rise to obligations to make payments that are penal or punitive in nature. A Cayman Islands court may stay enforcement proceedings if concurrent proceedings are being brought elsewhere.

The recognition and enforcement of foreign judgments are provided for under the PRC Civil Procedures Law. PRC courts may recognize and enforce foreign judgments in accordance with the requirements of the PRC Civil Procedures Law based either on treaties between China and the country where the judgment is made or on principles of reciprocity between jurisdictions. China does not have any treaties with the United States or the Cayman Islands that provide for the enforcement of foreign judgments and PRC courts strictly adopt the principle of reciprocity in judicial practice. In addition, according to the PRC Civil Procedures Law, courts in the PRC will not enforce a foreign judgment against us or our directors and officers if they decide that the judgment violates the basic principles of PRC law or national sovereignty, security, or public interest. As a result, it is uncertain whether and on what basis a PRC court would enforce a judgment rendered by a court in the United States or in the Cayman Islands.

Our corporate affairs are governed by our memorandum and articles of association, as amended and restated from time to time, and by the Companies Law (2020 Revision) and common law of the Cayman Islands. The rights of shareholders to take legal action against us and our directors, actions by minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which provides persuasive, but not binding, authority in a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States and provides significantly less protection to investors. In addition, shareholders in Cayman Islands companies may not have standing to initiate a shareholder derivative action in U.S. federal courts.

It is also difficult or impossible for you to bring an action against us or against our directors and officers in China. Under the PRC Civil Procedures Law, foreign shareholders may bring an action based on PRC law against a company in China for disputes if they can establish sufficient nexus to the PRC for a PRC court to have jurisdiction, and meet other procedural requirements, including, among others, the plaintiff must have a direct interest in the case, and there must be a concrete claim, a factual basis and a cause for the suit. It will be, however, difficult for U.S. shareholders to bring actions against us in the PRC in accordance with PRC laws because we are incorporated under the laws of the Cayman Islands and it will be difficult for U.S. shareholders, by virtue only of holding the ADSs or ordinary shares, to establish a connection to the PRC for a PRC court to have jurisdiction as required under the PRC Civil Procedures Law.

As a result, our public shareholders may have more difficulty in protecting their interests through actions against us, our management, our directors or our controlling shareholders than would shareholders of a corporation incorporated in a jurisdiction in the United States.

Our memorandum and articles of association contains anti-takeover provisions that could adversely affect the rights of holders of our common shares and ADSs.

Our currently effective memorandum and articles of association contains certain provisions that could limit the ability of others to acquire control of our company, including a provision that grants authority to our board directors to establish from time to time one or more series of preferred shares without action by our shareholders. The provisions could have the effect of depriving our shareholders of the opportunity to sell their shares at a premium over the prevailing market price by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transactions.

Our corporate actions are substantially controlled by our directors, executive officers and other principal shareholders, who can exert significant influence over important corporate matters, which may reduce the price of our ADSs and deprive you of an opportunity to receive a premium for your shares.

As of April 15, 2020, our directors, executive officers and existing principal shareholders beneficially owned approximately 47.7% of our outstanding common shares. These shareholders, if acting together, could exert substantial influence over matters such as electing directors and approving material mergers, acquisitions or other business combination transactions. This concentration of ownership may also discourage, delay or prevent a change in control of our company, which could have the dual effect of depriving our shareholders of an opportunity to receive a premium for their shares as part of a sale of our company and reducing the price of our ADSs. These actions may be taken even if they are opposed by our other shareholders. In addition, these persons could divert business opportunities away from us to themselves or others.

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

As a public company in the United States, we incur significant accounting, legal and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, as well as rules subsequently implemented by the Securities and Exchange Commission and the NASDAQ Global Select Market, require significantly heightened corporate governance practices of public companies, including Section 404 relating to internal control over financial reporting. We expect these rules and regulations to increase our legal and financial compliance costs and to make some corporate activities more time-consuming and costly. In particular, as we are no longer an "emerging growth company," we expect to incur significant expenses and devote substantial management efforts in assessing our internal control over financial reporting and comply with the auditor attestation requirement under Section 404 of the Sarbanes-Oxley Act of 2002. Compliance with these rules and requirements may be especially difficult and costly for us because we may have difficulty locating sufficient personnel in China with experience and expertise relating to U.S. GAAP and U.S. public company reporting requirements, and such personnel may command high salaries relative to similarly experienced personnel in the United States. If we cannot employ sufficient personnel to ensure compliance with these rules and regulations, we may need to rely more on outside legal, accounting and financial experts, which may be costly. If we fail to comply with these rules and requirements, or are perceived to have weaknesses with respect to our compliance, we could become the subject of a governmental enforcement action and investor confidence could be negatively impacted and the market price of our ADSs could decline. In addition, we will incur additional costs associated with our public company reporting requirements. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate with reasonable certainty the amount of additional costs we may incur or the timing of such costs.

We were named as a defendant in putative shareholder class action lawsuits in the United States, and we may be involved in more class action lawsuits in the future. Such lawsuits could divert a significant amount of our management's attention and other resources from our business and operations, which could harm our results of operations and require us to incur significant expenses to defend the lawsuits. Any such class action suit, whether or not successful, could harm our reputation and restrict our ability to raise capital in the future. In addition, if a claim is successfully made against us, we may be required to pay significant damages, which could have a material adverse effect on our financial condition and results of operations.

We believe we were a passive foreign investment company for our taxable year ended December 31, 2018, which could subject United States investors in the ADSs or common shares to significant adverse United States income tax consequences.

Based on the market price of our ADSs and the composition of our assets (in particular the retention of a substantial amount of cash), we believe that we were a "passive foreign investment company," (or a "PFIC"), for United States federal income tax purposes for our taxable year ended December 31, 2019, and we will very likely be a PFIC for our current taxable year ending December 31, 2020 unless the market price of our ADSs increases and/or we invest a substantial amount of the cash and other passive assets we hold in assets that produce or are held for the production of active income. In addition, it is possible that one or more of our subsidiaries may be or become classified as a PFIC for United States federal income tax purposes. A non-U.S. corporation will be classified as a PFIC for any taxable year if either (1) 75% or more of its gross income consists of certain types of passive income or (2) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to asses that produce or are held for the production of passive income.

If we are classified as a PFIC for any taxable year during which a U.S. Holder (as defined in Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations) holds our ADSs or common shares, such U.S. Holder 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 ("PFIC Tainted Shares") even if, we, in fact, cease to be a PFIC in subsequent taxable years. Accordingly, a U.S. Holder of our ADSs or common shares is urged to consult its tax advisor concerning the United States federal income tax considerations related to holding and disposing of ADSs or common shares (including, to the extent an election is available, making a "mark-to-market" election to avoid owning PFIC-Tainted Shares and the unavailability of an election to treat us as a qualified electing fund). For more information, see the section titled "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Considerations."

Item 4. Information on the Company

A. History and Development of the Company

We commenced operations in January 2003 through the establishment of Shenzhen Xunlei, which currently, together with its various subsidiaries in the PRC, operates our Xunlei internet platform.

In February 2005, we established Xunlei Limited as our holding company in the Cayman Islands. Xunlei Limited directly owns Giganology Shenzhen, our wholly owned subsidiary in China established in June 2005. Giganology Shenzhen primarily engages in the research and development of new technologies.

Giganology Shenzhen has entered into a series of contractual arrangements with Shenzhen Xunlei and its shareholders. These contractual arrangements enable us to exercise effective control over Shenzhen Xunlei and receive substantially all of the economic benefits of Shenzhen Xunlei. As a result, Shenzhen Xunlei is our variable interest entity and we have consolidated the financial results of Shenzhen Xunlei and its subsidiaries in our consolidated financial statements in accordance with U.S. GAAP. The existing principal subsidiaries of Shenzhen Xunlei include the following:

- Shenzhen Xunlei Wangwenhua Co., Ltd. (formerly known as "Shenzhen Fengdong Networking Technologies Co., Ltd."), or Wangwenhua, which was established in December 2005 and primarily engages in software development, technical consulting and other related technical services.

- Shenzhen Zhuolian Software Co., Ltd. (formerly known as "Xunlei Software (Shenzhen) Co., Ltd."), which was established in January 2010 and primarily engages in the development of software technology and the development of computer software.

- Xunlei Games Development (Shenzhen) Co., Ltd., or Xunlei Games, which was established in February 2010 and primarily engages in the development of online game and computer software and advertising services.

- Shenzhen Onething Technologies Co., Ltd., or Shenzhen Onething, which was established in September 2013 and primarily engages in cloud computing technology development and related services.

- Beijing Xunjing Technology Co., Ltd. (formerly known as "Wangxin Century Technologies (Beijing) Co., Ltd."), or Beijing Xunjing, which was established in October 2015 and currently a subsidiary of Wangwenhua. Beijing Xunjing primarily engages in technology development and related services.

- Shenzhen Crystal Interactive Technologies Co., Ltd., which was established in May 2016 and currently a subsidiary of Shenzhen Onething, and primarily engages in development of computer software and provision of information technology services.

- Beijing Onething Technologies Co., Ltd., which was established in January 2017 and primarily engages in development of computer software and provision of information technology service.

- Henan Tourism Information Co., Ltd., which we acquired 80% of the total equity interest from an independent third party in June 2018 and primarily engages in computer software development, information consultation, entertainment services, advertising, and certain information services under Type II value-added telecommunication businesses.

- Xi'an Onething Blockchain Technology Co., Ltd., which was established in July 2018 and primary engages in developing blockchain technology and computer software and relevant research projects.

In February 2011, we established a direct wholly owned subsidiary, Xunlei Network Technologies Limited, or Xunlei Network BVI, in the British Virgin Islands. In March 2011, we established Xunlei Network Technologies Limited, or Xunlei Network HK, in Hong Kong, which is the direct wholly owned subsidiary of Xunlei Network BVI. Xunlei Network HK primarily engages in the development of computer software. In November 2011, we established Xunlei Computer in China, which is the direct wholly owned subsidiary of Xunlei Network HK. Xunlei Computer primarily engages in the development of computer software and information technology services.

In May 2018, Xunlei Network HK acquired all equity interest of HK Onething Technologies Limited, or Onething HK. Onething HK operates our cloud computing business in Hong Kong, including selling our cloud computing device, Onething Cloud in Hong Kong and business development for international markets. In July 2018, Onething HK, together with a Thai individual and a Thai company, established Onething Co., Ltd. (Thailand), or Onething Thailand, in Thailand. Onething HK holds 49% of the total equity interest of Onething Thailand while has 90.57% of the total voting power of all equity interest of Onething Thailand. Onething Thailand primarily engages in cloud computing and blockchain business in Thailand, including selling our cloud computing device, Onething Cloud and providing blockchain services in Thailand.

In June 2014, we completed the initial public offering of our ADSs, which are listed on the NASDAQ Global Select Market under the symbol "XNET."

In September 2014, we, through Shenzhen Xunlei Networking Technologies Co., Ltd., acquired from subsidiaries of Kingsoft Corporation Limited Kuaipan Personal and Kansunzi, both software services in support of cloud-sourced storage and sharing, and their related business and assets, for an aggregate cash consideration of US$33 million. In August 2016, we discontinued our Kuaipan Personal services due to a change of business focus.

In July 2015, we completed the sale of our entire stake in Xunlei Kankan to Beijing Nesound International Media Corp., Ltd., an independent third party, for a consideration of RMB130.0 million (US$18.9 million). As of December 31, 2019, Beijing Nesound International Media Corp., Ltd. had fully paid the whole consideration of RMB130.0 million to us. This sale is part of our strategy to streamline our business and continue our transition into mobile internet.

Our principal executive offices are located at: 21-23/F, Block B, Building No. 12, No.18 Shenzhen Bay ECO-Technology Park, Keji South Road, Yuehai Street, Nanshan District, Shenzhen, the People's Republic of China. Our telephone number at this address is +86 755-8633-8443. Our registered office in the Cayman Islands is located at the offices of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, 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.

B. Business Overview

Overview

We are a leading innovator in shared cloud computing and blockchain technology in China. We operate a powerful internet platform in China based on cloud technology to enable our users to quickly access, manage, and consume digital media content on the internet. In recent years, we have expanded our products and services from PC-based devices to mobile devices in part through pre-installed acceleration products in mobile phones to further enlarge our user base and offer our users a wider range of access points. We provide a wide range of products and services across cloud acceleration, blockchain, shared cloud computing and digital entertainment to deliver an efficient, smart and safe internet environment.

To address deficiencies of digital media transmission over the internet in China, such as low speed and high delivery failure rates, we provide users with quick and easy access to online digital media content through core products and services below:

- Xunlei Accelerator, our most popular and free product, which enables users to accelerate digital transmission over the internet and has approximately 88.3 million monthly unique visitors in December 2019, according to our internal record; and

- Cloud acceleration subscription services, which are delivered through our product, Green Channel, and offer users premium services for speed and reliability.

Benefitting from the large user base of our core product, Xunlei Accelerator, we have further developed cloud computing services and various other value-added services or products to meet a fuller spectrum of our users' digital media content access and consumption needs. These value-added services and products primarily include live streaming services and online game services. These value-added services or products provide us with synergies in our business operations.

As a part of our cloud-based mobile strategies, we launched Mobile Xunlei, a mobile app that allows users to search, download and consume digital media content on their mobile devices in a user friendly way, in 2012 as an important step in expanding our services to mobile devices. Mobile Xunlei gained popularity while bigger screen phones with enhanced storage capacity changed mobile phone users' behavior in accessing and consuming digital media content. Based on our own record, the monthly average daily active user of this application was about 6.6 million in 2019. Mobile Xunlei is also one of the most downloaded applications in its category. In the fourth quarter of 2015, we started to monetize our mobile traffic through advertising sales and generated our first mobile advertising revenues. Mobile Xunlei supplements our existing subscriptions business, enabling us to reach a wider scope of user base and expand our services to additional devices of a user who has multiple devices.

Our mobile initiatives also benefit from our relationship with Xiaomi, one of our previous strategic shareholders. Since 2014, we have entered into a pre-installing services agreement with a Xiaomi group company which manufactures Xiaomi phones, a well-recognized brand of smart phones in China. Pursuant to the agreement, we agree to provide our Mobile Xunlei acceleration plug-in, and the mobile phone manufacturer agrees to install such plug-in on its phones, free of charge. Such pre-installment arrangement provides mobile phone users with access to our acceleration services, which we believe enhances our ability to generate more user traffic. Our mobile acceleration software has been officially adopted by Xiaomi's operating systems MIUI6, MIUI7, MIUI8, MIUI9, MIUI10 and MIUI11 and the software has been installed on Xiaomi phones sold in China, including both new phones shipments and system upgrades from existing Xiaomi phones.

Another key part of our strategies is to continue our innovation in crowdsourcing of idle bandwidth capacity and potential storage from users of our cloud computing hardware devices so that we can continuously deliver computing resources to third parties, such as internet content providers, through our CDN services. We started to generate revenue from selling crowdsourced uplink capacity we collected from users of our cloud computing services to third parties in the third quarter of 2015. To further develop our cloud computing business, we launched our decentralized cloud computing product, OneThing Cloud, in 2017. OneThing Cloud is essentially a cloud-based storage and sharing device that allows users to share their idle internet bandwidth and storage resources with our content delivery networks. The third parties that purchased our crowdsourced bandwidth capacity mainly include internet content providers such as iQiyi and Xiaomi. As an important part of our cloud strategy, LinkToken, a blockchain product formerly known as OneCoin, was developed in 2017. LinkToken essentially is a type of digital ticket generated by using our OneThing Cloud hardware device. The underlying technology of LinkToken is blockchain technology. By voluntarily participating in our OneThing reward program, users of our OneThing Cloud can be rewarded with LinkToken upon meeting certain conditions. The amount of LinkTokens awarded depends on a number of factors including, but not limited to, the size of bandwidth and external storage users contribute, the length of time online, and the usage of computing resources. Rewarded LinkTokens can be used to redeem for a variety of products and services offered in the LinkToken Mall. In 2018, we entered into an agreement with an independent third party to transfer of our LinkToken operations and the related assets and liabilities. Upon the completion of the disposal in April 2019, the transferee obtained the exclusive right to carry out LinkToken operations inside and outside mainland China, including without limitation, the formulation, amendment and execution of the rules governing the rewarding of LinkToken to users, operations of LinkToken Pocket and the LinkToken Mall. After the disposal, subject to rewarding rules determined by the independent third party, users of our OneThing Cloud are still able to be rewarded with LinkTokens. In May 2019, we terminated our technical support to such independent third party with respect to its LinkToken operations. As a result, rewarded LinkTokens were unable to be used to exchange for products and services offered by us or developed by third parties on our platform.

In 2018, we continued our efforts in cloud computing area and launched StellarCloud. StellarCloud is a shared cloud computing platform that upgraded our existing content delivery network (CDN) services to Infrastructure as a Service (IaaS). It provides powerful and cost-effective cloud computing solutions and shares its extensive node distribution with its enterprise users, enabling efficient and cost-effective access. StellarCloud also offers edge computing, function computing and shared CDN (SCDN) solutions to our enterprise users. In 2018, we also launched ThunderChain. ThunderChain is an open platform that enables our enterprise users to develop and manage blockchain applications. It represents our first accomplishment after we shift our focus from developing application products based on blockchain technology to the research and development of blockchain infrastructures.

The technological backbone of our products and services is our cloud acceleration technology, comprised of a proprietary file locating system and massive file index database. Our technology enables us to support greater user expansion with incremental increases in server and bandwidth costs. This technology, based on distributed computing architecture, along with our indexing technology, enables users to access internet content in an efficient manner.

We generated revenues by monetizing our large user base, primarily through the following services:

- Cloud acceleration subscription services. We provide premium acceleration services to subscribers to enable faster and more reliable access to digital media content;

- Online advertising services (including mobile advertising). We offer advertising services by providing marketing opportunities on our websites, mobile Xunlei application and platform to our advertisers;

- Sales of our cloud computing devices. We sell hardware devices that provide our users with easy access to our cloud computing services such as OneThing Cloud. We generate a large majority of our product revenue from selling OneThing Cloud device to our users; and

- Cloud computing and other internet value-added services. We offer cloud computing services and multiple other value-added services to our users and customers, such as live streaming services and online game services.

Our revenues increased from US$201.9 million in 2017 to US$232.1 million in 2018, but decreased to US$ 181.3 million in 2019. We had a net loss attributable to Xunlei Limited of US$37.8 million in 2017, US$39.3 million in 2018 and US$53.2 million in 2019.

Our platform

On our platform, users can accelerate internet content transmission, develop and operate blockchain-based services and applications and enjoy popular forms of internet-based entertainment, such as watching live online performance and playing online games.

Cloud-based acceleration

We provide data transmission acceleration services based on cloud computing technology to internet users. Our cloud computing technology utilizes a network of computers hosted on the internet to store, manage, and process data, thus providing our users with acceleration in internet data transmission and improves their download success rates. We provide our acceleration services to internet users with the following products and services.

Accelerator

We launched our core product, Xunlei Accelerator, in 2004 to address deficiencies of digital media content transmission over internet in China, such as low speed and high delivery failure rates. Xunlei Accelerator allows users to accelerate digital transmission over the internet for free. Xunlei Accelerator also bridges users with diverse needs to other services we offer, such as: Xunlei Media Player, which supports both online and offline video watching, and our various online games, by recommending and providing links to these services on its user interface.

Xunlei Accelerator is designed to provide an effective digital media content transmission solution to our users. In addition to our featured transmission acceleration function, we have integrated certain features into the interface of Xunlei Accelerator to enhance the overall user experience while helping users transmit their desired content efficiently. For example, Xunlei Accelerator provides a platform to integrate other third-party plug-in applications. Users can add application tabs to create shortcuts to various services that are provided by us, third-party application developers and application venders who have business relationships with us. Xunlei Accelerator also has a task management console to allow users to track and manage their transmissions in progress, to manage and prioritize cloud-based data transmission tasks, or manage and synchronize transmitted content across multiple internet-enabled devices.

Mobile acceleration plug-in

We offer a mobile acceleration plug-in, which provides mobile device users with benefits of download speed acceleration and download success rate improvements similar to those offered by the PC-based Xunlei Accelerator. Our mobile acceleration plug-in has been adopted by Xiaomi, a Chinese smartphone maker, on its operating systems MIUI6, MIUI7, MIUI8, MIUI9, MIUI10 and MIUI11. Xiaomi installs our mobile acceleration plug-in on all of its new phones sold in China free of charge and adds such plug-in to the existing ones via system upgrade. Xiaomi phone users thus have access to our acceleration services.

Subscription services

We charge monthly or annual fees for our premium cloud acceleration subscription services. The benefits and services within the subscription package, which typically include incrementally larger bandwidth and faster acceleration speed, are upgraded according to the VIP levels. Our cloud acceleration subscription services are delivered through our major premium acceleration product, Green Channel. It allows our subscribers to transmit digital media files from the internet, which significantly improves speed and reliability of such transmission. This is particularly helpful when subscribers need to transmit files that are only available from slow or unreliable data transmission sources, or to transmit a group of files while having only limited internet connectivity time. In addition to our major premium acceleration product, our product, Fast Bird, also accelerates our subscribers' internet access by increasing the bandwidth of the network system provided by telecommunications service providers.

We adopted different strategies and various promotion programs for each VIP level. For example, when we discovered that some of our users were not aware of our subscription services, we provided users with greater exposure to our subscription services in different parts of our platform and promoted products with significant potential interests to specific users. We use our powerful digital data analysis capabilities to explore different areas of user needs previously unmet by existing functions and research and develop relevant functions based on such analysis. We offer users promotional measures, such as providing some free trials of premium acceleration services, to show the differences in the data transmission speeds to demonstrate how our premium services tremendously enhance data delivery speed and overall subscriber experience. In order to promote customer loyalty, we may elevate the VIP levels of our subscribers if they actively engage in our services. Once upgraded to certain higher VIP levels, our subscribers may be offered additional independent accounts, internally termed as sub-accounts, at no additional charges. Such sub-accounts allow users to access our premium acceleration services, at no additional charge. Starting from September 2016, we have ceased to provide new sub-accounts to users with upgraded VIP levels. Users with existing independent accounts are still able to use such accounts.

We had a subscriber base of 4.3 million, 3.8 million and 4.0 million as of December 31, 2017, 2018 and 2019, respectively. In this annual report, the number of subscribers as of a given day excludes any sub-accounts.

Mobile Xunlei

Mobile Xunlei is a mobile application that allows users to search, download and consume digital media content on their mobile devices. The monthly average daily active user of this product was about 6.6 million in 2019. We started to monetize our mobile traffic through advertising sales and generated our first mobile advertising revenues in late 2015. Since then, our mobile advertising business has grown rapidly. However, we experienced a decline in revenue from mobile advertising in 2019. In 2019, our revenue generated from our mobile advertising business decreased by 43.9% from US$27.3 million in 2018 to US$15.3 million in 2019.

Moreover, this mobile application also supplements our existing subscriptions business. Many of our mobile application users also became users of our PC-based Xunlei Accelerator.

Cloud computing

We launched our cloud computing project in 2014, which crowdsources idle uplink capacity from internet users who have bought and connected our proprietary hardware, Zhuanqianbao, or ZQB, to their network router. Our ZQB devices can allocate those users' idle uplink capacity to us for our further allocation to internet content providers. We pay users of our ZQB devices for the use of their idle uplink capacity.

To further develop our cloud computing business and at the same time explore emerging blockchain technology, we launched our decentralized cloud computing product, OneThing Cloud, in 2017. OneThing Cloud is a cloud-based storage and sharing device, which crowdsources idle uplink capacity from our users who have bought and connected their OneThing Cloud devices to their network router. Similar to ZQB, OneThing Cloud crowdsources users' idle computing resources for our further allocation to third parties, such as internet content providers, through our CDN services. However, an important difference between OneThing Cloud and ZQB is that users of OneThing Cloud can voluntarily participate in OneThing reward program and be rewarded with LinkTokens, which can be used to redeem for products and services available in the LinkToken Mall. To focus more on the research and development of blockchain infrastructure, we transferred our LinkToken operations exclusively to an independent third party. Upon the completion of the transaction in 2019, the transferee obtained the exclusive right to operate LinkToken services inside and outside mainland China including, without limitation, the exclusive right to formulate, amend and implement the rules governing the rewarding of LinkTokens to users, the exclusive right to operate LinkToken Pocket and LinkToken Mall. Intangible assets associated with the LinkToken operations were also transferred to the transferee in the transaction.

In 2018, we further advanced our cloud computing business and launched StellarCloud. StellarCloud is a distributed cloud computing platform that integrates the idea of shared economy and blockchain technology with cloud computing technology. Leveraging our proprietary technologies, such as stellar scheduling, weak network acceleration and network dynamic defense, and the advantages of extensive distribution of nodes over traditional cloud vendors, StellarCloud provides powerful and cost-effective cloud computing solutions, such as edge computing, function computing and shared CDN (SCDN) and shares its extensive node distribution with its enterprise users. In 2019, we further expanded our CDN network by jointly establishing dozens of distributed cloud computing node rooms across China with local IDC and ISP service providers. We installed our OneThing Cloud devices in these locations while local IDC and ISP service providers provide us with internet access and data center management services. By cooperating with these IDC and ISP service providers, we are able to collect idle bandwidth, storage space and other resources.

The crowdsourced uplink capacities are valuable resources that we target to commercialize with potential customers such as streaming websites and app stores. Depending on our own needs, we also utilize those crowdsourced uplink capacities for our business from time to time, reducing our purchase of bandwidth from traditional third party carriers.

ThunderChain

We rolled out our first blockchain infrastructure product, ThunderChain, in May 2018. ThunderChain is an open platform that enables our users to develop and manage blockchain applications. We are dedicated to exploring practical adoptions of blockchain in various industries and sectors, and providing tools, frameworks, and guidelines for blockchain development. Through our ThunderChain open platform, we provide smart contract development services, blockchain implementation services, and blockchain commercial ecosystem establishment services. In December 2019, we updated ThunderChain's portfolio of products across six major industry sectors, i.e. financial services, livelihood matters, justice, healthcare, government services and industries. With this set of releases, ThunderChain now can offer a wide range of effective blockchain product solutions.

Our ThunderChain platform addresses the difficulties that both enterprise users and developers face in applying blockchain in an all-dimensional approach. For example, our ThunderChain platform has a strong concurrent processing capability. It is able to process over a million transactions per second. By using dual consensus algorithm (DPoA+PBFT), our ThunderChain platform is also able to realize low latency, data consistency and avoid bifurcation of data. Our ThunderChain platform supports several programming languages such as solidity, C, and C++. Developers do not have to learn new languages to develop ThunderChain-based blockchain applications. In addition, blockchain applications that are developed based on our ThunderChain generally have a good scalability as our ThunderChain platform supports configurable consensus algorithm and underlying storage system replacement, which facilitates the upgrade of ThunderChain-based blockchain applications based on different application scenarios. In terms of data security and privacy, our ThunderChain platform provides several advanced privacy protection solutions and supports multiple cryptographic algorithms. With these difficulties solved, enterprise users and developers are able to focus on application innovations and function developments.

Live streaming services

We launched our live streaming services in 2016 and adjusted our business model in 2017. Through our Xunlei Live website and mobile app, users are able to access our live video streaming services. While viewing live online performance delivered by broadcasters, users may interact with broadcasters, purchase virtual items from us to reward broadcasters they like. In May 2018, we supplemented our live streaming business by launching a live audio streaming product, PeiWan, through which users and broadcasters may interact with each other through audio streaming and purchase virtual items from our platform to reward each other. In September 2019, we further expanded our live video streaming services and started to operate another live video streaming product, BuOu Live, developed by a third party. Similar with Xunlei Live, users can purchase virtual items from us to reward broadcasters they like. The third party cooperating with us will be entitled to a small portion of the revenue generated from BuOu Live based on the cooperation agreement we entered into with such third party.

Xunlei Media Player

Xunlei Media Player, which we launched in 2008, is a supplementary tool that helps to deliver a more comprehensive viewing experience of digital media content to the users of Xunlei Accelerator. Xunlei Media Player is our proprietary product that supports both online and offline play of digital media content as well as simultaneous play of digital media content while it is being transmitted by Xunlei Accelerator.

Online game services

To better serve our users, we partnered with third-party online game developers or service providers to offer our users an array of online games through our online game website and mobile app. Such game play platform helps raise the average spending of our subscribers. Online game players can play the games free of charge, but are offered the opportunity to purchase in-game virtual items for a fee to enhance their game-playing experience. We typically enter into cooperation agreements with third-party online game developers or service providers and share revenues generated from online game operations pursuant to revenue sharing arrangements in the agreements.

After we disposed of our web game business and discontinued PC-based MMOGs business in 2018, we only operated mobile game business under our online game business. In 2019, we started to cooperate with a third party to operate web game business under a business model different from our previous web game business. Under the new web game business model, we do not engage directly in the operation and maintenance of web games. Instead, we collaborate with a third-party online game provider and grant such online game provider an exclusive right to provide our users with an array of web games on our Xunlei game center website. After logging into their Xunlei accounts, our users are able to play these web games provided by the third-party online game provider. Our users are also able to purchase virtual items in those web games using a payment channel provided by us. Mobile games developed by third-party online game developers are available on our mobile app as usual. Users can download mobile games they are interested in through our mobile app and login the games by using their Xunlei account.

In addition to the above value-added services, we may also from time to time offer other ancillary services to cater to users' needs and to supplement the major services we provide.

Advertising services

We provide advertising services primarily through various forms of advertisements placed on our PC websites and mobile platform. We started to generate mobile advertising revenue for the first time in the fourth quarter of 2015, and it has grown rapidly since then. We had 112 advertisers in 2017, 89 advertisers in 2018, and 71 advertisers in 2019. The number of advertisers include the number of third party advertising platforms we cooperate with in each corresponding year, such as Guangdiantong. Our brand advertisers include international and domestic companies that operate in a variety of industries. A significant majority of our advertisers purchase our advertising services through third-party advertising agencies. We focus on providing advertisers with creative and cost-effective advertising solutions. We strive to creatively utilize our integrated service interface in designing a particular advertising campaign for advertisers.

Technology

We provide accelerated data transmission services, available on PC and mobile devices, based on our distributed file locating system, designed to utilize our proprietary file indexing technology.

Indexing technology

Key elements of our file indexing technology include:

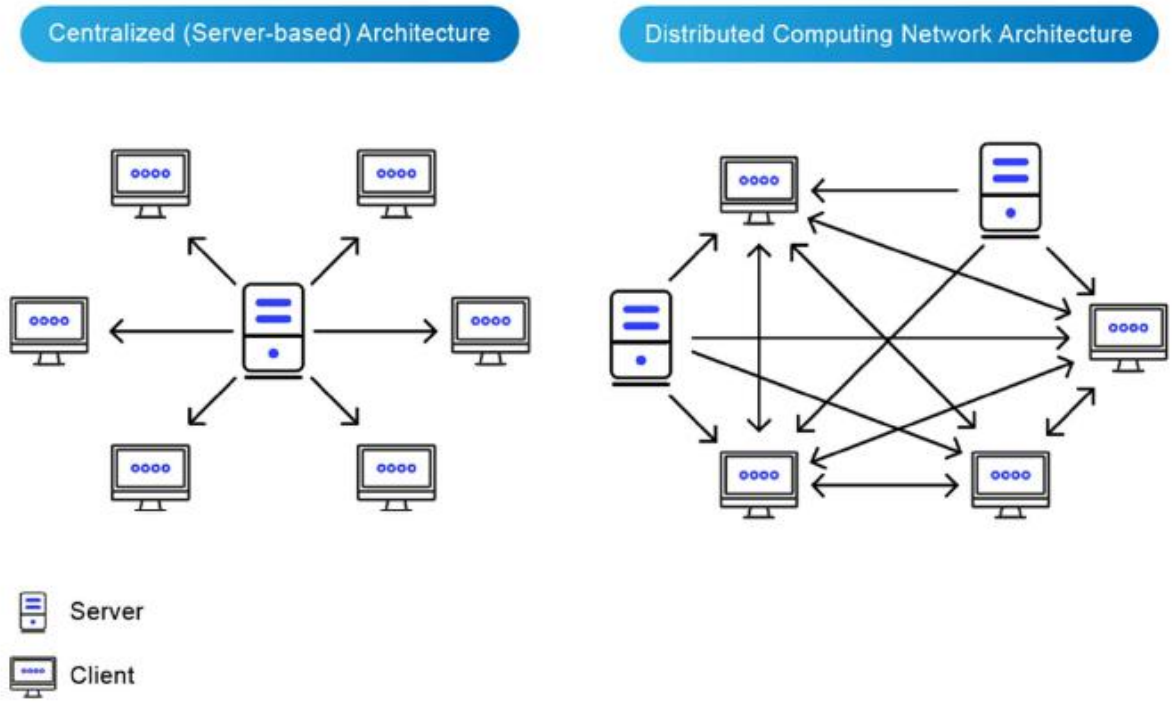
File indexing. We have created, and continue to maintain, a proprietary file index database that stores a massive index of unique file signatures representing all digital media content file that Xunlei Accelerator has found across the internet. Each file signature uniquely identifies the index of a given file. We store a list of each unique file's available data transmission locations from across the internet, which may include both peer and server computers, along with the estimated speed and reliability of each location.

Data mining . We also employ data mining algorithms, studying user habits in order to maximize the speed of our data delivery by ranking the keyword indexes that users search for and placing digital media content more likely to be searched by users in the more easily accessible locations in our network for optimal delivery speed.

Distributed internet crawling techniques . Our Xunlei Accelerator network acts as a system of distributed spiders to crawl the internet to search for digital media content files. Whenever the user initiates data transmission by using our Xunlei Accelerator, the URL of the data transmission location is uploaded to our server. We then use that URL to traverse and locate any other digital media content files that may also be available from the URL's internet page repositories. We then update our file index according to each traversal result.

Distributed file locating system

Our distributed file locating system is based on distributed computing architecture, which consists of all Xunlei Accelerator clients that are running and connected to the internet at a given time, along with the server addresses stored in our file index database. When users launch Xunlei Accelerator on a network-connected device, they are automatically connected to our distributed file locating system and contribute their bandwidth and computing power to our distributed file locating system, which enables users to locate and connect efficiently.



Key technologies include:

Multi-protocol file transfer technology . Our multi-protocol file transfer technology allows our product client to transmit, in parallel, from multiple sources that may use different file transfer protocols. Our multi-protocol file transfer technology significantly increases the number of data transmission sources available to further enhance data transmission performance.

Distributed file locating system . Our distributed file locating system helps users discover the best data transmission locations from across the internet, where a particular file may be transmitted or streamed for optimal performance. When a user requests data transmission using our Xunlei Accelerator, distributed file locating system will algorithmically prioritize and select from among the file's available data transmission locations an optimized subset of URLs based on their respective transmit speed and reliability, which is estimated through real-time collaborative interactions between our file index server and our massive network of active Xunlei Accelerator clients across the internet.

Network transport and traversal optimization . Our proprietary software algorithms perform dynamic internet bandwidth and throughput assessments across the Xunlei network and optimization of traffic routing to identify the most efficient path for data transport. These algorithms are designed to maximize delivery speed, reliability and efficiency, and support significant growth in network usage.

Cloud-based implementation

We provide cloud acceleration subscription services powered by our indexing technology and distributed file locating system. Our platform is compatible with different operating systems and hardware devices. As part of the infrastructure for the subscription services, except for proprietary load balancing and resource optimization algorithms, we maintain a virtual private network consisting of 61 co-location centers, over one million third party servers and over 7,000 servers that we own located throughout China.

We maintain proprietary load balancing and resource optimization algorithms, both of which help enhance our mass data mining on user habits to compile and maintain information on users' data transmission acceleration needs and requirements. As a cloud service provider, we use data mining for user habit prediction and co-location purposes. In user habit prediction, we analyze, sample and index user behavior data to help predict user acceleration needs and requirements. For co-location purposes, our program finds the most efficient and stable connection in our network for each transmission task. We also cooperate with telecom operators, maintaining logics and algorithms for our co-location centers in each telecom operator's network to enable real-time dynamic allocation of our servers and bandwidth to support user acceleration requirements. Our system automatically optimizes user connections based on key factors such as provincial network, firewall penetration and interconnection among various telecom operators.

Additionally, we entered into a framework service agreement with Alibaba Cloud Computing Co., Ltd., or Ali Cloud, in December 2018. Since then, Ali Cloud has provided us with cloud computing products and services. As of December 31, 2019, we were using 1,957 cloud servers and 2,900 cloud services provided by Ali Cloud through its six central nodes and 25 edge nodes.

Shared cloud computing model

We created a shared computing model and network by encouraging millions of personal users to share idle resources such as computing power, storage and bandwidth by deploying sharing economy smart devices such as OneThing Cloud and ZQB. With the shared cloud computing model, Xunlei provides high-quality, cost-effective cloud services for corporate clients. StellarCloud is a shared cloud computing platform which expands Xunlei's existing CDN services to a novel cloud computing service stack, offering edge computing, function computing and shared CDN solutions.

StellarCloud edge computing service allows users to deploy their own applications in the form of containers on shared nodes widely distributed on the internet, and make use of a considerable amount of resources such as computing power, storage and bandwidth on all these nodes. The key technology underlying the edge computing service is the container management system that we developed in-house. Unlike the mainstream container solutions designed for IDC environment, the system adopts a lightweight and highly fault-tolerant design that optimized for network and performance diversity of shared nodes, thus enables an efficient and reliable deployment and monitoring of containers among all the nodes.

StellarCloud CDN service is a distributed CDN service that integrates traditional cloud computing data centers and shared node networks. It provides common CDN capabilities such as video on demand, live video streaming, and file distribution. The system splits and encodes the data into segments and deploy them to multiple shared nodes according to a certain strategy. An end user requesting these data gets nearby nodes from our scheduling system, then establishes multiple peer-to-peer connections to fetch data segments concurrently and reassembles them into the original data. Combining our industry-leading peer-to-peer technology and the scheduling mechanism that has been improved for years, StellarCloud CDN moves data distribution from IDC to cost-effective shared nodes, cutting bandwidth costs without compromising the quality of service.

Blockchain platform

We launched ThunderChain, a high-performance blockchain infrastructure product, which can concurrently process millions of transactions per second. Based on our proprietary homogeneous multi-chain framework, ThunderChain is designed to realize confirmation and interaction among homogeneous chains and enable multiple transactions to be executed on different chains in parallel. ThunderChain adopts DPoA+PBFT dual consensus algorithm, which results in low latency and makes it possible to generate one block per second. PBFT, as a consistency algorithm, is also able to avoid soft fork. ThunderChain supports smart contracts written in solidity language and is compatible with Ethereum virtual machine, making it easy to migrate applications from other blockchain platforms.

Marketing

We built up our reputation and maintain our popularity primarily through word-of-mouth. We believe satisfied users and customers are more likely to recommend our services to others. Thus, we continue to focus on improving our services and enhancing our user experience. In the meanwhile, we also invest in a variety of marketing activities to further promote our brand awareness among existing and potential users as well as other customers. For example, we host or attend various public relations events, such as seminars, conferences and trade shows, in the advertising, online video and online game industries to attract users and advertisers. To retain and drive the growth of our subscribers, we market our premium paid services and place subscription advertisements at prominent locations throughout our integrated service offerings.

Intellectual property

Protection of our intellectual property

Our patents, copyrights, trademarks, trade secrets and other intellectual property rights are critical to our business. We rely on a combination of patent, copyright, trademark, trade secret and other intellectual property-related laws in the PRC and contractual restrictions to establish and protect our intellectual property rights. In addition, we require all of our employees to enter into agreements requiring them to keep confidential all information they obtain during the course of their employment relating to our technology, methods, business practices, customers and trade secrets. As of December 31, 2019, we had 94 patents granted in the PRC and four granted in the United States, while another 522 patent applications are being examined by the State Intellectual Property Office of the PRC. We also seek to vigorously protect our Xunlei brand and the brands of our other services. As of December 31, 2019, we have applied to register 923 trademarks, of which we have received 459 registered trademarks in different applicable trademark categories including one trademark registered with World Intellectual Property Organization.

Digital media data monitoring and copyright protection

We take initiatives to protect third-party copyrights. The internet industry in China suffers from copyright infringement issues and online digital media content providers are frequently involved in litigation based on allegations of infringement or other violations of copyrights. Assisted by an intellectual property team dedicated to copyright protection, we have implemented internal procedures pursuant to the legal requirements under relevant PRC laws and regulations to promptly disenable the download URL of contents for which we receive notice of infringement from the legitimate rights holder, and we work closely with the relevant regulatory authorities in China to ensure compliance with all relevant rules and regulations. We seek assurances in our contracts with digital media content providers that (i) they have the legal right to license the digital media data for the uses we require; (ii) the digital media content itself as well as the authorization or rights granted to us neither breach any applicable law, regulations or public morals, nor impair any third-party rights; and (iii) they will indemnify us for losses resulting from both the non-compliance of such digital media content with the laws and claims from third parties.

As of the date of this annual report, we had implemented several initiatives to further commit to copyright protection. For example, we require our third-party content providers to provide relevant contents that they are duly authorized to provide and do not infringe intellectual property rights of any other parties. We also make available on our websites and mobile applications reporting channels so that we can timely remove contents that infringe intellectual property rights of other parties. Despite the fact that we put in place preventive measures, we may still be subject to copyright infringement suits. As of the date of this annual report, we were involved in 20 copyright lawsuits. See "Item 3. Key Information—D. Risk Factors—Risks related to our business—We face and expect to continue to face copyright infringement claims and other related claims, including claims based on content available through our services, which could be time-consuming and costly to defend and may result in damage awards, injunctive relief and/or court orders, divert our management's attention and financial resources and adversely impact our business" and "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings."

User data safety

User data safety is a significant advantage we offer to our users. We try to improve user experience by usually maintaining two to four copies of one specific user file for data recovery in extreme circumstances such as system shutdown, private transmission backbone network problems and/or other contingencies beyond our control. The read and write characteristics of our distributed file locating system is identical to those of hard disks, and our unique user file decomposition and encryption algorithm enables us to maintain high standards for user data safety.

Competition

Due to our multiple service offerings, we face competition in several aspects of the internet services market in China. We believe that the key competitive factors in the overall internet services market in China include brand recognition, user traffic, technology platform and monetization abilities. We also face competition for the advertisement budgets of our advertisers from other internet companies and other forms of media.

Regulation

This section sets forth a summary of the most significant rules and regulations that affect our business activities in China.

Regulation on catalogue relating to foreign investment

The establishment, operation and management of corporate entities in the PRC are governed by the Company Law of the PRC, or the Company Law, which was promulgated by the Standing Committee of the National People's Congress, or the SCNPC, on December 29, 1993 and last amended and became effective on October 26, 2018. A foreign-invested company is also subject to the Company Law unless otherwise provided in the foreign investment laws.

The establishment and operations of wholly foreign-owned enterprises were mainly governed by the Law of the PRC on Wholly Foreign-Owned Enterprises and its implementation rules, which had been repealed by the Foreign Investment Law of the PRC enacted by the National People's Congress, or the NPC, on March 15, 2019 and became effective on January 1, 2020. On December 26, 2019, the State Council promulgated the Detailed Rules for the Implementation of the Foreign Investment Law of the PRC, which became effective on January 1, 2020.

Investment activities in the PRC by foreign investors and foreign-invested enterprises were regulated by the Catalogue of Industries for Guiding Foreign Investment, last repealed by the Special Management Measures (Negative List) for the Access of Foreign Investment (2019 Version), or the Negative List, and the Catalogue of Industries for Encouraging Foreign Investment (2019 Version), or Encouraging Catalogue, which were promulgated by the National Development and Reform Commission, or NDRC, and the Ministry of Commerce on June 30, 2019 and became effective on July 30, 2019. Pursuant to the Encouraging Catalogue and the Negative List, foreign-invested projects are categorized as encouraged, restricted and prohibited. Foreign-invested projects that are not listed in the Negative list are permitted foreign invested projects.

Establishment of wholly foreign-owned enterprises is generally allowed in industries not included in the Negative List. For the restricted industries within the Negative List, some of the industries are limited to equity or contractual joint ventures, while in some cases Chinese partners are required to hold the majority interests in such joint ventures. In addition, restricted category projects are subject to government approvals and certain special requirements. Foreign investors are not allowed to invest in industries in the prohibited category. The provision of value-added telecommunications services falls in the restricted category and the percentage of foreign ownership cannot exceed 50% (excluding e-commerce). The provision of internet cultural operating service (including online game operation services), internet publication service and online transmission of audio-visual programs service fall in the prohibited category and the foreign investors are prohibited to engage in such services. We conduct our operations in China principally through contractual arrangements among Giganology Shenzhen, our wholly-owned PRC subsidiary, and Shenzhen Xunlei, our VIE, and its shareholders. Shenzhen Xunlei or its relevant subsidiary, holds the licenses and permits necessary to conduct our resource discovery network, cloud computing, online advertising, online games and related businesses in China and holds various operating subsidiaries that conduct a majority of our operations in China. Shenzhen Onething has obtained an updated VATS License to cover CDN service for our cloud computing business. Both of Giganology Shenzhen and Xunlei Computer, another wholly-owned PRC subsidiary of ours, engage in the development of computer software, technical consulting and other related technical services and businesses, none of which falls into any of restricted or prohibited categories under the Catalogue. Hence, these activities operated by Giganology Shenzhen and Xunlei Computer are deemed to be permitted and open to foreign investment.

The establishment and change of foreign-invested enterprises was subject to record-filing procedures pursuant to the Interim Measures for Record-filing Administration of the Establishment and Change of Foreign-invested Enterprises, or FIE Record-filing Interim Measures, effective on the same day. Pursuant to FIE Record-filing Interim Measures, requirements, provided that the establishment if the establishment or change of FIE matters involve the special entry administration measures, the approval of the Ministry of Commerce or its local counterparts is still required. In December 2019, the Ministry of Commerce and the State Administration for Market Regulation issued Measures for the Reporting of Foreign Investment Information, effective on January 1, 2020, which repealed the FIE Record-filing Interim Measures. Pursuant to the Measures, where foreign investors carry out investment activities directly or indirectly within China, foreign investors or foreign-funded enterprises shall report investment information to relevant commerce departments.

Regulation on telecommunications and internet information services

The telecommunications industry, including the internet sector, is highly regulated in the PRC. Regulations issued or implemented by the State Council, MIIT, and other relevant government authorities cover many aspects of operation of telecommunications and internet information services, including entry into the telecommunications industry, the scope of permissible business activities, licenses and permits for various business activities and foreign investment.

The principal regulations governing the telecommunications and internet information services we provide in the PRC include:

- *Telecommunications regulations* (2016, revised), or the Telecom Regulations. The Telecom Regulations categorize all telecommunications businesses in the PRC as either basic or value-added. Value-added telecommunications services are defined as telecommunications and information services provided through public network infrastructures. The "Catalogue of Telecommunications Business," an attachment to the Telecom Regulations and updated by MIIT's Notice on Adjusting the Catalogue of Telecommunications Business effective from April 1, 2003 and amended on March 1, 2016, categorizes various types of telecommunications and telecommunications-related activities into basic or value-added telecommunications services, according to which, internet content provider services, or ICP services, are classified under the second category of value-added telecommunications businesses and the CDN services, the internet access services and the internet data center services are classified under the first category of value-added telecommunications business. Under the Telecom Regulations, commercial operators of value-added telecommunications services must obtain the VATS License covering the business classified under the relevant category from MIIT or its provincial level counterparts.

- *Administrative measures on internet information services* (2011, revised), or the Internet Measures. According to the Internet Measures, a commercial ICP service operator must obtain a VATS License from the relevant government authorities before engaging in any commercial ICP service within the PRC. When the ICP service involves areas of news, publication, education, medical treatment, health, pharmaceuticals, medical equipment and other industry and if required by law or relevant regulations, prior approval from the respective regulating authorities must be obtained prior to applying for the VATS License covering the ICP services from MIIT or its local branch at the provincial level. Moreover, an ICP service operator must display its ICP License number in a conspicuous location on its website and must monitor its website to remove categories of harmful content that are broadly defined.

- Administrative measures for telecommunications business operating license (2017, revised), or the Telecom License Measures. The Telecom License Measures set forth more specific provisions regarding the types of licenses required to operate value-added telecommunications services, the qualifications and procedures for obtaining such licenses and the administration and supervision of such licenses. For example, an ICP service operator conducting business within a single province must apply for the VATS License from MIIT's applicable provincial level counterpart, while an ICP service operator providing ICP services across provinces must apply for a Trans-regional VATS License directly from MIIT. The appendix to the VATS License must detail the permitted activities to be conducted by the ICP service operator. An approved ICP service operator must conduct its business in accordance with the specifications recorded on its VATS License. The VATS License is subject to annual report requirement. An ICP service operator shall report certain information to the issuing authorities through the administrative platform in the first quarter every year. Such information includes the business performance of the telecommunications business in the previous year, service quality, the actual implementation of the network and information security guarantee systems and measures, among others. ICP service operator shall be responsible for the truthfulness of the information in the annual report.

- *Detailed rules on the administration of internet websites* (2005), which set forth that the website operator is required to apply for the ICP filing from MIIT or its local branches at the provincial level on its own or through the access service provider.

- *Regulations for administration of foreign-invested telecommunications enterprises* (2016, revised), or the FITE Regulations. The FITE Regulations set forth detailed requirements with respect to, among others, capitalization, investor qualifications and application procedures in connection with the establishment of a foreign-invested telecommunications enterprise. Under the FITE Regulations, a foreign entity is prohibited from owning more than 50% of the total equity interest in any value-added telecommunications service business in the PRC and the major foreign investor in any value-added telecommunications service business in the PRC shall have good and profitable records and operating experiences in such industry.

- *Circular on strengthening the administration of foreign investment in and operation of value-added telecommunications business* (2006). Under this circular, a domestic PRC company that holds a VATS License is prohibited from leasing, transferring or selling the VATS License to foreign investors in any form, and from providing any assistance, including providing resources, sites or facilities, to foreign investors that conduct value-added telecommunications business illegally in the PRC. Further, the domain names and registered trademarks used by an operating company providing value-added telecommunications service shall be legally owned by such company and/or its shareholders. In addition, such company's operation premises and equipment should comply with the approved covering region on its VATS License, and such company should establish and improve its internal internet and information security policies and standards and emergency management procedures.

- *Circular of the Ministry of Industry and Information Technology on Clearing up and Regulating the Internet Access Service Market* (2017), which, among others, further strengthens the supervision and management of the applications of cloud computing, big data and other applications. For an enterprise that conducts the CDN business without a VATS License specifically covering such business, it must submit a written commitment to the original license issuing authority before March 31, 2017, undertaking that an eligible VATS License will be obtained by the end of 2017. If such enterprise fails to make the commitment on time, it must carry out business activities strictly in compliance with their existing licenses. Furthermore, if the enterprise fails to obtain the eligible VATS License as committed it should terminate the relevant business starting from January 1, 2018.

To comply with these PRC laws and regulations, we operate our websites through Shenzhen Xunlei, our PRC variable interest entity. We, through Shenzhen Xunlei, currently hold a VATS License covering its ICP services expiring on April 30, 2025 and another VATS License for its provision of could computing services including internet data center services and internet access services expiring on October 31, 2024, and own the essential trademarks and domain names in relation to our value-added telecommunications business. Shenzhen Onething has obtained an updated VATS License to cover the CDN service for our cloud computing business.

Under various laws and regulations governing ICP services, ICP services operators are required to monitor their websites. They may not produce, duplicate, post or disseminate any content that falls within the prohibited categories and must remove any such content from their websites, including any content that:

- opposes the fundamental principles determined in the PRC's Constitution;

- compromises state security, divulges state secrets, subverts state power or damages national unity;

- harms the dignity or interests of the State;

- incites ethnic hatred or racial discrimination or damages inter-ethnic unity;

- sabotages the PRC's religious policy or propagates heretical teachings or feudal superstitions;

- disseminates rumors, disturbs social order or disrupts social stability;

- propagates obscenity, pornography, gambling, violence, murder or fear or incites the commission of crimes;

- insults or slanders a third party or infringes upon the lawful rights and interests of a third party; or

- includes other content prohibited by laws or administrative regulations.

The PRC government may shut down the websites of VATS License holders that violate any of such content restrictions and requirement, revoke their VATS Licenses or impose other penalties pursuant to applicable law. To comply with these PRC laws and regulations, we have adopted internal procedures to monitor content displayed on our website.

Regulation on online transmission of audio-visual programs

On April 25, 2016, SAPPRFT issued the *Administrative Provisions on Audio-Visual Program Services through Private Network and Targeted Communication* , which replaced the Measures for the Administration of Publication of Audio-visual Programs through Internet or Other Information Network, or the 2004 Internet A/V Measures. Pursuant to these provisions, "audio-visual program services through private network and targeted communication" refer to radio, TV program and other audio-visual program services to a targeted audience with TV and all types of handheld electronic equipment as terminal recipients, and through setting up virtual private network through local networks and internet or with Internet and other information networks as targeted transmission channels, including the provision of contents, integrated broadcast control, transmission and distribution, and other activities conducted by such forms as Internet protocol television (IPTV), private network mobile TV, and Internet TV. Any provider who engages in aforesaid service must obtain a license from GAPPRFT. Wholly foreign-owned enterprises, Sino-foreign joint ventures and Sino-foreign cooperative enterprises are not allowed to engage in the above business. 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, MOC, GAPPRFT, the NDRC and the Ministry of Commerce, 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 conduct the business of transmitting audio-visual programs via information network.

On December 20, 2007, GAPPRFT and MIIT jointly promulgated the *Administrative Provisions on Internet Audio-visual Program Service* , or the Audio-visual Program Provisions, which came into effect on January 31, 2008 and was revised on August 28, 2015. The Audio-visual Program Provisions apply to the provision of audio-visual program services to the public via internet (including mobile network) within the territory of the PRC. Providers of internet audio-visual program services are required to obtain a License for Online Transmission of Audio-visual Programs issued by GAPPRFT or complete certain registration procedures with GAPPRFT. Providers of internet audio-visual program services are generally required to be either State-owned or State-controlled by the PRC government, and the business to be carried out by such providers must satisfy the overall planning and guidance catalog for internet audio-visual program services determined by GAPPRFT. In a press conference jointly held by GAPPRFT and MIIT to answer questions with respect to the Audio-visual Program Provisions in February 2008, GAPPRFT 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 shall be eligible to register their business and continue their operation of internet audio-visual program services so long as those providers had not been in violation of the laws and regulations. On March 10, 2017, SAPPRFT promulgated the *Categories of the Internet Audio-Video Program Services* , which classifies internet audio-video programs into four categories.

On May 21, 2008, GAPPRFT issued a *Notice on Relevant Issues Concerning Application and Approval of License for Online Transmission of Audio-visual Programs* , which further sets forth detailed provisions concerning the application and approval process regarding the License for Online Transmission of Audio-visual Programs. The notice also provides that providers of internet audio-visual program services who engaged in such services prior to the promulgation of the Audio-visual Program Provisions shall also be eligible to apply for the license so long as their violation of the laws and regulations is minor and can be rectified timely and they have no records of violation during the latest three months prior to the promulgation of the Audio-visual Program Provisions.

On December 28, 2007, GAPPRFT issued the *Notice on Strengthening the Administration of TV Dramas and Films Transmitted via the Internet, or the Notice on Dramas and Films* . According to this notice, if audio-visual programs published to the public through an information network fall under the film and drama category, the requirements of the Permit for Issuance of TV Dramas, Permit for Public Projection of Films, Permit for Issuance of Cartoons or academic literature movies and Permit for Public Projection of Academic Literature Movies and TV Plays will apply accordingly. In addition, providers of such services should obtain prior consents from copyright owners of all such audio-visual programs.

Further, on March 31, 2009, GAPPRFT issued the *Notice on Strengthening the Administration of the Content of Internet Audio-visual Programs* , or the *Notice on Content of A/V Programs* which reiterates the requirement of obtaining the relevant permit of audio-visual programs to be published to the public through information network, where applicable, and prohibits certain types of internet audio-visual programs containing violence, pornography, gambling, terrorism, superstition or other hazardous factors. In addition, on August 14, 2009, GAPPRFT issued the *Notice on Relevant Issues Regarding Strengthening of the Administration of Internet Audio/visual Program Services Received by Television Terminals* , which specifies that prior to providing audio-visual program services for television terminals, an ICP service operator shall obtain the License for Online Transmission of Audio-visual Programs containing the scope of "Integration and Operation Services of Audio-visual Programs Received by Television Terminals." On March 10, 2017, SAPPRFT issued the *Internet Audio/Visual Program Services Categories (Provisional)* , or the Provisional Categories, which classified internet audio-visual programs into four categories.

On August 1, 2018, the MIIT, the Ministry of Public Security of the PRC and other government agency jointly issued the Notice on Strengthening the Administration of the Internet Live Streaming Service which requires the internet live streaming service providers shall go through the procedures of filing with the competent department of telecommunications. The internet live streaming service providers engaged in telecommunications business and internet news information, network performances and internet live streaming of audio-visual programs shall apply to the relevant departments for permission to operate such telecommunication business and shall perform the procedures of record-filing with the local public security department within 30 days after the live streaming service being operated.

To comply with these laws and regulations, Henan Tourism Information Co., Ltd., or Henan Tourism, one of our operating subsidiaries in the PRC, currently holds a License for Online Transmission of Audio-visual Programs with an effective period from February 2018 to February 2021. See "Item 3. Key Information—D. Risk factors—Risks related to our business—We are strictly regulated in China. Any lack of requisite licenses or permits applicable to our businesses or to our third-party services providers and any changes in government policies or regulations may have a material and adverse impact on our businesses, financial conditions and results of operations."

Regulation on online cultural activities

On February 17, 2011, the MOC promulgated the *Provisional Measures on Administration of Internet Culture* , or the Internet Culture Measures, which became effective as of April 1, 2011 and was amended on December 15, 2017. On March 18, 2011, the MOC issued the *Notice on Issues Relating to Implementing the Newly Amended Provisional Measures on Administration of Internet Culture* . The Internet Culture Measures regulates entities engaging in activities relating to "online cultural products." "Online cultural products" are defined as cultural products produced, disseminated and circulated via internet which mainly include: (i) online cultural products particularly produced for the internet, such as online music entertainment, network games, network performance programs, online performing arts, online artworks and online animation features and cartoons; and (ii) online cultural products converted from music entertainment, games, performance programs, performing arts, artworks and animation features and cartoons, and disseminated via the internet. Pursuant to these measures, entities are required to obtain relevant Online Culture Operating Permits from the applicable provincial level culture administrative authority if they intend to commercially engage in any of the following types of activities:

- production, duplication, importation, distribution or broadcasting of online cultural products;
- publication of online cultural products on the internet or transmission thereof via information networks such as the internet and the mobile networks to computers, fixed-line or mobile phones, television sets or gaming consoles for the purpose of browsing, reviewing, using or downloading such products by online users; or
- exhibitions or contests related to online cultural products.

On December 2, 2016, the MOC issued *the Administrative Measures for Business Activities of Online Performances* , which became effective on January 1, 2017. According to these measures, the business of transmitting in real time the content of online games presented or narrated via information networks such as the internet, mobile communication networks and mobile internet or uploading such contents for communication in the audio-visual form shall be administered as online performances. An operator of online performances shall apply for Online Culture Operating Permit with the competent provincial cultural administration department, and the business scope indicated on the Online Culture Operating Permit shall clearly include online performances. In addition, an operator of online performances shall present the number of its Online Culture Operating Permit in a prominent position on the homepage of its websites.

To comply with these then and currently effective laws and regulations, Shenzhen Xunlei obtained an Online Culture Operating Permit, which was last renewed in March 2019 with an effective period from March 16, 2019 to March 15, 2022 to offer music entertainment product online, operate online performance business and online shows business, and engage in the exhibition of online culture products and competition activities. Shenzhen Wangwenhua obtained an Online Culture Operating Permit with an effective period from May 2, 2017 to May 1, 2020 to operate online performance business and online shows business. In addition, Shenzhen Zhuolian Software Co., Ltd. obtained an Online Culture Operating Permit with an effective period from January 9, 2018 to January 8, 2021 to operate online performance business and online shows business.

Regulation on online games

MOCT (formerly the MOC) is the government agency primarily responsible for regulating online games in the PRC. On June 3, 2010, MOC promulgated the *Provisional Measures on the Administration of Online Games* , amended on December 15, 2017 and last repealed by the Decision of the Ministry of Culture and Tourism to Repeal the Measures for the Administration of Online Games and the Measures for the Administration of Tourism Development Plans, which became effective on July 10, 2019. Pursuant to the *Provisional Measures on the Administration of Online Games* , the content of the online games are subject to the review of MOC. These measures set forth a series of prohibitions regarding the content of the online games, including but without limitation the prohibition on content that oppose the fundamental principles stated in the PRC Constitution, compromise state security, divulge state secrets, subvert state power or damage national unity, and content that is otherwise prohibited by laws or administrative regulations. Moreover, in accordance with these measures, ICP service operators engaging in any activities involving the operation of online games, issuance or trading of virtual currency must obtain the Online Culture Operating Permit and handle the censorship procedures for imported online games and the filing procedures for domestically developed online games with MOC and its provincial counterparts. The procedures for the censorship of imported online games must be conducted with MOC prior to the commencement date of the online operation and the filing procedures for domestic online games must be conducted with MOC within 30 days after the commencement date of the online operation or the occurrence date of any material alteration of such online games. Regarding virtual currency trading, ICP service operators can only issue virtual currency in exchange of the service provided by itself rather than trading for service or products provided by third parties. ICP service operators cannot appropriate the advance payment by the players and are not allowed to provide trading service of virtual currency to minors. All the transactions in the accounts shall be kept in records for a minimum of 180 days. To comply with these laws and regulations, Shenzhen Xunlei, Xunlei Games, and Shenzhen Wangwenhua have obtained an Online Culture Operating Permit for our operation of online games.

Further, the online publication of online games is subject to the regulation of SAPPRFT, formerly the GAPPRFT, under the *Administrative Provisions on Online Publishing Services* and ICP service operators must obtain the internet publishing services license prior to provision of any online game publishing services. On September 28, 2009, GAPPRFT, the National Copyright Administration and the National Office of Combating Pornography and Illegal Publications jointly published the *Notice Regarding the Consistent Implementation of the "Stipulations on 'Three Provisions' of the State Council and the Relevant Interpretations of the State Commission Office for Public Sector Reform and the Further Strengthening of the Administration of Pre-examination and Approval of Internet Games and the Examination and Approval of Imported Internet Games "*, or the Notice of Three Provisions and Internet Games, which expressly requires that all online games need to be screened by GAPPRFT through the advanced approvals before they are operated online, and any updated online game versions or any change to the online games shall be subject to further advanced approvals before they can be operated online. In addition, foreign investors are prohibited from operating online games by the forms of Sino-foreign joint ventures, Sino-foreign cooperatives and wholly foreign-owned enterprises. The indirect functions such as contractual control and technology supply are also prohibited.

Moreover, on December 1, 2016, MOC issued *the Circular of the Ministry of Culture on Regulating the Operations of Online Games and Strengthening Interim and Ex-Post Regulation* , which will become effective on May 1, 2017. MOC further clarified the scope of online game operation in the circular. If an enterprise conducts technical testing of online games by means of, among others, making the online games available for user registration, opening the fee-charging system of the online games or providing client-end software with direct server registration and log-in functions, such enterprise is deemed to be an online game operator. If an enterprise provides user systems, fee-charging systems, program downloading, publicity and promotion and other services for the online game products of another game operator and participates in sharing the revenue from the operations of online games, such enterprise is deemed as a joint operator, and must bear corresponding liabilities. In addition, enterprises engaging in online game operations must require users to register their real names by using valid identity documents and must limit the amount that a user may top up each time in a single game. In addition, the enterprises are required to send information that requires confirmation by users when they top up or make the payments, and the contact details for protecting users' rights and interests must be indicated conspicuously in an online game.

On May 14, 2019, the MOCT issued a notice announcing the adjustment of the scope of business activities that are subject to the MOCT's approval for Online Culture Operation License. Pursuant the notice, the MOCT will no longer be responsible for issuing Online Culture Operation License to companies operating online games and issuance and trading of virtual currency in connection with online game operations. On July 10, 2019, the MOCT abolished the Provisional Measures on the Administration of Online Games, which required online game operators to obtain Online Culture Operation License for operating online games and issuance and trading of virtual currency in connection with online game operations. As a result, Online Culture Operation License is no longer required for online game operators.

Our online game services are operated by Shenzhen Wangwenhua and Xunlei Games. Both entities have obtained the VATS License for operating online games, but do not possess the internet publishing services license. For risks relating to the internet publishing services license, see "Item 3. Key Information—D. Risk factors—Risks related to our business—We may not be able to successfully address the challenges and risks we face in the online games market, such as a failure to operate popular, high-quality games or to obtain all the licenses required to operate online games, which may subject us to penalties from relevant authorities, including the discontinuance of our online game business."

Regulation on anti-fatigue system, real-name registration system and parental guardianship project

In April 2007, GAPPRFT and several other government agencies issued a circular requiring the implementation of an anti-fatigue system and a real-name registration system by all PRC online game operators to curb addictive online game playing by minors. Under the anti-fatigue 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 to be "fatiguing," and five hours or more to be "unhealthy." Game operators are required to reduce the value of in-game benefits to a minor player by half if the minor has reached the "fatiguing" level, and to zero once reaching the "unhealthy" level.

To identify whether a game player is a minor and thus subject to the anti-fatigue system, a real-name registration system must be adopted to require online game players to register their real identity information before playing online games. The online game operators are also required to submit the identity information of game players to the public security authority for verification. In July 2011, GAPPRFT, together with several other government agencies, jointly issued the *Notice on Initializing the Verification of Real-name Registration for the Anti-Fatigue System on Online Games* , or the Real-name Registration Notice, to strengthen the implementation of the anti-fatigue and real-name registration system. The main purpose of the Real-name Registration Notice is to curb addictive online game playing by minors and protect their physical and mental health. This notice indicates that the National Citizen Identity Information Center of the Ministry of Public Security will verify identity information of game players submitted by online game operators. The Real-name Registration Notice also imposes stringent penalties on online game operators that do not implement the required anti-fatigue and real-name registration systems properly and effectively, including terminating their online game operations.

In January 2011, MOC, together with several other government agencies, jointly issued a Circular on Printing and Distributing Implementation Scheme regarding Parental Guardianship Project for Minors Playing Online Games to strengthen the administration of online games and protect the legitimate rights and interests of minors. This circular indicates that online game operators must have person in charge, set up specific service webpages and publicize specific hotlines to provide parents with necessary assistance to prevent or restrict minors' improper game playing behavior. Online game operators must also submit a report regarding its performance under the Parental Guardianship Project to the local MOC office each quarter.

In October 2019, General Administration of Press and Publication issued the Anti-indulgence Notice, under which the total period of time for underage users to play online games is strictly restricted. For example, from 22:00 p.m. each day to 8:00 a.m. of the next day, game operators are not allowed to provide underage users with any form of access to online games they operate, and the total length of time for game operators to provide underage users with access to online games cannot exceed three hours a day during statutory holidays or 1.5 hours a day on days other than statutory holidays. The Anti-indulgence Notice also requires game operators to implement the real-name registration system for players of online games and take effective measures to restrict underage players from using paid services that are inconsistent with their capacity for civil conduct.

For the online games on our platform, we have implemented a real-name registration system for our online games. For game players who do not provide verified identity information, we assume that they are minors under 18 years of age. Online game operators or developers rely on the identify information provide by us to implement their anti-indulgence measures. With respect to anti-indulgence measures, we have developed our own anti-indulgence measures and are currently working with our third-party online game providers to implement anti-indulgence measures pursuant to the Anti-indulgence Notice. See "Item 3. Key Information—D. Risk Factors—Risks related to our business—We may not be able to successfully address the challenges and risks we face in the online games market, such as a failure to operate popular, high-quality games or to obtain all the licenses required to operate online games, which may subject us to penalties from relevant authorities, including the discontinuance of our online game business."

Regulation on online game virtual currency

On February 15, 2007, MOC, the People's Bank of China and other relevant government authorities jointly issued the *Notice on Further Strengthening Administrative Work on the Internet Cafes and Online Games* , or the Internet Cafes Notice, pursuant to which the People's Bank of China is directed to strengthen the administration of virtual currency in online games to avoid any adverse impact on the economy and financial system. This notice provides that the total amount of virtual currency issued by online game operators and the amount purchased by individual game players should be strictly limited, with a strict and clear division between virtual transactions and real transactions carried out by way of electronic commerce. It also provides that virtual currency shall only be used to purchase virtual items. On June 4, 2009, MOC and Ministry of Commerce jointly issued the *Notice on Strengthening the Administrative Work on Virtual Currency of Online Games* , pursuant to which no enterprise may concurrently provide both virtual currency issuance service and virtual currency transaction service. In addition, the Provisional Measures on the Administration of Online Games require companies that (i) issue online game virtual currency (including prepaid cards and/or pre-payment or prepaid card points) or (ii) offer online game virtual currency transaction services to apply for the Online Culture Operating Permit from provincial branches of MOC. The regulations prohibit companies that issue online game virtual currency from providing services that would enable the trading of such virtual currency. Any company that fails to submit the requisite application will be subject to sanctions, including but not limited to termination of operation, confiscation of incomes and fines. The regulations also prohibit online game operators from allocating virtual items or virtual currency to players based on random selection through lucky draw, wager or lottery that involves cash or virtual currency directly paid by the players. In addition, companies that issue online game virtual currency must comply with certain specific requirements, for example, online game virtual currency can only be used for products and services related to the issuance company's own online games.

On May 14, 2019, the MOCT issued a notice announcing the adjustment of the scope of business activities that are subject to the MOCT's approval for Online Culture Operation License. Pursuant the notice, the MOCT will no longer be responsible for issuing Online Culture Operation License to companies operating online games and issuance and trading of virtual currency in connection with online game operations. On July 10, 2019, the MOCT abolished the Provisional Measures on the Administration of Online Games, which required online game operators to obtain Online Culture Operation License for operating online games and issuance and trading of virtual currency in connection with online game operations. As a result, Online Culture Operation License is no longer required for online game operators.

Since Online Culture Operation License is no longer required for the issuance and trading of virtual currency in connection with online game operations, Xunlei Games did not renew its Online Culture Operation Licenses after expiration.

Regulation on internet publication

SAPPRFT (formerly the GAPPRFT) is the government agency responsible for regulating publication activities in the PRC. On June 27, 2002, MIIT and GAPPRFT jointly promulgated the *Tentative Administration Measures on Internet Publication* , or the Internet Publication Measures, which took effect on August 1, 2002. The Internet Publication Measures require internet publishers to secure approval, or the Internet Publication License, from GAPPRFT to conduct internet publication activities. In February 2016, the SAPPRFT and the MIIT jointly issued the *Administrative Measures on Network Publication* , which took effect in March 2016 and replaced the Internet Publication Measures. Pursuant to the Administrative Measures on Network Publication, Internet publishers shall be approved by and obtain an internet publishing services from GAPPRFT to engage in network publication service. The network publication services refer to the activities of providing network publications to the public through information networks; and the network publications refer to the digitalized works with the publishing features such as editing, producing and processing. The Administrative Measures on Network Publication also provide the detailed qualifications and application procedures for obtaining an internet publishing services license. The Notice of Three Provisions and Internet Games issued jointly by GAPPRFT and other relevant administrations confirmed that the entities operating internet games must obtain the Internet Publication License. On February 21, 2008, the GAPPRFT promulgated the *Rules for the Administration of Electronic Publication* , or the Electronic Publication Rules, which took effect on April 15, 2008 and was amended on August 28, 2015. Under the Electronic Publication Rules and other regulations issued by the GAPPRFT, 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 GAPPRFT.

Shenzhen Xunlei holds an Internet Publication License for the publication of internet games with an expiry date of September 17, 2022. See “Item 3. Key Information—D. Risk factors—We may not be able to successfully address the challenges and risks we face in the online games market, such as a failure to acquire and operate popular, high-quality games or to obtain all the licenses required to operate online games, which may subject us to penalties from relevant authorities, including the discontinuance of our online game business.”

Regulation on internet privacy

The PRC Constitution states that PRC law protects the freedom and privacy of communications of citizens and prohibits infringement of such rights. In recent years, PRC government authorities have enacted legislation on internet use to protect personal information from any unauthorized disclosure. The Internet Measures prohibit ICP service operators from insulting or slandering a third party or infringing upon the lawful rights and interests of a third party. Pursuant to the BBS Measures, ICP service operators that provide electronic messaging services must keep users’ personal information confidential and must not disclose such personal information to any third party without the users’ consent, unless such disclosure is required by law. The regulations further authorize the relevant telecommunications authorities to order ICP service operators to rectify unauthorized disclosure. ICP service operators are subject to legal liability if the unauthorized disclosure results in damages or losses to users. The PRC government, however, has the power and authority to order ICP service operators to turn over personal information if an internet user posts any prohibited content or engages in illegal activities on the internet. Under the *Several Provisions on Regulating the Market Order of Internet Information Services* issued by MIIT on December 29, 2011, without the consent of a user, an ICP operator may not collect any user personal information or provide any such information to third parties. An ICP service operator shall expressly inform the users of the method, content and purpose of the collection and processing of such user personal information and may only collect such information necessary for the provision of its services. An ICP service operator is also required to properly keep the user personal information, and in case of any leak or likely leak of the user personal information, the ICP service operator shall take immediate remedial measures and in severe consequences, to make an immediate report to the telecommunications regulatory authority. In addition, pursuant to the *Decision on Strengthening the Protection of Online Information* issued by the SCNPC of the PRC on December 28, 2012, or the Decision, and the *Order for the Protection of Telecommunication and Internet User Personal Information* issued by MIIT on July 16, 2013, or the Order, any collection and use of user personal information shall 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 ICP service operator shall also keep such information strictly confidential, and is further prohibited from divulging, tampering or destroying of any such information, or selling or proving such information to other parties. Any violation of the Decision or the Order may subject the ICP service operator to warnings, fines, confiscation of illegal gains, revocation of licenses, cancellation of filings, closedown of websites or even criminal liabilities.

Pursuant to the Ninth Amendment to the Criminal Law of the PRC issued by the SCNPC on August 29, 2015, any internet service provider that fails to fulfill the obligations related to internet information security as required by applicable laws and refuses to take corrective measures, will be subject to criminal liability for (i) any large-scale dissemination of illegal information; (ii) any severe effect due to the leakage of users' personal information; (iii) any serious loss of evidence of criminal activities; or (iv) other severe situations, and any individual or entity that (a) sells or provides personal information to others unlawfully or (b) steals or illegally obtains any personal information will be subject to criminal liability in severe situations.

The SCNPC promulgated the Cybersecurity Law of the PRC, or the Cybersecurity Law, on November 7, 2016. Pursuant to the Cybersecurity Law, network operators shall follow their cybersecurity obligations according to the requirements of the classified protection system for cybersecurity, including: (a) formulating internal security management systems and operating instructions, determining the persons responsible for cybersecurity, and implementing the responsibility for cybersecurity protection; (b) taking technological measures to prevent computer viruses, network attacks, network intrusions and other actions endangering cybersecurity; (c) taking technological measures to monitor and record the network operation status and cybersecurity incidents; (d) taking measures such as data classification, and back-up and encryption of important data; and (e) other obligations provided by laws and administrative regulations. In addition, network operators shall follow the principles of legitimacy to collect and use personal information and disclose their rules of data collection and use, clearly express the purposes, means and scope of collecting and using the information, and obtain the consent of the persons whose data is gathered.

On November 28, 2019, the Secretary Bureau of the Cyberspace Administration of China, the General Office of the Ministry of Industry and Information Technology, the General Office of the Ministry of Public Security and the General Office of the State Administration for Market Regulation promulgated the Identification Method of Illegal Collection and Use of Personal Information Through App, which provides guidance for the regulatory authorities to identify the illegal collection and use of personal information through mobile apps, and for the app operators to conduct self-examination and self-correction and for other participants to voluntarily monitor compliance.

The National Information Security Standardization Technical Committee issued the latest *Standard of Information Security Technology—Personal Information Security Specification* , which came into effect in March, 2020 and replaced the 2017 version. Under such standard, a personal information controller should follow the principles of legality, justification and necessity in handling personal information, obtain a consent from personal information providers and provide the personal information providers an independent choice when the product or service provided by the personal information controller has multiple functions.

To comply with these laws and regulations, we have established information security systems to protect user's privacy. We periodically review and amend our privacy policies on our websites and mobile applications based on the development and changes of our business operations so that we obtain consents from our users for collecting and using their personal information.

Regulation on internet medicine information service

The State Food and Drug Administration, or the SFDA, promulgated the Administration Measures on Internet Medicine Information Service on July 8, 2004, which was amended in November 2017, and certain implementing rules and notices thereafter. These measures set out regulations governing the classification, application, approval, content, qualifications and requirements for internet medicine information services. An ICP service operator that provides information regarding medicine or medical equipment must obtain an Internet Medicine Information Service Qualification Certificate from the applicable provincial level counterpart of SFDA. Shenzhen Xunlei has obtained a Medicine Information Service Qualification Certificate from Guangdong Food and Drug Administration for the provision of internet medical information services with an expiry date of August 21, 2023. Shenzhen Wangwenhua has also obtained a Medicine Information Service Qualification Certificate from Guangdong Food and Drug Administration for the provision of internet medical information services with an expiry date of September 17, 2022.

Regulation on advertising business

The State Administration for Industry and Commerce, or the SAIC, is the government agency responsible for regulating advertising activities in the PRC.

According to the PRC laws and regulations, companies that engage in advertising activities must obtain from SAIC or its local branches a business license which specifically includes operating an advertising business within its business scope. 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 law or regulation. PRC advertising laws and regulations set forth certain content requirements for advertisements in the PRC 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 by PRC advertising laws and regulations to ensure that the content of the advertisements they prepare or distribute is true and in full compliance with applicable law. 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. The release or delivery of advertisements through the Internet shall not impair the normal use of the network by users. The advertisements released in pop-up form on the webpage of the Internet and other forms shall indicate the close flag in prominent manner and ensure one-key close. Violation of these regulations may result in penalties, including fines, confiscation of advertising income, orders to cease dissemination of the advertisements and orders to publish an advertisement correcting the misleading information. In circumstances involving serious violations, SAIC or its local branches may revoke violators' licenses or permits for their advertising business operations.

In July 2016, the SAIC issued *the Interim Measures for the Administration of Internet Advertising to regulate internet advertising activities* . According to these measures, no advertisement of any medical treatment, medicines, food for special medical purpose, medical apparatuses, pesticides, veterinary medicines, dietary supplement or other special commodities or services subject to examination by an advertising examination authority as stipulated by laws and regulations may be published unless the advertisement has passed such examination. In addition, no entity or individual may publish any advertisement of over-the-counter medicines or tobacco on the internet. An internet advertisement must be identifiable and clearly identified as an "advertisement" to the consumers. Paid search advertisements are required to be clearly distinguished from natural search results. In addition, the following internet advertising activities are prohibited: providing or using any applications or hardware to intercept, filter, cover, fast forward or otherwise restrict any authorized advertisement of other persons; using network pathways, network equipment or applications to disrupt the normal data transmission of advertisements, alter or block authorized advertisements of other persons or load advertisements without authorization; or using fraudulent statistical data, transmission effect or matrices relating to online marketing performance to induce incorrect quotations, seek undue interests or harm the interests of others. Internet advertisement publishers are required to verify relevant supporting documents and check the content of the advertisement and are prohibited from publishing any advertisement with unverified content or without all the necessary qualifications. Internet information service providers that are not involved in internet advertising business activities but simply provide information services are required to block any attempt to publish an illegal advisement that they are aware of or should reasonably be aware of through their information services.

To comply with these laws and regulations, we have obtained a business license, which allows us to operate advertising businesses, and adopted several measures. Our advertising contracts require that substantially all advertising agencies or advertisers that contract with us must examine the advertising content provided to us to ensure that such content are truthful, accurate and in full compliance with PRC laws and regulations. In addition, we have established a task force to review all advertising materials to ensure the content does not violate the relevant laws and regulations before displaying such advertisements. See "Item 3. Key Information—D. Risk factors—Risks related to our business—Advertisements we display may subject us to penalties and other administrative actions."

Regulation on information security and censorship

The applicable PRC laws and regulations specifically prohibit the use of internet infrastructure where it may breach public security, provide content harmful to the stability of society or disclose state secrets. According to these regulations, it is mandatory for internet companies in the PRC to complete security filing procedures and regularly update information security and censorship systems for their websites with the local public security bureau. In addition, the amended *Law on Preservation of State Secrets* which became effective on October 1, 2010 provides that whenever an internet service provider detects any leakage of state secrets in the distribution of online information, it should stop the distribution of such information and report to the authorities of state security and public security. As per request of the authorities of state security, public security or state secrecy, the internet service provider should delete any content on its website that may lead to disclosure of state secrets.

On June 28, 2016, the CAC issued the *Administrative Provisions on Mobile Internet Applications Information Services* , which became effective on August 1, 2016, to further strengthen the administration over the mobile internet application information services. Pursuant to these provisions, owners or operators of mobile internet applications that provide information services are required to be responsible for information security management, which, among others, includes the following:

- certifying the identification information of the registered users;

- establishing and improving the protective mechanism for users information, following the principle of legality, rightfulness and necessity, and expressly stating the purpose, method and scope of, and obtaining user consent to, the collection and use of users' personal information; and

- establishing and improving the verification mechanism for the content, taking measures against any illegal content, keeping the relevant records and reporting such content to relevant competent authorities.

On November 7, 2016, the SCNPC promulgated the *Cyber Security Law of the People's Republic of China*, or Cyber Security Law, which became effective on June 1, 2017 to protect cyberspace security and order. Pursuant to the Cyber Security Law, any individual or organization using the network must comply with the constitution and the applicable laws, follow the public order and respect social moralities, and must not endanger cyber security, or engage in activities by making use of the network that endanger the national security, honor and interests, or infringe on the fame, privacy, intellectual property and other legitimate rights and interests of others. In addition, the new Cyber Security Law requires network operators must not collect personal information irrelevant to their services. The network operators are required to strictly keep confidential users' personal information that they have collected and to establish and improve user information protective mechanism. In the event of any unauthorized disclosure, damage or loss of collected personal information, network operators must take immediate remedial measures, notify the affected users and report the incidents to the relevant authorities in a timely manner.

On August 25, 2017, the CAC promulgated the Provisions on the Administration of Internet Comments Posting Services, which became effective on October 1, 2017. According to such provisions, internet comments posting services refer to the services of publishing transcripts, symbols, expressions, pictures, audio and video and other information offered by Internet websites, applications, interactive communication platforms and other types of communication platforms with news and public opinion property and social mobilization function by way of post, reply, message, bullet screen and using other means. Providers of the internet comments posting services shall strictly assume the primary responsibilities and discharge the following obligations accordingly:

- verify the real identity information of registered users following the principle of using real name at foreground and volunteering to do so at background and forbid the provision of internet comments posting services for users whose real identity information is not verified;

- establish and improve a user information protection system;
- establish a system to review new comments before they are published when providing internet comments posting services;
- establish and improve an internet comments posting review and management, real-time check, emergency response and other information security management systems, timely identify and process illicit information and submit a report to the relevant competent authorities;
- develop information protection and management technologies for the internet comments posting, timely identify security flaws and bugs and other risks in internet comments posting services, take remedial measures and submit a report to the relevant competent authorities; and
- set up a reviewing and editing team and improve the professionalism of editors.

In addition, on August 25, 2017, the CAC promulgated the *Administrative Provisions on Internet Forum and Community Services* , which became effective on October 1, 2017, pursuant to which the internet forum and community service providers shall assume the primary responsibility for establishing and improving the information inspection and verification, public information real-time check, emergency response and personal information protection and other information security management systems, put in place safe and controllable preventative measures, employ professionals based on service scope, and provide necessary technical support for the relevant departments in performing duties according to the law. The internet forum and community service providers shall not use internet forum and community services to publish or disseminate information banned by laws, regulations and the relevant provisions of the state. Where the internet forum and community service providers identify any aforementioned information, they shall cease the transmission of such information forthwith, delete and take other measures, retain the relevant records and timely submit a report to the CAC or its local branches.

Violation of these laws and provisions may result in penalties, including fines, confiscation of illegal income. In the case of serious violations, the competent telecommunication authority, public security authority and other relevant authorities may suspend relevant business, rectification or close down the website, or revoke licenses or permits for their business operations.

We are subject to the laws and regulations relating to information security and censorship. To comply with these laws and regulations, we have completed the mandatory security filing procedures with the local public security authorities, and regularly updates its information security and content-filtering systems with newly issued content restrictions as required by the relevant laws and regulations. To comply with these laws and regulations, we have also established information security systems to protect user’s privacy. We periodically review and amend our privacy policies on our websites and mobile applications based on the development and changes of our business operations so that we obtain consents from our users for collecting and using their personal information.

Regulation on torts

The Tort Law was promulgated by the SCNPC on December 26, 2009 and became effective on July 1, 2010. Under this law, internet users and internet service providers shall bear tortious liability in the event they infringe upon other people’s civil rights and interests through the internet. Where an internet user is infringing upon the civil rights or interests of another person via internet, the injured party shall have the right to demand the relevant internet service provider to take necessary measures such as deleting the infringing content, etc. by serving the internet service provider a notice. Where the internet service provider fails to take any necessary measures, it shall be jointly and severally liable with the internet user for any additional injury or damage incurred thereafter. Under the circumstance that the internet service provider is aware that an internet user is infringing upon the civil rights or interests of another person and fails to take necessary measures, the internet service provider shall be jointly liable for such infringement with such internet user.

Regulation on intellectual property rights

The PRC has adopted comprehensive legislation governing intellectual property rights, including copyrights, patents, trademarks and domain names.

Copyright law

Under the Copyright Law (1990), as revised in 2001 and 2010, and its related Implementing Regulations (2002), as revised in 2013, creators of protected works enjoy personal and property rights, including, among others, the right of dissemination via information network of the works. The term of a copyright, other than the rights of authorship, alteration and integrity of an author which shall be unlimited in time, is life plus 50 years for individual authors and 50 years for corporations.

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, without editing, amending or selecting any 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.

Pursuant to the *Regulation on Protection of the Right of Communication through Information Network (2006)* , as amended in 2013, an ICP service provider may be exempted from indemnification liabilities under certain circumstances:

- any ICP service provider, who provides automatic internet access service upon instructions of its users or provides automatic transmission service of works, performance and audio-visual products provided by its users, will not be required to assume the indemnification liabilities if (i) it has not chosen or altered the transmitted works, performance and audio-visual products; and (ii) it provides such works, performance and audio-visual products to the designated user and prevents any person other than such designated user from obtaining the access.

- any ICP service provider who, for the sake of improving network transmission efficiency, automatically provides to its own users, based on the technical arrangement, the relevant works, performances and audio-visual products obtained from any other ICP service providers will not be required to assume the indemnification liabilities if (i) it has not altered any of the works, performance or audio-visual products that are automatically stored; (ii) it has not affected such original ICP service provider in grasping the circumstances where the users obtain the relevant works, performance and audio-visual products; and (iii) when the original ICP service provider revises, deletes or shields the works, performance and audio-visual products, it will automatically revise, delete or shield the same based on the technical arrangement.

- any ICP service provider, who provides its users with information memory space for such users to provide the works, performance and audio-visual products to the general public via the information network, will not be required to assume the indemnification liabilities if (i) it clearly indicates that the information memory space is provided to the users and publicizes its own name, contact person and web address; (ii) it has not altered the works, performance and audio-visual products that are provided by the users; (iii) it is not aware of or has no reason to know the infringement of the works, performance and audio-visual products provided by the users; (iv) it has not directly derived any economic benefit from the provision of the works, performance and audio-visual products by its users; and (v) after receiving a notice from the right holder, it has deleted such works, performance and audio-visual products as alleged for infringement pursuant to such regulation.

- any ICP service provider, who provides its users with search services or links, will not be required to assume the indemnification liabilities if, after receiving a notice from the rights holder, it has deleted the works, performance and audio-visual products as alleged for copyright infringement pursuant to this regulation. However, the ICP service provider shall be subject to joint liabilities for copyright infringement if it is aware of or has reason to know the infringement of the works, performance and audio-visual products to which it provides links.

In December 2012, the Supreme People's Court of China promulgated the *Provisions on Certain Issues Related to the Application of Law in the Trial of Civil Cases Involving Disputes over Infringement of the Right of Dissemination through Information Networks* , which provides that the courts will require ICP service providers to remove not only links or content that have been specifically mentioned in the notices of infringement from rights holders, but also links or content they "should have known" to contain infringing content. The provisions further provide that where an ICP service provider has directly obtained economic benefits from any content made available by an internet user, it has a higher duty of care with respect to internet users' infringement of third-party copyrights.

To comply with these laws and regulations, we have implemented internal procedures to monitor and review the contents on our websites and platforms and remove any infringing content promptly after we receive notice of infringement from the legitimate rights holder.

Patent law

The NPC adopted the Patent Law in 1984, and amended it in 1992, 2000 and 2008, respectively. A patentable invention, utility model or design must meet three conditions: novelty, inventiveness and practical applicability. Patents cannot be granted for scientific discoveries, rules and methods for intellectual activities, methods used to diagnose or treat diseases, animal and plant breeds or substances obtained by means of nuclear transformation or designs that are mainly used for marking the pattern, color or combination of these two of prints. The State Intellectual Property Office under the State Council is responsible for receiving, examining and approving patent applications. A patent is valid for a twenty-year term in the case of an invention and a ten-year term in the case of a utility model or design, starting from the application date. A third-party user must obtain consent or a proper license from the patent owner to use the patent except for certain specific circumstances provided by law. Otherwise, the use will constitute an infringement of the patent rights. As of December 31, 2019, we had 94 registered patents in the PRC and 522 patent applications were being examined by the State Intellectual Property Office of the PRC.

Trademark law

Registered trademarks are protected under the Trademark Law adopted in 1982 and amended in 1993, 2001 2013 and 2019 and its implementation rules. The PRC Trademark Office of SAIC is responsible for the registration and administration of trademarks throughout the PRC. The Trademark Law has adopted a "first-to-file" principle with respect to trademark registration. Where a trademark for which a registration has been made is identical or similar to another trademark that has already been registered or been subject to a preliminary examination and approval for use on the same kind of or similar commodities or services, the application for registration of such trademark may be rejected. Any person applying for the registration of a trademark shall not prejudice the existing right of others obtained by priority, nor shall any person register in advance a trademark that has already been used by another person and has already gained "sufficient degree of reputation" through that person's use. After receiving an application, the PRC Trademark Office will make a public announcement if the relevant trademark passes the preliminary examination. Within three months after such public announcement, any person may file an opposition against a trademark that has passed a preliminary examination. The PRC Trademark Office's decisions on rejection, opposition or cancellation of an application may be appealed to the PRC Trademark Review and Adjudication Board, whose decision may be further appealed through judicial proceedings. If no opposition is filed within three months after the public announcement period or if the opposition has been overruled, the PRC Trademark Office will approve the registration and issue a registration certificate, upon which the trademark is registered and will be effective for a renewable ten-year period, unless otherwise revoked. As of December 31, 2019, we had applied for registration of 923 trademarks, of which 459 had been successfully registered in different applicable trademark categories, including one trademark registered with World Intellectual Property Organization.

Domain name

The domain names are protected under the *Administrative Measures on the Internet Domain Names* promulgated by MIIT on August 24, 2017 and effective on November 11, 2017. MIIT is the major regulatory body responsible for the administration of the PRC internet domain names, under supervision of which China Internet Network Information Center, or CNNIC, is responsible for the daily administration of CN domain names and Chinese domain names. On September 25, 2002, CNNIC promulgated the *Implementation Rules of Registration of Domain Name* , or the CNNIC Rules, which was renewed on June 5, 2009 and May 29, 2012, respectively. Pursuant to the *Administrative Measures on the Internet Domain Names* and the CNNIC Rules, the registration of domain names adopts the "first to file" principle and the registrant shall complete the registration via the domain name registration service institutions. In the event of a domain name dispute, the disputed parties may lodge a complaint to the designated domain name dispute resolution institution to trigger the domain name dispute resolution procedure in accordance with the *CNNIC Measures on Resolution of the Top Level Domains Disputes* , file a suit to the People's Court or initiate an arbitration procedure. We have registered www.xunlei.com and other domain names.

Regulation on tax

PRC enterprise income tax

The PRC enterprise income tax is calculated based on the taxable income determined under the PRC laws and accounting standards. On March 16, 2007, the NPC enacted a new *PRC Enterprise Income Tax Law* , or the EIT Law, which became effective on January 1, 2008 and last revised on December, 2018. On December 6, 2007, the State Council promulgated the Implementation Rules to the PRC Enterprise Income Tax Law, or the Implementation Rules, which also became effective on January 1, 2008. On December 26, 2007, the State Council issued the Notice on Implementation of Enterprise Income Tax Transition Preferential Policy under the PRC Enterprise Income Tax Law, or the Transition Preferential Policy Circular, which became effective simultaneously with the EIT Law. The EIT Law imposes a uniform enterprise income tax rate of 25% on all domestic enterprises, including foreign-invested enterprises unless they qualify for certain exceptions, and terminates most of the tax exemptions, reductions and preferential treatments available under previous tax laws and regulations. Under the EIT Law and the Transition Preferential Policy Circular, enterprises that were established before March 16, 2007 and already enjoyed preferential tax treatments will continue to enjoy them (i) in the case of preferential tax rates, for a period of five years from January 1, 2008; during the five-year period, the tax rate will gradually increase from 15% to 25%, or (ii) in the case of preferential tax exemption or reduction for a specified term, until the expiration of such term. In addition, the EIT Law and its implementation rules permit qualified high and new technology enterprises, or HNTEs, to enjoy a reduced enterprise income tax rate of 15%.

Moreover, under the EIT Law, enterprises organized under the laws of jurisdictions outside China with their "de facto management bodies" located within China may be considered PRC resident enterprises and therefore subject to PRC enterprise income tax at the rate of 25% on their worldwide income. The Implementation Rules define the term "de facto management body" as the management body that exercises full and substantial control and overall management over the business, productions, personnel, accounts and properties of an enterprise. In addition, the *Circular Related to Relevant Issues on the Identification of a Chinese holding Company Incorporated Overseas as a Residential Enterprise under the Criterion of De Facto Management Bodies* issued by the SAT on April 22, 2009 provides that a foreign enterprise controlled by a PRC enterprise or a PRC enterprise group will be classified as a "resident enterprise" with its "de facto management bodies" located within China if the following requirements are satisfied: (i) the senior management and core management departments in charge of its daily operations function mainly in the PRC; (ii) its financial and human resources decisions are subject to determination or approval by persons or bodies in the PRC; (iii) 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 (iv) at least half of the enterprise's directors or senior management with voting rights reside in the PRC. Although the circular only applies to offshore enterprises controlled by PRC enterprises or PRC enterprise groups and not those controlled by PRC individuals or foreigners, the determining criteria set forth in the circular may reflect the SAT's general position on how the "de facto management body" text should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises, individuals or foreigners.

Although we are not controlled by a PRC enterprise or PRC enterprise group and we do not believe that we meet all of the above-mentioned conditions, substantial uncertainty exists as to whether we will be deemed a PRC resident enterprise for enterprise income tax purpose. 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, but the dividends that we receive from our PRC subsidiaries would be exempt from the PRC withholding tax since such income is exempted under the PRC Enterprise Income Tax Law for a PRC resident enterprise recipient. See "Item 3. Key Information—D. Risk factors—Risks related to doing business in China—Our global income may be subject to PRC taxes under the PRC EIT Law, which may have a material adverse effect on our results of operations."

Under applicable PRC tax laws and regulations, arrangements and transactions among related parties may be subject to audit or scrutiny by the PRC tax authorities within ten years after the taxable year when the arrangements or transactions are conducted. We could face material and adverse tax consequences if the PRC tax authorities were to determine that the contractual arrangements among Giganology Shenzhen, our wholly-owned subsidiary in China and Shenzhen Xunlei, our variable interest entity in China and its shareholders were not entered into on an arm's-length basis and therefore constituted unfavorable transfer pricing arrangements. Unfavorable transfer pricing arrangements could, among other things, result in an upward adjustment to the tax liability of Shenzhen Xunlei, and the PRC tax authorities may impose interest on late payments on Shenzhen Xunlei for the adjusted but unpaid taxes. Our results of operations may be materially and adversely affected if Shenzhen Xunlei's tax liabilities increase significantly or if it is required to pay interest on late payments.

PRC value added tax

On May 24, 2013, the Ministry of Finance, or the MOF, and the SAT issued the *Circular on Tax Policies in the Nationwide Pilot Collection of Value Added Tax in Lieu of Business Tax in the Transportation Industry and Certain Modern Services Industries* , or the Pilot Collection Circular. The scope of certain modern services industries under the Pilot Collection Circular extends to the inclusion of radio and television services. On March 23, 2016, the MOF and the SAT jointly issued the Circular on the Pilot Program for Overall Implementation of the Collection of Value Added Tax Instead of Business Tax, or Circular 36, which took effect on May 1, 2016. Pursuant to the Circular 36, all of the companies operating in construction, real estate, finance, modern service or other sectors which were required to pay business tax are required to pay VAT, in lieu of business tax. The VAT rate is 6%, except for rate of 11% for real estate sale, land use right transferring and providing service of transportation, postal sector, basic telecommunications, construction, real estate lease; rate of 17% for providing lease service of tangible property; and rate of zero for specific cross-bond activities.

On April 4, 2018, the Ministry of Finance and the State Administration of Taxation issued *the Circular on Adjustment of VAT Rates* , which became effective on May 1, 2018. According to *the Circular on the Adjustment of VAT Rates* , relevant VAT rates have been reduced since May 1, 2018, such as (i) VAT rates of 17% and 11% applicable to the taxpayers who have VAT taxable sales activities or imported goods are adjusted to 16% and 10%, respectively; and (ii) VAT rate of 11% originally applicable to the taxpayers who purchase agricultural products is adjusted to 10%.

On March 20, 2019, the Ministry of Finance, the State Administration of Taxation and the General Administration of Customs of the PRC issued *the Circular on Adjustment of VAT Rates* , which became effective on April 1, 2019. According to *the Circular on the Adjustment of VAT Rates* , starting from April 1, 2019, the VAT rate of 10% was adjusted to 9% while the VAT rate of 16% was adjusted to 13%.

PRC dividend withholding tax

Under the PRC tax laws effective prior to January 1, 2008, dividends paid to foreign investors by foreign-invested enterprises were exempt from PRC withholding tax. Pursuant to the EIT Law and the Implementation Rules, dividends generated after January 1, 2008 and payable by a foreign-invested enterprise in China to its foreign enterprise investors are subject to a 10% withholding tax, unless any such foreign investor's jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. Under the China-HK Taxation Arrangement, income tax on dividends payable to a company resident in Hong Kong that holds more than a 25% equity interest in a PRC resident enterprise may be reduced to a rate of 5%. In February 2018, the SAT issued a new circular on issues relating to "beneficial owner" in tax treaties, or Circular No. 9, which will become effective on April 1, 2018 and replace Circular No. 601. Circular No. 9 provides a more flexible guidance to determine whether the applicant engages in substantive business activities. Furthermore, under the *Administrative Measures for Non-Resident Enterprises to Enjoy Treatments under Tax Treaties* , non-resident taxpayers which satisfy the criteria for entitlement to tax treaty benefits may, at the time of tax declaration or withholding declaration through a withholding agent, enjoy the tax treaty benefits and are subject to further regulation by the tax authorities. If non-resident taxpayers fail to claim the tax treaty benefits with the withholding agent, or the materials and the information contained in the relevant reports and statements provided to the withholding agent do not satisfy the criteria for entitlement to tax treaty benefits, the withholding agent shall withhold tax pursuant to the provisions of PRC tax laws. In addition, according to a tax circular issued by SAT in February 2009, if the main purpose of an offshore arrangement is to obtain a preferential tax treatment, the PRC tax authorities have the discretion to adjust the preferential tax rate enjoyed by the relevant offshore entity. Although Xunlei Computer is currently wholly owned by Xunlei Network HK, we cannot assure you that we will be able to enjoy the preferential withholding tax rate of 5% under the China-HK Taxation Arrangement.

Regulation on labor laws and social insurance

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

In addition, employers in China are obliged to provide employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds.

To comply with these laws and regulations, we have caused all of our full-time employees to enter into labor contracts and provide our employees with the proper welfare and employment benefits.

Regulation on foreign exchange control and administration

Foreign exchange regulation in the PRC is primarily governed by the following regulations:

- *Foreign Exchange Administration Rules* , or the Exchange Rules, promulgated by the State Council on January 29, 1996, which was amended on January 14, 1997 and on August 5, 2008 respectively; and

- *Administration Rules of the Settlement, Sale and Payment of Foreign Exchange* , or the Administration Rules promulgated by the People's Bank of The PRC on June 20, 1996.

Under the Exchange Rules, Renminbi is convertible for current account items, including the distribution of dividends, interest payments, trade and service-related foreign exchange transactions. As for capital account items, such as direct investments, loans, security investments and the repatriation of investment returns, however, the conversion of foreign currency is still subject to the approval of, or registration with, SAFE or its competent local branches; while for the foreign currency payments for current account items, the SAFE approval is not necessary for the conversion of Renminbi except as otherwise explicitly provided by laws and regulations. Under the Administration Rules, enterprises may only buy, sell or remit foreign currencies at banks that are authorized to conduct foreign exchange business after the enterprise provides valid commercial documents and relevant supporting documents and, in the case of certain capital account transactions, after obtaining approval from SAFE or its competent local branches. Capital investments by enterprises outside of the PRC are also subject to limitations, which include approvals by or registration with the Ministry of Commerce, SAFE and the National Development and Reform Commission, or their respective competent local branches. On July 21, 2005, the PRC government changed its policy of pegging the value of the Renminbi to the U.S. dollar. Under the new policy, the Renminbi is permitted to fluctuate within a band against a basket of certain foreign currencies.

On August 29, 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 Circular No. 142. Pursuant to Circular No. 142, the Renminbi capital from the settlement of foreign currency capital of a foreign-invested enterprise must be used within the business scope as approved by the applicable government authority and unless it is otherwise provided by law, such Renminbi capital cannot be used for domestic equity investment. Documents certifying the purposes of the settlement of foreign currency capital into Renminbi, including a business contract, must also be submitted for the settlement of the foreign currency. In addition, SAFE strengthened its oversight of the flow and use of the Renminbi capital converted from foreign currency registered capital of a foreign-invested company. The use of such Renminbi capital may not be altered without the SAFE's approval, and such Renminbi capital may not be used to repay Renminbi loans if such loans have not been used. Violations of the Circular No. 142 could result in severe monetary fines or penalties. In March 2015, SAFE issued SAFE Circular No. 19, which took effect on June 1, 2015 and replaced SAFE Circular No. 142 and subsequently issued the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Policy on the Management of Foreign Exchange Settlement under Capital Account, or SAFE Circular No. 16 on June 9, 2016. Although SAFE Circular No. 19 and SAFE Circular No. 16 allow the use of RMB converted from the foreign currency-denominated capital for equity investments in the PRC, the restrictions continue to apply as to foreign-invested enterprises' use of the converted RMB for purposes beyond the business scope, issuing loans to non-associated companies (except the cases expressly allowed in the business scope), or issuing inter-company RMB loans.

On November 19, 2012, SAFE promulgated the *Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment* , or Circular 59, which became effective on December 17, 2012. Circular 59 substantially amends and simplifies the current foreign exchange procedure. The major developments under Circular 59 are that the opening of various special purpose foreign exchange accounts (e.g. pre-establishment expenses account, foreign exchange capital account, guarantee account) no longer requires the approval of SAFE. Furthermore, multiple capital accounts for the same entity may be opened in different provinces, which was not possible before the issuance of Circular 59. Reinvestment of RMB proceeds by foreign investors in the PRC no longer requires SAFE approval or verification, and remittance of foreign exchange profits and dividends by a foreign-invested enterprise to its foreign shareholders no longer requires SAFE approval.

On May 10, 2013, SAFE promulgated the *Circular on Printing and Distributing the Provisions on Foreign Exchange Administration over Domestic Direct Investment by Foreign Investors and the Supporting Documents* , which specifies that the administration by SAFE or its local branches over direct investment by foreign investors in the PRC shall be conducted by way of registration. Institutions and individuals shall register with SAFE and/or its branches for their direct investment in the PRC. Banks shall process foreign exchange business relating to the direct investment in the PRC based on the registration information provided by SAFE and its branches.

In February 2015, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Further Simplifying and Improving the Policies Concerning Foreign Exchange Control on Direct Investment, or SAFE Circular No. 13, which took effect on June 1, 2015. SAFE Circular No. 13 delegates the authority to enforce the foreign exchange registration in connection with the inbound and outbound direct investment under relevant SAFE rules to certain banks and therefore further simplifies the foreign exchange registration procedures for inbound and outbound direct investment. On April 26, 2016, SAFE issued the Circular of the State Administration of Foreign Exchange on Further Promoting Trade and Investment Facilitation and Improving Authenticity Review, which provides that for outward remittances of the profit equivalent of more than US$ 50,000 (exclusive) by domestic institutions, banks shall review the relevant board resolution (or the partnership resolution) on profit distribution, the original copies of tax return forms and the financial statements evidencing the profits, in accordance with the principle of authentic transactions.

In January 2017, SAFE promulgated *the Circular on Further Improving the Reform of Foreign Exchange Administration and Optimizing Genuineness and Compliance Verification* , or SAFE Circular 3, which provides 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 should check board resolutions regarding profit distribution, the original version of tax filing records and audited financial statements; and (ii) domestic entities should hold income to account for previous years' losses before remitting the profits. Furthermore, according to SAFE Circular 3, domestic entities should 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.

On October 23, 2019, SAFE promulgated the Circular on Further Facilitating Cross-border Trade and Investment, or SAFE Circular 28. Pursuant to SAFE Circular 28, restrictions on domestic equity investments made with capital funds by non-investing foreign-funded enterprises and restrictions on the use of funds in domestic asset realization accounts for foreign exchange settlement are cancelled.

Regulation on foreign exchange registration of offshore investment by PRC residents

On October 21, 2005, SAFE issued the *Circular on Several Issues concerning Foreign Exchange Administration for Domestic Residents to Engage in Financing and in Return Investments via Overseas Special Purpose Companies* , or Circular No. 75, which went into effect on November 1, 2005. Circular No. 75 and related rules provide that if PRC residents establish or acquire direct or indirect interests of offshore special purpose companies, or offshore SPVs, for the purpose of financing these offshore SPVs with assets of, or equity interests in, an enterprise in the PRC, or inject assets or equity interests of PRC entities into offshore SPVs, they must register with local SAFE branches with respect to their investments in offshore SPVs. Circular No. 75 also requires PRC residents to file changes to their registration if their offshore SPVs undergo material events such as capital increase or decrease, share transfer or exchange, merger or division, long-term equity or debt investments, and provision of guaranty to a foreign party. SAFE promulgated *the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles* , or SAFE Circular No. 37, on July 4, 2014, which replaced the SAFE Circular No. 75. SAFE Circular No. 37 requires PRC residents to register with local branches of SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular No. 37 as a "special purpose vehicle." The term "control" under SAFE Circular No. 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. SAFE Circular No. 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period, or any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration and the amendment requirements described above could result in liability under PRC law for the evasion of applicable foreign exchange restrictions. On February 13, 2015, SAFE issued SAFE Circular No. 13, which took effect on June 1, 2015. SAFE Circular No. 13 has delegated to the qualified banks the authority to register all PRC residents' investment in "special purpose vehicle" pursuant to the SAFE Circular No. 37, except that those PRC residents who have failed to comply with the SAFE Circular No. 37 will continue to fall within the jurisdiction of the relevant local SAFE branches and must make their supplementary registration application with such local SAFE branches.

We have requested PRC residents holding direct or indirect interest in our company to our knowledge to make the necessary applications, filings and amendments as required under Circular No. 37 and other related rules. However, we may not be informed of the identities of all the PRC residents holding direct or indirect interest in our company, and we cannot provide any assurances that these PRC residents will comply with our request to make or obtain any applicable registrations or comply with other requirements required by Circular No. 37 or other related rules. The failure or inability of our PRC resident shareholders to make any required registrations or comply with other requirements under Circular No. 37 and other related rules may subject such PRC residents or our PRC subsidiaries to fines and legal sanctions and may also limit our ability to raise additional financing and contribute additional capital into or provide loans to (including using the proceeds from our initial public offering) our PRC subsidiaries, limit our PRC subsidiaries' ability to pay dividends or otherwise distribute profits to us, or otherwise adversely affect us.

Regulation on employee share options

On December 25, 2006, the People's Bank of China promulgated the *Administrative Measures for Individual Foreign Exchange* . On February 15, 2012, SAFE issued 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, which 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 according to 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.

Our PRC citizen employees who have been granted share options or restricted shares, or PRC grantees, are subject to the Stock Option Rules. If we or our PRC grantees fail to comply with the Individual Foreign Exchange Rule and the Stock Option Rules, we and/or our PRC grantees may be subject to fines and other legal sanctions. We may also face regulatory uncertainties that could restrict our ability to adopt additional share incentive plans for our directors and employees under PRC law. In addition, the State Administration for Taxation has issued certain circulars concerning employee share awards. Under these circulars, our employees working in the PRC who exercise share options or hold the vested restricted shares will be subject to PRC individual income tax. Our PRC subsidiaries have obligations to file documents related to employee share awards with relevant tax authorities and to withhold individual income taxes of those employees who exercise their share options or hold the vested restricted shares. If our employees fail to pay or we fail to withhold their income taxes according to relevant laws and regulations, we may face sanctions imposed by the tax authorities or other PRC government authorities.

Regulation on dividend distributions

The Company Law primarily governs the distribution of dividends paid by wholly foreign-owned enterprises after the Foreign Investment Law of the People's Republic of China and Regulation on the Implementation of the Foreign Investment Law of the People's Republic of China came into effect. Under the Company Law, enterprises in the PRC may pay dividends only out of their accumulated profits, if any, as determined in accordance with PRC accounting standards and regulations. In addition, an enterprise in the PRC is required to set aside at least 10% of its after-tax profit based on PRC accounting standards each year to its statutory common reserves until its cumulative total reserve funds reaches 50% of its registered capital.

Regulation on overseas listings

On August 8, 2006, six PRC regulatory agencies, namely, the Ministry of Commerce, the State Assets Supervision and Administration Commission, the State Administration for Taxation, SAIC, CSRC and SAFE, jointly adopted *the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors* , or the M&A Rules, which became effective on September 8, 2006 and were amended on June 22, 2009. The M&A Rules purport, among other things, to require that offshore special purpose vehicles, or SPVs, that are controlled by PRC companies or individuals and that have been formed for overseas listing purposes through acquisitions of PRC domestic interest held by such PRC companies or individuals, to obtain the approval of the CSRC prior to publicly listing their securities on an overseas stock exchange. On September 21, 2006, the CSRC published a notice on its official website specifying documents and materials required to be submitted to it by SPVs seeking CSRC approval of their overseas listings. While the application of the M&A Rules remains unclear, our PRC legal counsel has advised us that based on its understanding of the current PRC laws, rules and regulations and the M&A Rules, prior approval from the CSRC is not required under the M&A Rules for the listing and trading of our ADSs on the NASDAQ Global Select Market given that (i) our PRC subsidiaries were directly established by us as wholly foreign-owned enterprises, and we have not acquired any equity interest or assets of a PRC domestic company owned by PRC companies or individuals as defined under the M&A Rules that are our beneficial owners after the effective date of the M&A Rules, and (ii) no provision in the M&A Rules clearly classifies the contractual arrangements as a type of transaction subject to the M&A Rules.

However, our PRC legal counsel has further advised us uncertainties still exist as to how the M&A Rules will be interpreted and implemented and its opinions summarized above are subject to any new laws, rules and regulations or detailed implementations and interpretations in any form relating to the M&A Rules. If CSRC or another PRC regulatory agency subsequently determines that prior CSRC approval was required for our initial public offering, we may face regulatory actions or other sanctions from CSRC or other PRC regulatory agencies. These regulatory agencies may impose fines and penalties on our operations, limit our operating privileges, delay or restrict the repatriation of the proceeds from our initial public offering into the PRC or payment or distribution of dividends by our PRC subsidiaries, or take other actions that could materially adversely affect our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs. In addition, if CSRC later requires that we obtain its approval for our initial public offering, we may be unable to obtain a waiver of CSRC approval requirements, if and when procedures are established to obtain such a waiver. Any uncertainties or negative publicity regarding CSRC approval requirements could have a material adverse effect on the trading price of our ADSs.

Regulation on initial coin offerings

On September 4, 2017, People's Bank of China, the Office of the Central Leading Group for Cyberspace Affairs, the MIIT, the State Administration for Industry and Commerce, the China Banking Regulatory Commission, the China Securities Regulatory Commission, and the China Insurance Regulatory Commission jointly promulgated the *Announcement on Prevention of Token Fundraising Risks* to strengthen the administration of the initial coin offerings activities. Pursuant to the announcement, "fundraising through token offerings" is referred to as a type of fundraising activities where an issuer raises "virtual currencies" such as Bitcoin or Ether from investors through the illegal issuance and subsequent circulation of tokens. Pursuant to the announcement, token fundraising activity is essentially an illegal public fundraising activity without obtaining government's approval. It is a suspected illegal offering of tokens, illegal offering of securities, illegal fundraising, financial fraud, pyramid scheme, which are criminal offenses under the PRC law. The announcement prohibits fundraising activities through token issuance. In addition, the announcement also provides that token trading platform should not be engaged in (i) the exchange between any statutory currency with tokens and "virtual currencies," (ii) the trading, either as a central counterparty or not, of the tokens or "virtual currencies," and (iii) token or "virtual currency" pricing, information intermediary services or other services for tokens or "virtual currencies."

We launched the LinkToken business in 2017 and transferred such business to an independent third party in April 2019. We strongly believe that we did not engage in token fundraising activities by virtue of carrying out LinkToken operations prior to our disposal of such operations, nor do we believe that we would have been deemed to be a token trading platform, which is operated under a completely different business model. To date, no governmental financial regulators have imposed any administrative penalties against us relating to LinkTokens on the basis that we engaged in token fundraising activities. However, we cannot assure you that going forward, relevant PRC authorities would have the same view with us and would not impose regulatory restrictions or penalties on us. Were that to happen, we may be subject to additional regulatory risks, and our business and results of operations as well as the price of our ADSs may be adversely affected. See "Item 4. Information on the Company—B. Business Overview—Our Platform—Cloud Computing" for more information on LinkToken and "Item 3. Key Information—D. Risk Factors—Regulatory uncertainties exist with respect to our previous LinkToken operations, which may have a material adverse effect on our business and results of operations" for regulatory uncertainties and risks relating to our previous LinkToken operations.

Regulation on blockchain information services

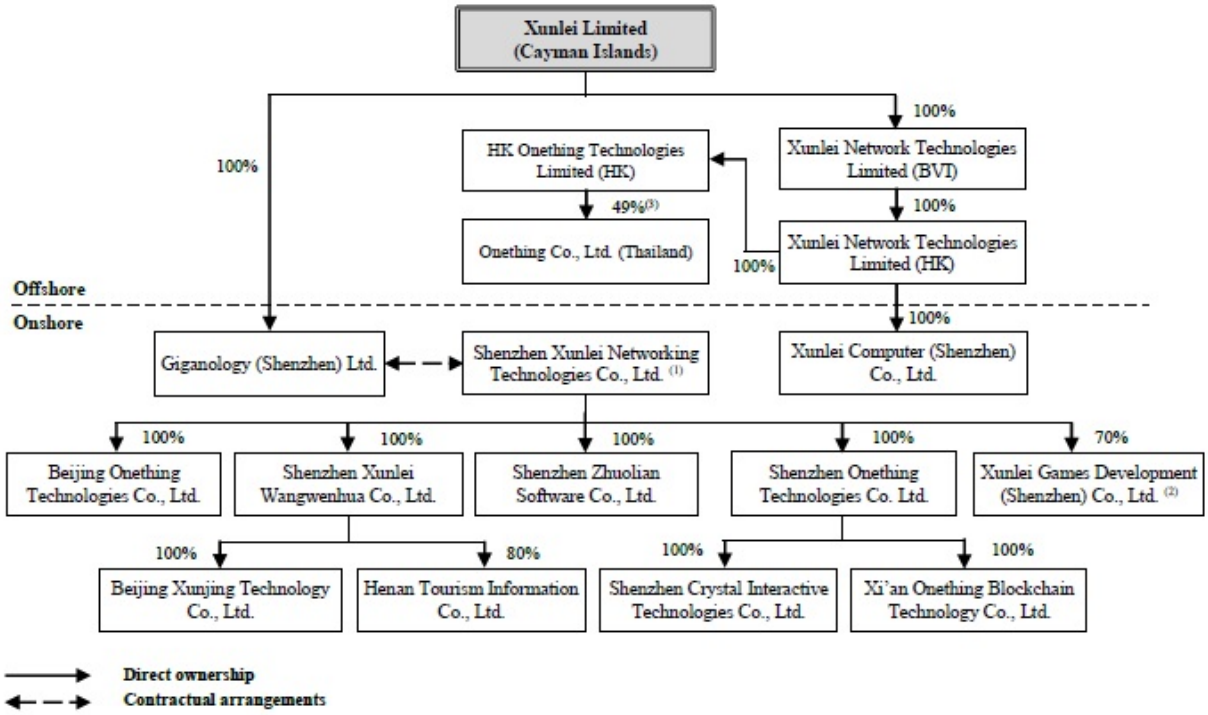
On January 10, 2019, the Cyberspace Administration of China, or CAC, issued the *Provisions on the Administration of Blockchain Information Services* , or the Blockchain Provisions, which came into effect on February 15, 2019. Pursuant to the Blockchain Provisions, a blockchain information service provider is required to file particulars of such service provider including its name, service category, service form, application field, and server address with the blockchain information service filing management system managed by the CAC and go through filing procedures within ten business days after it starts to provide services. After completing the filing procedure, the blockchain information service provider should display the filing number in a conspicuous position on the service provider's websites and applications through which it provides services. Service providers that had already started to provide blockchain information services before the Blockchain Provisions became effective are required to do make-up filings within 20 business days after the Blockchain Provisions became effective. As of the date of this annual report, we had obtained the initial record-filing number.

In addition, the Blockchain Provisions also imposed an array of obligations to the providers of blockchain information services. For example, blockchain information service providers are required to set up various rules and procedures in terms of user registration, information verification, emergency response, and safeguard measures. Blockchain information service providers are also required to formulate and publish blockchain platform management rules and enter into a service agreement with users of blockchain information services. In addition, blockchain information service providers are obligated to verify the real name of the users of blockchain information services and are prohibited to offer services to users who fail to provide information relating to their real identity. Failure to comply with relevant requirements in the Blockchain Provisions may subject blockchain information service providers to administrative penalties such as warning, being ordered to temporarily suspend relevant business operations to rectify within prescribed time period, or fines, or criminal liabilities, depending on which provisions are violated.

On October 24, 2019, the Political Bureau of the CPC Central Committee carried out the 18th collective learning on the current situation and trend of blockchain technology development, and President Xi Jinping emphasized that the integrated application of blockchain technology played an important role in new technological innovation and industrial transformation.

C. Organizational Structure

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



Notes:

(1) Shenzhen Xunlei is our variable interest entity. Mr. Sean Shenglong Zou, our co-founder and director, Mr. Hao Cheng, our co-founder and director, Mr. Jianming Shi, Guangzhou Shulian Information Investment Co., Ltd. and Ms. Fang Wang respectively own 76.0%, 8.3%, 8.3%, 6.7% and 0.7% of Shenzhen Xunlei's equity interests.

(2) The remaining 30% of the equity interest is owned by Mr. Hao Cheng.

(3) The 49% of the shares of Onething Co., Ltd. held by HK Onething Technologies Limited has 90.57% of the total voting power of all shares.

Contractual arrangements with Shenzhen Xunlei

Agreements that provide us effective control over Shenzhen Xunlei

Business operation agreement

Pursuant to the business operation agreement among Giganology Shenzhen, Shenzhen Xunlei and the shareholders of Shenzhen Xunlei, as amended, Shenzhen Xunlei's shareholders must appoint the candidates nominated by Giganology Shenzhen to be the directors on its board of directors in accordance with applicable laws and the articles of association of Shenzhen Xunlei, and must cause the persons recommended by Giganology Shenzhen to be appointed as its general manager, chief financial officer and other senior executives. Shenzhen Xunlei and its shareholders also agree to accept and strictly follow the guidance provided by Giganology Shenzhen from time to time relating to employment, termination of employment, daily operations and financial management. Moreover, Shenzhen Xunlei and its shareholders agree that Shenzhen Xunlei will not engage in any transactions that could materially affect its assets, business, personnel, liabilities, rights or operations, including but not limited to the amendment of Shenzhen Xunlei's articles of association, without the prior consent of Giganology Shenzhen and Xunlei Limited or their respective designees. For instance, in May 2011, Shenzhen Xunlei sought and obtained consent from Giganology Shenzhen and Xunlei Limited to increase its registered capital by RMB20 million and to revise its articles of association accordingly. This agreement will expire in 2026.

Equity pledge agreement

Pursuant to the equity pledge agreement between Giganology Shenzhen and the shareholders of Shenzhen Xunlei, as amended, the shareholders of Shenzhen Xunlei have pledged all of their equity interests in Shenzhen Xunlei to Giganology Shenzhen to guarantee Shenzhen Xunlei and its shareholders' performance of their respective obligations and any ensuing liabilities under the exclusive technology support and service agreement, as amended, the exclusive technology consulting and training agreement, as amended, the proprietary technology license agreement, the business operation agreement, as amended, the equity interests disposal agreement, as amended, the loan agreements, as amended, and the intellectual properties purchase option agreement, as amended. In addition, the shareholders of Shenzhen Xunlei have completed the registration of equity pledge under the equity pledge agreement with the competent governmental authority. If Shenzhen Xunlei and/or its shareholders breach their contractual obligations under those agreements, Giganology Shenzhen, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests.

Powers of attorney

Pursuant to the irrevocable powers of attorney executed by each shareholder of Shenzhen Xunlei, each such shareholder appointed Giganology Shenzhen as its attorney-in-fact to exercise such shareholders' rights in Shenzhen Xunlei, including, without limitation, the power to vote on its behalf on all matters of Shenzhen Xunlei requiring shareholder approval in accordance with PRC laws and regulations and the articles of association of Shenzhen Xunlei. Each power of attorney will remain in force for 10 years from the date of execution unless the business operation agreement, as amended, among Giganology Shenzhen, Shenzhen Xunlei and the shareholders of Shenzhen Xunlei is terminated at an earlier date. The term may be extended at Giganology Shenzhen's discretion.

Agreements that transfer economic benefits to us

Exclusive technology support and services agreement

Pursuant to the exclusive technology support and services agreement between Giganology Shenzhen and Shenzhen Xunlei, as amended, Giganology Shenzhen has the exclusive right to provide to Shenzhen Xunlei technology support and technology services related to all technologies needed for its business. Giganology Shenzhen exclusively owns any intellectual property rights resulting from the performance of this agreement. The service fee payable by Shenzhen Xunlei to Giganology Shenzhen is a certain percentage of its earnings. This agreement will expire in 2025 and may be extended with Giganology Shenzhen's written confirmation prior to the expiration date. Giganology Shenzhen is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Shenzhen Xunlei.

Exclusive technology consulting and training agreement

Pursuant to the exclusive technology consulting and training agreement between Giganology Shenzhen and Shenzhen Xunlei, as amended, Giganology Shenzhen has the exclusive right to provide to Shenzhen Xunlei technology consulting and training services related to its business. Giganology Shenzhen exclusively owns any intellectual property rights resulting from the performance of this agreement. The service fee payable by Shenzhen Xunlei to Giganology Shenzhen is a certain percentage of its earnings. This agreement will expire in 2025 and may be extended with Giganology Shenzhen's written confirmation prior to the expiration date. Giganology Shenzhen is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Shenzhen Xunlei.

Proprietary technology license contract

Pursuant to the proprietary technology license contract between Giganology Shenzhen and Shenzhen Xunlei, Giganology Shenzhen grants Shenzhen Xunlei a non-exclusive and non-transferable right to use Giganology Shenzhen's proprietary technology. Shenzhen Xunlei can only use the proprietary technology to conduct its business within China. Giganology Shenzhen or its designated representative(s) owns the rights to any improvements developed based on the proprietary technology licensed pursuant to this contract. This agreement will expire in 2022 and, at Giganology Shenzhen's discretion, may be extended for an additional 10 years or for other time period as agreed by both Giganology Shenzhen and Shenzhen Xunlei.

Intellectual properties purchase option agreement

Pursuant to the intellectual properties purchase option agreement between Giganology Shenzhen and Shenzhen Xunlei, as amended, Shenzhen Xunlei irrevocably grants Giganology Shenzhen (or its designated representative(s)) an exclusive option to purchase certain specified intellectual properties that it owns for RMB1.0 or the minimum amount of consideration permitted under the PRC law. This agreement will expire in 2022 and may be automatically extended for an additional 10 years at each expiration date as long as these intellectual properties have not been transferred to Giganology Shenzhen and/or its designee and Shenzhen Xunlei then still exist.

Agreements that provide us the option to purchase the equity interest in Shenzhen Xunlei

Equity interests disposal agreement

Pursuant to the equity interests disposal agreement among Giganology Shenzhen, Shenzhen Xunlei and the shareholders of Shenzhen Xunlei, as amended, Shenzhen Xunlei's shareholders irrevocably grant Giganology Shenzhen (or its designated representative(s)) an exclusive option to purchase all or part of their equity interests in Shenzhen Xunlei for RMB1.0 or the minimum amount of consideration permitted under PRC law. This agreement will expire in 2026.

Loan agreements

Under the loan agreement between Giganology Shenzhen and Guangzhou Shulian Information Investment Co., Ltd., Sean Shenglong Zou, Hao Cheng, Fang Wang and Jianming Shi, as amended, Giganology Shenzhen made interest-free loans of approximately RMB1.8 million, RMB2.5 million, RMB2.3 million, RMB0.2 million and RMB2.3 million, respectively, to each of the above shareholders of Shenzhen Xunlei and all of these shareholders have used the full amount of loans to make capital contribution to Shenzhen Xunlei. The term of this agreement is two years from the date it was signed, and will be automatically extended afterwards on a yearly basis until each shareholder of Shenzhen Xunlei has repaid the loan in its entirety in accordance with the loan agreement. The loan for each shareholder will be deemed to be repaid under this agreement only when all equity interest held by the relevant shareholder in Shenzhen Xunlei has been transferred to Giganology Shenzhen or its designated parties. As of the date of this annual report, all the loans under the loan agreements remain outstanding. At any time during the term of the loan agreement, Giganology Shenzhen may, at its sole discretion, require any of the shareholders of Shenzhen Xunlei to repay all or any portion of his outstanding loan under the agreement.

In addition, following the loan agreement mentioned above, under a separate loan agreement between Giganology Shenzhen and Mr. Sean Shenglong Zou as a shareholder of Shenzhen Xunlei, as amended, Giganology Shenzhen made an additional interest-free loan of RMB20 million to Mr. Zou, the entire amount of which was used to contribute to the registered capital of Shenzhen Xunlei, increasing the registered capital of Shenzhen Xunlei to RMB30 million. The term of this agreement is two years from the date it was signed, and will be automatically extended afterwards on a yearly basis until Mr. Zou has repaid the loan in its entirety in accordance with the loan agreement. This loan will be deemed to be repaid under this agreement only when all equity interest held by the relevant shareholder in Shenzhen Xunlei has been transferred to Giganology Shenzhen or its designated parties. At any time during the term of the loan agreement, Giganology Shenzhen may, at its sole discretion, require all or any portion of the outstanding loan under the agreement to be repaid.

In the opinion of King & Wood Mallesons, our PRC legal counsel:

- the ownership structures of our variable interest entity and our subsidiaries in China comply all applicable PRC Laws and regulations currently in effect; and

- the contractual arrangements among Giganology Shenzhen, our PRC subsidiary, Shenzhen Xunlei and its shareholders governed by PRC law are valid, binding and enforceable in accordance with the contractual arrangements' terms, and will not result in any violation of PRC laws or regulations currently in effect.

We have been advised by King & Wood Mallesons, our PRC legal counsel, however, that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules. Accordingly, the PRC regulatory authorities may take a view that is contrary to the above opinion of our PRC legal counsel. We have been further advised by our PRC legal counsel that if the PRC government finds that the agreements that establish the structure for operating our business to provide digital media data transmission and streaming services, online games and other value-added telecommunication services do not comply with PRC government restrictions on foreign investment in the aforesaid business we engage in, we could be subject to severe penalties including being prohibited from continuing operations. See "Item 3. Key Information—D. Risk factors—Risks related to our corporate structure—If the PRC government finds that the agreements that establish the structure for operating our businesses in China do not comply with PRC governmental restrictions on foreign investment in internet-related business and foreign investors' mergers and acquisition activities in China, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations."

D. Property, Plant and Equipment

Our principal executive offices are located at 21-23/F Block B, Building No.12, No.18 Shenzhen Bay ECO-Technology Park, Keji South Road, Yuehai Street, Nanshan District, Shenzhen, the People's Republic of China, which comprises approximately 7,575 square meters of office space. In addition to other offices in Shenzhen, we also have offices in Beijing, Xian and Hong Kong, respectively, totaling approximately 19,667 square meters. Our leased premises are leased from unrelated third parties who have valid title to the relevant properties. The lease for our principal executive offices will expire in December, 2021, and the other leases typically have terms of one to three years. Our servers are primarily hosted at internet data centers owned by major domestic internet data center providers. The hosting services agreements typically have one-year terms and are renewed upon expiration. We believe that we will be able to obtain adequate facilities, principally through leasing, to accommodate our future expansion plans.

Item 4A. Unresolved Staff Comment s

None.

Item 5. Operating and Financial Review and Prospects

The following discussion of our financial condition and results of operations is based upon, and should be read in conjunction with, our audited consolidated financial statements and the related notes included in this annual report on Form 20-F. This report contains forward-looking statements. See "Forward-looking Information." In evaluating our business, you should carefully consider the information provided under the caption "Item 3. Key Information—D. Risk Factors" in this annual report on Form 20-F. We caution you that our businesses and financial performance are subject to substantial risks and uncertainties. Unless otherwise specified, the results presented in this annual report do not include Xunlei Kankan and web game business, which have been classified as discontinued operations. In 2019, we started to operate web game business again under a different business model by cooperating with a third party. Revenues from web game business has been included in the continuing operations.

A. Operating Results

Overview

We operate a powerful internet platform in China based on cloud computing to enable our users to quickly access, manage and consume digital media content on the internet. In recent years, we have expanded our products and services from PC-based devices to mobile devices in part through pre-installed acceleration plug-ins on mobile phones to further enlarge our user base and offer our users a wider range of access points. In addition, we have also started to provide blockchain products and services since 2018.

We provide users with quick and easy access to digital media content on the internet through two core products and services, available to users for free and for a subscription fee, respectively. Our acceleration products and services include Xunlei Accelerator and our cloud acceleration subscription services (delivered through our product, Green Channel). Benefitting from the large user base accumulated by our core product, Xunlei Accelerator, we have further developed cloud computing services and various other value-added services to meet a fuller spectrum of our users' digital media content access and consumption needs. These value-added products and services primarily include our live streaming services and online game services. In July 2015, we completed the divesture of our entire stake in our online video streaming platform, Xunlei Kankan, to Beijing Nesound International Media Corp., Ltd., an independent third party.

We generate revenues primarily through the following services:

- *Service revenue* . We generate revenue from various services we offer to users and clients. The services we offer primarily include acceleration subscription services, online advertising services and other internet value-added services.
  - *Subscription services* . We provide cloud acceleration subscription services for subscribers to enable faster and more reliable access to digital media content. Revenues from subscription services contributed to 45.0% of our revenue in 2019. Subscription fees are time-based and are primarily collected up-front from subscribers on a monthly or yearly basis.
  - *Online advertising services (including mobile advertising)* . We provide marketing opportunities on our PC websites and mobile platform to advertisers. Online advertising revenues contributed to 8.6% of our revenue in 2019. The revenues are derived principally from various forms of advertisements that we place on our mobile platform after we started to generate mobile advertising revenue in the fourth quarter of 2015.
  - *Cloud computing and other internet value-added services* . Other internet value-added services primarily include live streaming services and online game services. Revenues from our internet value-added services accounted for 41.8% of our total revenue in 2019.
- *Product revenue* . We sell hardware devices mainly related to our cloud computing services, such as OneThing Cloud. Product revenue contributed 4.6% of our revenue in 2019.

Our revenues increased from US$201.9 million in 2017 to US$232.1 million in 2018 and decreased to US$181.3 in 2019. We had a net loss attributable to Xunlei Limited of US$37.8 million, US$39.3 and US$53.2 million in 2017, 2018 and 2019, respectively. Xunlei Kankan and web game business are accounted for as discontinued operations due to the sale of those two businesses and our consolidated statements of comprehensive income/(loss) in this annual report separately classifies the discontinued operations from our remaining business operations for all years presented. In 2019, we started to operate web game business again under a different business model by cooperating with a third party. Revenues from web game business has been included in the continuing operations.

Major factors affecting our results of operations

Our business and operating results are subject to general factors affecting the internet industry in China, including overall economic growth, which has resulted in increases in disposable income and consumer spending, government and industry initiatives accelerating the technological advancement and growth of internet industry, the growth of internet usage and penetration rate in China, strong preference of Chinese consumers for accessing digital media content through the internet, the greater availability of digital media content on the internet, and the increasing acceptance of online advertising as part of advertisers' overall marketing strategy and spending. Our results of operations will continue to be affected by such general factors.

Our results of operations are also directly affected by a number of company-specific factors, including:

Our ability to continue to enhance and innovate our service offerings, including our mobile products and our cloud computing services.

As our industry evolves rapidly and user preference for our services may change quickly, our revenues and results of operations significantly depend on our ability to continue enhancing and expanding our service offerings to meet evolving user preference and market demand, and to broaden our user base. We have a proven track record of developing our service offerings to successfully address the preferences of China's internet users. To address deficiencies of digital media content transmission over the internet in China, we provide users with quick and easy access to digital media content on the internet through two core products and services, Xunlei Accelerator and our cloud acceleration subscription services, available to users for free and for a subscription fee, respectively. To meet our users' digital media content access and consumption needs, we have further developed various value-added services, including online game and live streaming services. Furthermore, we focus more on user behaviors and study users' life cycles on our platform, so that we can offer relevant services at the right time and encourage users to continue using our services.

An important part of our business plan is to continue transitioning to mobile internet. As an increasing number of users are accessing online services through mobile devices, we are increasingly expanding our services to mobile devices, particularly through cooperation with smartphone makers, including Xiaomi, which currently offers our mobile acceleration plug-in pre-installed on its new phones and as updates on its existing phones. We intend to further work with more smartphone makers in China so that a larger number of mobile users can benefit from our mobile products, including acceleration and higher downloading success rates.

We have also launched our cloud computing project to allocate idle uplink capacity to internet content providers and other internet users in need. We gather idle uplink capacity from internet users who have bought and connected our proprietary ZQB and OneThing Cloud devices to their network router. Our ZQB devices and OneThing Cloud can allocate those users' idle computing resources to us for our further allocation to internet content providers and other internet users. We pay users of our ZQB device for the use of their idle computing resources. For the users of our OneThing Cloud, they can voluntarily participate in the OneThing reward program and be rewarded with LinkTokens, which can be used to redeem for products and services. The computing resources gathered from ZQB and OneThing Cloud devices are valuable resources that we target to commercialize with potential customers such as streaming websites and app stores. Depending on our own needs, we also utilize those crowdsourced capacities for our own business from time to time, reducing our purchase of bandwidth from traditional third party carriers.

Our ability to further monetize our user base.

Our revenues and results of operations depend on our ability to further monetize our user base, to convert more users to subscribers and to increase the spending of our subscribers. With enhanced knowledge of user behavior and preferences, we offer a diverse range of premium services tailored to their individual needs. For example, our cloud acceleration subscription services offer users value-added services for speed. We intend to further monetize our user base and aim to convert users to subscribers by expanding our offering of value-added services, such as cloud-based storage and mobile access. We plan to provide one-stop services for our users, in terms of accessing content and storage and synchronization of content across devices, including mobile devices and PC.

Our ability to maintain our technology leadership and cost-efficient infrastructure.

Our results of operations depend on our ability to maintain our technology leadership, with innovations such as our mobile technology, our uplink capacity crowdsourcing technology and our cloud acceleration technology. Our mobile technology allows users to access content from anywhere, our uplink capacity crowdsourcing technology enables us to utilize the idle capacity available from our large user base, and our cloud acceleration technology enables users to access content in an efficient manner. Our proprietary technology and highly scalable massive distributed computing network form our core competitive advantage, enabling us to deliver superior transmission acceleration services and enhanced user experience anywhere and with an efficient sort of acceleration. Our resource discovery network leverages our distributed computing power, computing and storage capacity and significantly reduces our reliance on servers operated by us. As part of our expansion strategy, we plan to devote substantial resources to research and development in order to better serve our users, particularly to our cloud computing services and mobile products and services. Therefore, the expenses associated with our research and development are expected to increase in the near future. However, we plan to continue to increase the uplink capacity we crowdsource through our cloud computing services, which is expected to reduce our bandwidth cost incurred in our purchase from traditional suppliers, contribute to the cost efficiency of our overall infrastructure and generate additional revenue when we sell those capacity to third parties.

Our ability to control our costs and operating expenses.

Our results of operations depend on our ability to control our costs and operating expenses. We expect our bandwidth costs to increase as we grow our business, in particular CDN business, although we expect such costs to be partly offset by the fact that we expect to source an increasing amount of bandwidth from our cloud computing services. In addition, our operating expenses are expected to increase in the future, since we expect an increase in marketing expense in a competitive environment and an increase in employee compensation to attract talents. We plan to continue to invest in research and development to maintain our technology leadership, especially to increase our research and development expenses and sales and marketing expenses in relation to our cloud computing services.

Description of certain statement of operations items

Revenues

We derive our revenues primarily from cloud acceleration subscription services, selling of cloud computing devices, online advertising services, and cloud computing and other internet value-added services, which consist primarily of cloud computing services, online games services, and live streaming services. The following table sets forth the principal components of our revenues by amounts and percentages of our revenues for the periods presented.

	For the Year Ended December 31,					
	2017		2018		2019	
	US$	%	US$	%	US$	%
	(in thousands, except for percentages)					
Continuing operations						
Subscriptions	84,956	42.1	81,877	35.3	81,532	45.0
Online advertising	22,484	11.1	27,781	12.0	15,643	8.6
Product revenue	32,894	16.3	54,604	23.5	8,269	4.6
Cloud computing and other internet value-added services	61,577	30.5	67,870	29.2	75,823	41.8
Total	201,911	100.0	232,132	100.0	181,267	100.0

Subscriptions . We introduced our cloud acceleration subscription services in March 2009. We generate revenues from providing our users with exclusive services, such as access to high-speed online transmission, premium acceleration or access privileges, for a time-based subscription fee. The standard subscription fee is RMB10 (US$1.4) per month or RMB99 (US$14.3) per year, and we also offer premium subscription packages with prices at RMB15 (US$2.2) per month or RMB149 (US$21.6) per year or RMB30 (US$4.3) per month or RMB288 (US$41.7) per year to cater to subscribers' different demand for acceleration speed and user experience, which are becoming increasingly popular among our subscribers. Our subscription revenues, as a percentage of our revenues, decreased from 42.1% in 2017 to 35.3% in 2018 and increased to 45.0% in 2019.

The most significant factor that directly affects our subscription revenues is the number of subscribers. We may maintain our subscriber base in the future by expanding our offering of fee-based services, but important factors outside of our control, such as the PRC government's regulation and censorship of information disseminated over the internet, may have a material adverse impact on our cloud acceleration services, which in turn may have an adverse effect on the number of our subscribers and on our revenues and results of operations. For example, in April 2014, the Chinese government initiated a campaign to enhance and enforce its scrutiny on internet content in China, particularly for pornographic content, and various websites were subject to penalties and in some cases outright suspension of website operations. We regularly conducted internal compliance investigation to ensure that the content transmitted by our products is in compliance with the strict standards set out by the authorities. We deleted millions of cached files, added thousands of keywords to our automatic keyword filtration system and permitted temporary suspension of services by approximately 181,000 existing subscribers as of the end of 2019. See "Item 3. Key Information—D. Risk Factors—Risks related to doing business in China—Regulation and censorship of information disseminated over the internet in China have adversely affected our business and may continue to adversely affect our business, and we may be liable for the digital media content on our platform." In the future, there may be other laws and regulations that lead to further voluntary or forced removal of content or other measures to ensure compliance with standards set out by relevant regulatory authorities, which may further reduce our subscriber base. To date, we have not been able to quantify the magnitude and extent of such impact.

Online advertising . Our online advertising revenues are derived from various forms of advertisements that we place on our PC websites and mobile platform. A significant majority of our advertisers purchase our online advertising services through third-party advertising agencies. As is customary in the advertising industry in China, we pay rebates to third-party advertising agencies and recognize revenues net of these rebates.

The revenues from our mobile advertising decreased to US$ 15.3 million in 2019, accounting for 98.1% of the online advertising revenues. We expect the revenues from mobile advertising will account for the majority of our advertising revenues in the future with our on-going transition to mobile internet. Other advertising revenues decreased continuously from US$3.1 million in 2015 to US$0.3 million in 2019 after we sold Xunlei Kankan in July 2015. We do not expect to generate a significant amount of other advertising revenues in the foreseeable future. For details of our sale of Xunlei Kankan, see "Item 4. Information on the Company—A. History and Development of the Company."

Product revenue. Product revenue represents the revenue we generate primarily from the sales of hardware devices and OneThing Cloud, in relation to our cloud computing services. The product revenue decreased from US$54.6 million in 2018 to US$8.3 million in 2019, primarily because there was a decrease in the sales of OneThing Cloud in 2019 as a result of a decreased demand from individual users.

Cloud computing and other internet value-added services . We actively seek new business opportunities that complement our existing core acceleration business to further improve our users' overall experience. Revenues from cloud computing and other internet value-added services increased from US$61.6 million in 2017 to US$67.9 million in 2018 and further to US$75.8 million in 2019.

Revenues of cloud computing and other internet value-added services were generated primarily from our live streaming services, online game services and our cloud computing services. For live streaming services, users purchase virtual gifts from us and send the gifts they purchase to broadcasters to show their support. We recognized revenue from the sales of virtual gifts in an amount of US$ 26.9 million in 2019. Our online games business used to consist of web games, mobile games and PC-based MMOGs. In light of the overall decline in web game market and a shift of our strategy, we streamlined our business and disposed of our web game business in January 2018 and discontinued our PC-based MMOGs business in July 2018. In 2019, we started to operate web game business again under a business model different from our previous web game business. We calculate the number of paying users during a given period as the cumulative number of users that have purchased virtual items or other products and services for online games at least once during the relevant period. We had approximately 69,017 paying users of our online games in 2017, 33,343 in 2018 and 28,480 in 2019, respectively. For cloud computing services, we recognize revenue when we provide bandwidth to our customers. We started to generate revenue from cloud computing services in 2015 and the revenue for the year ended December 31, 2019 increased by 39.8% on a year-over-year basis primarily due to an increased demand for your shared computing service. We expect the revenue from cloud computing and other internet value-added services to increase in the future.

Cost of revenues

Our cost of revenues consists primarily of (i) bandwidth costs, (ii) cost of inventories sold, (iii) cost of live streaming services, (iv) depreciation of servers and other equipment, (v) payment handling charges, and (vi) other costs, including write-down of inventory. The following table sets forth the components of our cost of revenues by amounts and percentages of our revenues for the periods presented:

	For the Year Ended December 31,					
	2017		2018		2019	
	US$	%	US$	%	US$	%
	(in thousands, except for percentages)					
Continuing operations						
Bandwidth costs	68,441	33.9	48,118	20.7	57,093	31.5
Cost of inventories sold	21,485	10.6	31,634	13.6	7,181	4.0
Cost of live streaming services	12,724	6.3	23,928	10.3	20,734	11.4
Depreciation of servers and other equipment	7,647	3.8	5,018	2.2	5,198	2.9
Payment handling charges	4,855	2.4	3,016	1.3	1,658	0.9
Other costs	2,724	1.4	3,953	1.7	8,049	4.4
Total	117,876	58.4	115,667	49.8	99,913	55.1

Bandwidth costs . Bandwidth costs consist of the fees we pay to telecommunications carriers and other service providers for telecommunications services and for hosting our servers at their internet data centers and to a less extent, the fees we compensate users of our ZQB and OneThing Cloud devices for the use of their idle uplink capacity. Bandwidth is a significant component of our cost of revenues. We expect our bandwidth costs to increase as we grow our business although we expect such costs would be partly offset by our plan to source an increasing amount of bandwidth from our cloud computing services.

For details on our cloud computing services, see “Item 4. Information on the Company—B. Business Overview.”

Cost of inventories sold. Cost of inventories sold mainly consists of the cost associated with the sale of hardware devices including OneThing Cloud, in relation to our cloud computing services.

Cost of live streaming services. Cost of live streaming services mainly represents the fees we pay to broadcasters and the talent agencies. We expect such cost to continue to grow along with the growth of our live streaming services.

Depreciation of servers and other equipment . Depreciation expenses for servers and other equipment that are directly related to our business operations and technical support are included in our cost of revenues. We expect our depreciation expenses as a percentage of revenues to decrease as cloud computing increases our use of cloud servers, which is also consistent with the industry trend.

Payment handling charges . Payment handling charges are the fees we pay to payment channels for cloud acceleration subscription services, online games and other paid services. Users can make payments for such services through third-party online, fixed phone line and mobile phone payment channels. These third-party payment channels typically charge a handling fee for their services. Our subscribers used to make subscription payments through mobile phones. However, as mobile carriers generally charge higher handling fees than other channels, we have modified our subscription fee structure to encourage our subscribers to use other available payment channels. We expect such payment handling charges to decrease as we continue to optimize our channel for the collection of subscription fee.

Other costs . Other costs mainly include fast bird service cost, which we pay to telecommunication service providers for accelerating service we provide for our subscribers’ internet access, impairment cost, which arises from our write-down of inventory based on our assessment, and LinkToken redemption cost, which represents the cost we incurred for making products and services available in the LinkToken Mall for holders of LinkTokens to redeem.

Operating expenses

Our operating expenses consist of (i) research and development expenses, (ii) sales and marketing expenses, (iii) general and administrative expenses, and (iv) assets impairment loss, net of recoveries. The following table sets forth the components of our operating expenses by amounts and percentages of our revenues for the periods presented:

	For the Year Ended December 31,					
	2017		2018		2019	
	US$	%	US$	%	US$	%
	(in thousands, except for percentages)					
Research and development expenses	66,947	33.2	76,763	33.1	68,571	37.8
Sales and marketing expenses	19,888	9.8	35,322	15.2	31,820	17.6
General and administrative expenses	36,517	18.1	40,833	17.6	38,930	21.5
Assets impairment loss, net of recoveries	13,556	6.7	6,348	2.7	(2,147)	(1.2)
Total	136,908	67.8	159,266	68.6	137,174	75.7

Research and development expenses . Research and development expenses consist primarily of salaries and benefits for our research and development personnel. Expenditures incurred during the research phase are expensed as incurred. Expenditures incurred for the development of the acceleration products prior to the establishment of technological feasibility are expensed when incurred. We expect our research and development expenses to increase in the short term as we need to retain talents to develop new products and update existing products, particularly our cloud computing services, blockchain technology, and our mobile products.

Sales and marketing expenses . Sales and marketing expenses consist primarily of salaries, sales commissions and benefits for our sales and marketing personnel and marketing and promotional expenses. We expect our sales and marketing expenses to increase in the future as we expect to invest in brand enhancement efforts and the promotion of our products, particularly as we plan to increase our efforts in promoting our cloud computing services, blockchain technology, Mobile Xunlei and new products under development.

General and administrative expenses . General and administrative expenses consist primarily of salaries and benefits, professional service fees and other administrative expenses. We expect our general and administrative expenses to increase in the future as we expect our business to continue to grow and as a result of general inflation.

Assets impairment loss, net of recoveries. Assets impairment loss, net of recoveries consists of assets written-offs after impairment and recoverability assessment, net of recovered amount of impaired assets. The assets impairment in 2019 was related to a recovery of the last installment of Xunlei Kankan purchase price, which we wrote-off in the previous fiscal year.

Taxation

Cayman Islands

We are incorporated in the Cayman Islands. Under the current laws of the Cayman Islands, we are not subject to tax on income or capital gains. Additionally, there is no withholding tax on dividends paid by us to our shareholders.

China

On March 16, 2007, the NPC promulgated the EIT Law, which was revised on December 29, 2018, adopting a unified EIT rate of 25%. In addition, the EIT Law also provides a five-year transitional period starting from its effective date for those enterprises that were established before the date of promulgation of the EIT Law and that were entitled to preferential income tax rates under the then effective tax laws or regulations. On December 26, 2007, the State Council issued the “Circular for Implementation of the Transitional Preferential Policies for the Enterprise Income Tax.” Pursuant to this Circular, the transitional income tax rates for enterprises established in the Shenzhen Special Economic Zone before March 16, 2007 were 18%, 20%, 22%, 24% and 25% for 2008, 2009, 2010, 2011 and 2012, respectively. Thus, the applicable EIT rate for Giganology Shenzhen, the VIE and its subsidiaries, which were established in the Shenzhen Special Economic Zone before March 16, 2007, was 25% for each of the 2015, 2016, 2017, 2018 and 2019 fiscal years.

On January 29, 2016, relevant PRC governmental regulatory authorities released further qualification criteria, application procedures and assessment processes for meeting the High and New Technology Enterprise, or HNTE status under the EIT Law which would entitle qualified and approved entities to a favorable statutory tax rate of 15%. In April 2009, the State Administration for Taxation, or SAT, issued Circular Guoshuihan [2009] No. 203 stipulating that entities qualified for the HNTE status should apply with the relevant tax authorities to enjoy the reduced EIT rate of 15% provided under the EIT Law starting from the year when the HNTE certificate becomes effective. In addition, an entity qualified for the HNTE status can continue to enjoy its remaining tax holiday from January 1, 2008 provided that it has obtained the HNTE certificate according to the new recognition criteria set by the EIT Law and the relevant regulations. Shenzhen Xunlei possesses such HNTE certificate and is qualified to enjoy a preferential tax rate of 15% for the years ended December 31, 2017, 2018 and 2019. We are currently renewing such HNTE certificate for Shenzhen Xunlei. In addition, Shenzhen Onething and Shenzhen Wangwenhua also obtained the HNTE certificate in October 2017 and August 2017, respectively, and therefore enjoy a preferential income tax rate of 15% for the years ended December 31, 2017, 2018 and 2019. Xunlei Computer also obtained the HNTE certificate in November 2018 and thus entitled to enjoy a preferential income tax rate of 15% for the years ended December 31, 2018, 2019 and 2020.

According to a policy of the State Tax Administration of the PRC, enterprises that engage in research and development activities are entitled to claim 175% of the research and development expenses incurred in a year as tax deductible expenses in determining their tax assessable profits for that year, or Super Deduction, during the period from January 1, 2018 to December 31, 2020. Shenzhen Xunlei, Shenzhen Onething, Shenzhen Wangwenhua and Xunlei Computer have been claiming this Super Deduction in ascertaining its tax assessable profits.

Shenzhen Xunlei obtained the certificate of National Key Software Enterprise for the year ended December 31, 2017 which entitled Shenzhen Xunlei a preferential tax rate of 10% for fiscal year 2017. Shenzhen Xunlei also hold a HNTE certificate which entitled Shenzhen Xunlei to enjoy an income tax rate of 15% for 2017, 2018 and 2019 fiscal year.

Pursuant to the relevant PRC regulations, Xunlei Computer is entitled to the 2-year Exemption and 3-year 50% Reduction treatment. The first year of profitable operation of Xunlei Computer is 2013. Accordingly, the applicable EIT rates for Xunlei Computer were 12.5%, 12.5% and 12.5% for the years ended December 31, 2015, 2016 and 2017, respectively. The term of 50% reduction treatment expired in 2017. Our other subsidiaries and VIE's subsidiaries, which were established after January 1, 2008, are subject to EIT at a rate of 25%. Xunlei Computer also obtained the HNTE certificate in November 2018 and thus entitled to enjoy a preferential income tax rate of 15% for the years ended December 31, 2018, 2019 and 2020.

According to the 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 are 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 generally applicable to any dividends to be distributed from Giganology Shenzhen and Xunlei Computer to us out of any profits of Giganology Shenzhen and Xunlei Computer derived after January 1, 2008. Although Xunlei Computer and Giganology Shenzhen had retained earnings as of December 31, 2018 and December 31, 2019, the directors of the company decided to reinvest the retained earnings permanently in China and therefore no such WHT is required.

In addition, the current EIT Law treats enterprises established outside the PRC with "effective management and control" located in the PRC as PRC resident enterprises for tax purposes. The term "effective management and control" is generally defined as exercising overall management and control over the business, personnel, accounting, properties, etc. of an enterprise. If a company is considered as a PRC resident enterprise for tax purposes, it would be subject to the PRC Enterprise Income Tax at the rate of 25% on its worldwide income after January 1, 2008. As of December 31, 2019, our company has not accrued for PRC tax on such basis. Our company will continue to monitor its tax status.

Results of operations

The following table sets forth a summary of our consolidated results of continuing operations by amounts and percentages of our revenues for the years indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this annual report. The results of operations in any period are not necessarily indicative of the results that may be expected for any future period.

	For the Year Ended December 31,					
	2017		2018		2019	
	US$	%	US$	%	US$	%
	(in thousands, except for percentages)					
Net revenues						
Service revenue	169,017	83.7	177,528	76.5	172,998	95.4
Product revenue	32,894	16.3	54,604	23.5	8,269	4.6
Total revenue, net of rebates and discounts	**201,911**	**100.0**	**232,132**	**100.0**	**181,267**	**100.0**
Business taxes and surcharge	(1,328)	(0.7)	(1,528)	(0.7)	(602)	(0.3)
Total net revenues	200,583	99.3	230,604	99.3	180,665	99.7
Cost of revenues						
Service	(96,391)	(47.7)	(84,033)	(36.2)	(92,732)	(51.1)
Product	(21,485)	(10.7)	(31,634)	(13.6)	(7,181)	(4.0)
Total cost of revenues	(117,876)	(58.4)	(115,667)	(49.8)	(99,913)	(55.1)
Gross profit	**82,707**	**41.0**	**114,937**	**49.5**	**80,752**	**44.6**
Operating expenses						
Research and development expenses	(66,947)	(33.2)	(76,763)	(33.1)	(68,571)	(37.8)
Sales and marketing expenses	(19,888)	(9.8)	(35,322)	(15.2)	(31,820)	(17.6)
General and administrative expenses	(36,517)	(18.1)	(40,833)	(17.6)	(38,930)	(21.5)
Assets impairment loss, net of recoveries	(13,556)	(6.7)	(6,348)	(2.7)	2,147	1.2
Total operating expenses	(136,908)	(67.8)	(159,266)	(68.6)	(137,174)	(75.7)
Operating loss	**(54,201)**	**(26.8)**	**(44,329)**	**(19.1)**	**(56,422)**	**(31.1)**
Interest income	1,967	1.0	1,183	0.5	1,897	1.1
Interest expense	(239)	(0.1)	(239)	(0.1)	(75)	(0.0)
Other income, net	7,880	3.9	2,810	1.2	5,861	3.2
Share of loss from equity investees	(1,875)	(0.9)	(307)	(0.1)	—	—
Loss from continuing operations before income tax	**(46,468)**	**(23.0)**	**(40,882)**	**(17.6)**	**(48,739)**	**(26.8)**
Income tax benefit	2,252	1.1	89	—	(4,676)	(2.6)
Net loss from continuing operations	**(44,216)**	**(21.9)**	**(40,793)**	**(17.6)**	**(53,415)**	**(29.4)**
Discontinued operations:						
Income from discontinued operations before income taxes	7,538	3.7	1,533	0.7	—	—
Income tax expenses	(1,131)	(0.6)	(230)	(0.1)	—	—
Net income from discontinued operations	6,407	3.2	1,303	0.6	—	—
Net loss for the year	**(37,809)**	**(18.7)**	**(39,490)**	**(17.0)**	**(53,415)**	**(29.4)**
Less: Net profit attributable to the non-controlling interest	13	0.0	212	0.1	246	0.1
Net loss attributable to Xunlei Limited	**(37,822)**	**(18.7)**	**(39,278)**	**(16.9)**	**(53,169)**	**(29.3)**

Year ended December 31, 2019 compared with year ended December 31, 2018.

Revenues . Our revenues decreased by 21.9% from US$232.1 million in 2018 to US$181.3 million in 2019, primarily due to decreases of revenues from OneThing cloud hardware sales, online advertising services and live streaming services.

Service revenue. Our service revenue decreased by 2.6% from US$177.5 million in 2018 to US$173.0 million in 2019, primarily due to a decreased demand for our online advertising services.

Our revenue from subscription services decreased by 0.4% from US$81.9 million in 2018 to US$81.5 million in 2019, primarily due to a decline in average revenue per subscriber.

Our online advertising revenues decreased by 43.7% from US$27.8 million in 2018 to US$ 15.6 million in 2019, primarily due to a decreased demand for our online advertising services mainly by the mobile gaming industry in 2019.

Revenues derived from cloud computing and other internet value-added services increased by 11.9% from US$67.9 million in 2018 to US$75.8 million in 2019, primarily due to an increase in demand for our shared cloud computing service.

Product revenue. Our product revenue decreased by 84.9% from US$54.6 million in 2018 to US$8.3 million in 2019, primarily due to a decrease in sales of OneThing cloud as we gradually phased out promotional activities for the OneThing cloud and a decreased demand for OneThing cloud from individual users.

Cost of revenues . Our cost of revenues decreased by 13.6% from US$115.7 million in 2018 to US$99.9 million in 2019, primarily attributable to a decline in cost of inventories sold as a result of decreased demand for our OneThing cloud hardware and reduced revenue sharing costs of live streaming service.

Bandwidth costs . Our bandwidth costs increased by 18.7% from US$48.1 million in 2018 to US$57.1 million in 2019, primarily due to an increased capacity of our shared cloud computing.

Cost of inventories sold. Our cost of inventories sold decreased by 77.3% from US$31.6 million in 2018 to US$7.2 million in 2019, primarily due to a decrease in sale of OneThing Cloud as we gradually phased out promotional activities for the OneThing cloud and a decreased demand for the OneThing cloud from individual users.

Cost of live streaming. Our cost of live streaming services decreased by 13.4% from US$23.9 million in 2018 to US$20.7 million in 2019, primarily due to a decline in revenue-sharing costs as a result of a decrease in our live streaming revenues.

Depreciation of servers and other equipment . Depreciation of servers and other equipment increased by 3.7% from US$5.0 million in 2018 to US$5.2 million in 2019, primarily due to an increase in depreciation of our shared cloud computing servers that we installed to our newly established distributed edge computing node rooms across China this year.

Payment handling charges . Our payment handling charges decreased by 45.0% from US$3.0 million in 2018 to US$1.7 million in 2019, primarily because we cooperated with more third-party payment service providers that charged lower service fees.

Other costs . These costs increased by 103.6% from US$4.0 million in 2018 to US$8.0 million in 2019, primarily due to a write-down of our inventory for OneThing Cloud hardware device in an amount of US$3.2 million based on our inventory impairment assessment.

Gross profit . As a result of the above, our gross profit decreased by 29.7% from US$114.9 million in 2018 to US$80.8 million in 2019. Gross profit margin decreased from 49.5% in 2018 to 44.5% in 2019, primarily due to a decrease in Onething Cloud hardware sales and a lower level of online advertising revenues generated this year.

Operating expenses . Our operating expenses decreased by 13.9% from US$159.3 million in 2018 to US$137.2 million in 2019, primarily due to (i) a decrease in technical services fee we incurred arising from collecting idle bandwidth from individual users due to the improvement of own technology and the increased bandwidth capacity we collected from Onething cloud users, (ii) a decrease in labor cost as a result of our optimization of organizational structure, benefits and compensation, and (iii) a decrease number of marketing and promotional activities as we gradually phased out our promotion activities for Onething Cloud hardware.

Research and development expenses . Our research and development expenses decreased by 10.7% from US$76.8 million in 2018 to US$68.6 million in 2019, primarily due to our optimization of organizational structure, employee benefits and compensation.

Sales and marketing expenses . Our sales and marketing expenses decreased by 9.9% from US$35.3 million in 2018 to US$31.8 million in 2019, primarily due to a gradually decreased marketing and promotional activities during this year for the sales of OneThing Cloud hardware device.

General and administrative expenses . Our general and administrative expenses decreased by 4.7% from US$40.8 million in 2018 to US$38.9 million in 2019, primarily because we incurred less legal and consulting expenses as we were involved in less copyright lawsuits.

Assets impairment loss, net of recoveries. We recorded a credit balance of US$2.1 million in 2019, compared to an assets impairment loss of US$6.3 million in 2018. The balance in 2019 represented a net recovery of the last installment of Xunlei Kankan purchase price which we impaired in 2017. The balance in 2018 represented receivables that were written-off after impairment and recoverability assessment, net of recovered amount of impaired assets.

Interest income . Our interest income increased by 60.4% from US$1.2 million in 2018 to US$1.9 million in 2019, primarily due to an increase in the balance of time deposits in our bank account.

Interest expense . Our interest expense decreased slightly from US$0.2 million in 2018 to US$0.1 million in 2019, primarily because less interest was accrued for the long-term payables to certain shareholders arising from the repurchase of shares in 2014.

Other income, net . Our other income increased by 108.6% from US$2.8 million in 2018 to US$5.9 million in 2019, primarily because we recorded a gain of approximately US$6.6 million on the disposal of LinkToken operations and its related assets and liabilities.

Income tax benefit . We recorded an income tax expense of US$4.7 million in 2019, as compared to an income tax benefit of US$0.1 million in 2018. We recorded an income tax expense in 2019 primarily due to a write-down of Shenzhen Xunlei's deferred tax assets of US$7.4 million after our assessment based on a five year profit forecast.

Net loss from continuing operations . As a result of the above, our net loss increased from US$40.8 million in 2018 to US$53.4 million in 2019.

Net income from discontinued operations . Net income from discontinued operations was US$1.3 million in 2018 and nil in 2019.

Net loss attributable to Xunlei Limited . As a result of the above, we generated a net loss attributable to Xunlei Limited of US$39.3 million and US$53.2 million in 2018 and 2019, respectively.

Year ended December 31, 2018 compared with year ended December 31, 2017.

Revenues . Our revenues increased by 15.0% from US$201.9 million in 2017 to US$232.1 million in 2018. The increase was primarily due to an increase in revenues from product sales, live streaming services, and mobile advertising services.

Service revenue. Our service revenue increased by 5.0% from US$169.0 million in 2017 to US$177.5 million in 2018, primarily due to increases in the revenue generated from our online advertising services and cloud computing and other internet value-added services, partially offset by slight decreases in revenues from subscription services.

Our revenue from subscription services decreased by 3.6% from US$85.0 million in 2017 to US$81.9 million in 2018, primarily due to a decline in the number of subscribers from 2017 to 2018.

Our online advertising revenues increased by 23.6% from US$22.5 million in 2017 to US$27.8 million in 2018, primarily due to higher average advertising fees we charged as we optimized our advertising channels.

Revenues derived from other internet value-added services increased by 10.2% from US$61.6 million in 2017 to US$67.9 million in 2018, primarily due to an increase in revenue from our live streaming business.

Product revenue. Our product revenue increased by 66.0% from US$32.9 million in 2017 to US$54.6 million in 2018, primarily due to an increase in the sales of OneThing Cloud devices in 2018.

Cost of revenues . Our cost of revenues decreased by 1.9% from US$117.9 million in 2017 to US$115.7 million in 2018, primarily attributable due to a decrease in bandwidth costs.

Bandwidth costs . Our bandwidth costs decreased by 29.7% from US$68.4 million in 2017 to US$48.1 million in 2018, primarily due to the use of crowdsourced bandwidth capacity that we obtained through our cloud computing service.

Cost of inventories sold. Our cost of inventories sold increased by 47.2% from US$21.5 million in 2017 to US$31.6 million in 2018, primarily due to an increase in cost of inventories sold associated with the sale of OneThing Cloud.

Cost of live streaming. Our cost of live streaming services increased by 88.1% from US$12.7 million in 2017 to US$23.9 million in 2018, primarily due to an increase in live streaming costs associated with the growth of our live streaming service in 2018.

Depreciation of servers and other equipment . Depreciation of servers and other equipment decreased by 34.4% from US$7.6 million in 2017 to US$5.0 million in 2018, primarily because we had a one-off acceleration in the depreciation of servers in an aggregate amount of US$1.3 million in 2017.

Payment handling charges . Our payment handling charges decreased by 37.9% from US$4.9 million in 2017 to US$3.0 million in 2018, primarily because we used more third-party payment service providers that charged lower service fees.

Other costs . These costs increased by 45.1% from US$2.7 million in 2017 to US$4.0 million in 2018, primarily due to the increase in LinkToken redemption cost.

Gross profit . As a result of the above, our gross profit increased by 39.0% from US$82.7 million in 2017 to US$114.9 million in 2018. Gross profit margin increased from 41.0% in 2017 to 49.5% in 2018, primarily due to an increase in the sales of high margin product and a decreased bandwidth costs.

Operating expenses . Our operating expenses increased by 16.3% from US$136.9 million in 2017 to US$159.3 million in 2018, primarily due to (i) our continued development and promotion of cloud computing service and blockchain business, and (ii) an increase in staff compensation expenses.

Research and development expenses . Our research and development expenses increased by 14.7% from US$66.9 million in 2017 to US$76.8 million in 2018, primarily because we hired additional research and development engineers for our cloud computing business and blockchain business.

Sales and marketing expenses . Our sales and marketing expenses increased by 77.6% from US$19.9 million in 2017 to US$35.3 million in 2018, primarily due to an increase in marketing expenses we incurred in promoting our cloud computing and blockchain products and services.

General and administrative expenses . Our general and administrative expenses increased by 11.8% from US$36.5 million in 2017 to US$40.8 million in 2018, primarily due to an increase in employee compensation as a result of an increased employee headcount and a higher average salary.

Assets impairment loss, net of recoveries. We recorded assets impairment loss of US$13.6 million in 2017 and US$6.3 million in 2018. The balance in 2018 represented receivables that were written-off after impairment and recoverability assessment, net of recovered amount of impaired assets. The balance in 2017 represented the write-offs in relation to Xunlei Kankan, which we disposed of in July 2015 and Kuaipan Personal, with respect to which we performed an impairment assessment due to a change of our product focus.

Interest income . Our interest income decreased by 39.9% from US$2.0 million in 2017 to US$1.2 million in 2018, primarily due to a decrease in the balance of time deposits in our bank account.

Interest expense . Our interest expense remained stable at US$0.2 million in 2017 and US$0.2 million in 2018, which represented interest expenses accrued for long-term payables to certain shareholders resulting from repurchase of shares in 2014.

Other income, net . Our other income decreased by 64.3% from US$7.9 million in 2017 to US$2.8 million in 2018, primarily due to the write-off of long term investments in an amount of approximately US$7.8 million in 2018, partially offset by exchange gains of approximately US$1.2 million.

Income tax benefit . Our income tax benefit decreased from US$2.3 million in 2017 to US$0.1 million in 2018, primarily due to a decrease in deferred tax assets.

Net loss from continuing operations . As a result of the above, our net loss increased from US$44.2 million in 2017 to US$40.8 million in 2018.

Net income from discontinued operations . Net income from discontinued operations was US$6.4 million in 2017 and US$1.3 million in 2018.

Net loss attributable to Xunlei Limited . As a result of the above, we generated a net loss attributable to Xunlei Limited of US$37.8 million and US$39.3 million in 2017 and 2018, respectively.

Inflation

To date, inflation in China has not materially affected our results of operations in recent years. According to the National Bureau of Statistics of China, the year-over-year percent changes in the consumer price index for December 2017, 2018 and 2019 were increases of 1.6%, 2.1% and 4.5%, respectively. Although we have not been materially affected by inflation in the past, we can provide no assurance that we will not be affected if China experiences higher rates of inflation in the future.

Critical accounting policies

We prepare our financial statements in conformity with U.S. GAAP, which requires us to make estimates and assumptions that affect the amounts reported in the accompanying consolidated financial statements and related disclosures. We regularly evaluate these estimates based on historical experiences and on various other assumptions that we believe to be reasonable, the result of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from what we expect. 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

Subscription revenues

We operate a VIP subscription program where VIP subscribers can have access to high speed online acceleration services, online streaming and other access privileges. The subscription fee is time-based and is collected up-front from subscribers except in the cases when they elect to pay via their mobile operators. The subscription fee is collected when the subscribers pay for their monthly phone bills. The terms of time-based subscriptions range from one month to twelve months, with the subscribers having the option to renew the contracts. The receipt of subscription fees is initially recorded as contract liabilities. We satisfy our various performance obligations by providing services throughout the subscription period and revenue is recognized ratably over the period of subscription as services are rendered. Unrecognized portion fee beyond 12 months from balance sheet date is classified as a long-term liability. We evaluated the principal versus agent criteria and determined that we are the principal in the transaction and accordingly record revenue on a gross basis. In determining whether to report revenues gross for the amount of subscription revenue, we assess whether it maintains the principal relationship with the VIP subscribers, whether it bears the credit risk and whether it establishes prices for the end users. Service fees levied by online system, fixed phone line and mobile payment channels ("Payment handling charges") are recorded as the cost of revenues in the same period as the revenue for the subscription fee is recognized.

Advertising revenues

Advertising revenues are derived principally from arrangements where the advertisers pay to place their advertisements on our platform over a particular period of time. It includes multiple performance obligations, primarily for advertisements to be displayed in different spots at different times, placed under different formats including but are not limited to videos, banners, links, logos and buttons. Advertisements on our platform 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. We enter into advertising contracts with third-party advertising agencies that represent advertisers, as well as directly with advertisers. A typical contract term would range from a few days to three 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 three months.

Where our customers purchase multiple advertising spaces with different display periods in the same contract, we allocate the total consideration to the various advertising elements based on their relative fair values and recognize revenues for the different elements over their respective display periods. We determine the fair values of different advertising elements based on the prices charged when these elements were sold on a standalone basis. We recognize revenues on the elements delivered and defer the recognition of revenues for the fair value of the undelivered elements until the remaining obligations have been satisfied. Where all of the elements within an arrangement are delivered uniformly over the contract period, revenues are recognized on a straight line basis over the contract period.

(a) Transactions with third-party advertising agencies

For contracts entered into with third-party advertising agencies, the third-party advertising agencies will in turn sell the advertising services to advertisers. Revenues are recognized ratably over the contract period of display.

We provide sales incentives in the forms of discounts and rebates to third party advertising agencies based on purchase amount. As the advertising agencies are viewed as the customers in these transactions, revenues are recognized based on the price charged to the agencies, net of sales incentives provided to the agencies. Sales incentives are estimated and recorded at the time of revenue recognition based on the contracted rebate rates and estimated sales volume based on historical experience.

(b) Transactions with third party advertising platforms

We began to cooperate with third party advertising platforms such as Guangdiantong and Baidu since the fourth quarter in 2015. In this business model, advertisers put their content on third party advertising platforms, and platforms will dispatch the advertising content to Xunlei's platforms by certain analysis systematically. As the third party advertising platforms are viewed as the customers in these transactions, revenue is recognized monthly based on the data publicized on third party platforms and the price charged to these advertising platforms.

(c) Transactions with advertisers

We also enter into advertisement contracts directly with advertisers. Under these contracts, similar to transactions with third-party advertising agencies, we recognize revenues ratably over the contract period of display. The terms and conditions, including price, are fixed according the contracts between us and the advertisers. We also perform credit assessment of all advertisers prior to entering into contracts. Revenues are recognized based on the amount charged to the advertisers, net of discounts.

We have estimated and recorded sales rebates provided to the agencies and advertisers of US$440,000, US$394,000 and nil for the years ended December 31, 2017, 2018 and 2019, respectively.

Live streaming revenue

We operate live streaming platform and users can purchase virtual gifts which they can then send to performers in the live streaming platform. The consumption of each virtual gift sold to users is considered as the performance obligation. We do not have further obligations to the user after the virtual gifts are consumed immediately or after the stated period for time-based items. The revenue from consumable item is recognized at fair value of the virtual items, as we are the principal in this arrangement, based on actual consumption of virtual items by the paying users. The revenue from time-based item is recognized over the duration of stated period of the item.

Cloud computing and other internet value-added services

(a) Revenues from cloud computing

As part of our cloud computing business, we engage in sale of OneThing Cloud. OneThing Cloud is a personal cloud hardware device that allows users to share their idle bandwidth with us, in exchange for LinkTokens. LinkTokens are not convertible into cash but they can be used to redeem for products and services offered in the LinkToken Mall. LinkTokens represent an obligation to deliver future services by the operator of LinkToken program.

Prior to April 1, 2019, the bandwidth shared by the users in exchange for LinkTokens is an identifiable benefit which we can reasonably estimate fair value. The benefit that we receives from user's contribution of bandwidth is independent from OneThing Cloud that we sells to users.

In April 2019, we transferred the operation of LinkTokens, including the issuance and redemption obligation of LinkTokens, as well as the LinkTokens Mall to a third party, Beijing LinkChain Co., Ltd. ("Beijing LinkChain"). Upon completion of the transfer, users could continue to share their idle bandwidth with us in exchange for the LinkTokens issued by Hainan LinkChain Networking Technology Co., Ltd. ("Hainan LinkChain"), a wholly-owned subsidiary of Beijing LinkChain. In addition, we are obligated to pay to Hainan LinkChain a pre-determined amount per active user of OneThing Cloud who shared their idle bandwidth with us.

We primarily sold OneThing Cloud to individuals through online e-commerce platforms before 2019 and corporate customers starting from 2019, and the performance obligation is satisfied when the item is dispatched to the end customers.

The core business concept of cloud computing is to collect idle uplink capacity from individuals with reward, and deliver those collected computing resources to online video streaming platforms. On a monthly basis, we record the bandwidth we deliver and recognize revenue from these online video streamers under contractual rates applied (price per GB of bandwidth multiplies total GBs of bandwidth per month).

Revenue is recognized net of return allowances when the products are delivered and title passes to customers. Return allowances, which reduce net revenues, are estimated based on historical experiences. Product warranties are estimated and recognized at the time we recognize revenue. The warranty period is one year. We accrue warranty liabilities at the time of sale, based on historical and projected incident rates and expected future warranty costs.

(b) Online game revenues

Online games used to consist of web games, mobile games and PC games. Users play games through our 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. The utilization of the virtual item is considered performance obligation by us and revenue is allocated to each performance obligation on a relative stand-alone selling price basis, which are determined based on the prices charged to customers. 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 game.

Pursuant to contracts signed between us and game developers, revenue from the sale of virtual items are shared based on a pre-agreed ratio for each game. We enter into both non-exclusive and exclusive licensing contracts with game developers.

The games under non-exclusive licensed contracts are maintained, hosted and updated by the game developers. We mainly provide access to the platform and limited after-sale services to the game players. The determination of whether to record these revenues using the gross or net method is based on an assessment of various factors. The primary factors are whether we act as the principal in offering services to the game players or as agent in the transaction, and the specific requirements of each contract. We determined that for non-exclusive game licensed arrangements, the third party game developers are the principal given that the game developers design and develop the game services offered, have reasonable latitude to establish prices of game virtual items, and are responsible for maintaining and upgrading the game content and virtual items. Accordingly, we record online game revenue, net of the portion remitted to the game developers.

Given that online games are managed and administered by the game developers for non-exclusive licensed games, we do not have access to the data on the consumption details and the types of virtual items purchased by the game players. We have adopted a policy to recognize revenues relating to both consumable and perpetual items over the shorter of (i) estimated lives of the games and (ii) the estimated lives of the user relationship with us, which were approximately one to ten months for the periods presented.

Adjustments arising from the changes of estimated lives of virtual items are applied prospectively as such changes are resulted from new information indicating a change in the game player behavioral patterns.

For exclusive licensing contracts with game developers, the games are maintained and hosted by us. Accordingly, we are determined to be the principal. We record online game revenue on a gross basis, with the amount remitted to the game developers reported as cost of revenue. Payment handling charges are recognized as cost of revenues when the related revenues are recognized.

For exclusive licensed games which are maintained on our server, we have access to the data on the consumption details and types of virtual items purchased by the game players. We do not maintain information on consumption details of virtual items, and only have limited information related to the frequency of log-ons. Given that a substantial portion of the virtual items purchased by the game players in exclusive licensed games are perpetual items, management determined that it would be most appropriate to recognize revenue over the shorter of (i) estimated lives of the games and (ii) the estimated lives of the user relationship with us, which were approximately one to six months for the periods presented. Revenues related to consumable items are recognized immediately upon consumption.

Game players can purchase prepaid virtual items which can be used to purchase virtual items via online channels. We incur service fees levied by those payment channels, and such payment expenses are recorded as the cost of revenues when the related revenues are recognized.

For both non-exclusive and exclusive licensed games, we estimate the life of virtual items to be the shorter of the estimated lives of the games and the estimated lives of the user relationship. The estimated user relationship period is based on data collected from those users who have purchased virtual items. To estimate the life of the user relationship, we maintain a software system that captures the following information for each user: the date of first log-on, the date the user ceases to play the game and frequency of log-ons. We estimate the life of the user relationship to be the weighted average period from the first purchase of a virtual item to the date the user ceases to play the game based on the frequency of log-ons.

To estimate the life of the games, we consider both games that they operate as well as games in the market that are of a similar nature. We categorize these games by their nature, such as simulation games, role playing games and others, which appeal to players belonging to different demographics. We estimate that the life of each group of the games to be the average period from the date of launch for such games to the date the games are expected to be removed from the website or terminated altogether. When we launch a new game, they estimate the life of the game and user relationship based on lives of other similar games in the market until the new game establishes its own history. We also consider the game’s profile, attributes, target audience, and its appeal to players of different demographic groups in estimating the user relationship period.

The consideration of user relationship with each online game is based on our best estimate that takes into account all known and relevant information at the time of assessment. Adjustments arising from the changes of estimated lives of virtual items are applied prospectively as such changes are resulted from new information indicating a change in the game player behavioral patterns. Any changes in the estimates of lives of virtual items may result in our revenues being recognized on a basis different from prior periods and may cause our operating result to fluctuate. We periodically assess the estimated lives of the virtual items and any changes from prior estimates are accounted for prospectively. Any adjustments arising from changes in user relationship 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.

We entered into a legally binding agreement to sell our web game business in December 2017. Web game revenue recognized from discontinued operations was US$11,428,000, US$656,000 and nil for the years ended December 31, 2017, 2018 and 2019, respectively.

Share-based Compensation

We awarded a number of share-based compensation options to our employees, officers and directors. The details of these share-based awards and the respective terms and conditions are described in “Share-based compensation” in note 18 to our audited consolidated financial statements for the years ended December 31, 2017, 2018 and 2019.

We measure share based compensation at the grant date based on the fair value of the award determined using the Black Scholes option pricing model. As we have granted share options and restricted shares with service only condition, we elected to recognize compensation costs net of estimated forfeitures on a straight line basis over the requisite service period, which is generally the same as the vesting period. The amount of compensation cost recognized at any date is at least equal to the portion of the grant-date value of the award that is vested at that date.

Impairment of Long-lived Assets

For other long-lived assets, we evaluate our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable. We assess the recoverability of the long-lived assets by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows we expect to receive from the use of the assets and their eventual disposition at the lowest level of identifiable cash flows. 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. If we identify an impairment, the carrying value of the asset will be reduced to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values.

Impairment of Goodwill

Impairment of goodwill assessment is performed on at least an annual basis on December 31 or whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. According to ASC 350-20-35, an entity may assess qualitative factors to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount, including goodwill. Alternatively, an entity may proceed directly to perform a two-step goodwill impairment test. The first step compares the fair values of a 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 a reporting unit 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 a reporting unit.

We chose directly to perform a two-step goodwill impairment test. For the first step, the impairment test was performed using a discounted cash flow analysis to assess the fair value of the company, as a single reporting unit. The discounted cash flow analysis, which requires certain assumptions and estimates regarding economics and future profitability, use cash flow projections for the purposes of impairment reviews covering a five-year period. Cash flows beyond the five-year period are extrapolated using an estimated annual growth of not more than 2%. The growth rates used do not exceed the historical growth of the company. The discount rates used of 18.2% reflect market assessments of the time value and the specific risks. According to the assessment of the first step, the fair value of the reporting unit exceeded its carrying amount and the goodwill was not considered impaired. Accordingly, the second step was not required.

No goodwill impairment losses were recognized for the year ended December 31, 2017, 2018 and 2019 based on the impairment test performed by us.

Consolidation

The consolidated financial statements include the financial statements of Xunlei Limited, our subsidiaries and our VIE for which Xunlei Limited is the primary beneficiary. All significant transactions and balances among our subsidiaries, our VIE and us have been eliminated upon consolidation.

A subsidiary is an entity in which we, directly or indirectly, control 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 to cast a majority of the votes at meetings of the board of directors or to govern the financial and operating policies of the investee under a statute or agreement among the shareholders or equity holders.

An entity is considered to be a VIE if the entity's equity holders do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties.

We consolidate entities for which we are the primary beneficiary if the entity's equity holders do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties.

In determining whether Xunlei Limited or its subsidiary is the primary beneficiary of a VIE, we considered whether we have the power to direct activities that are significant to the VIE's economic performance, including the power to appoint senior management, right to direct company strategy, power to approve capital expenditure budgets, and power to establish and manage ordinary business operation procedures and internal regulations and systems.

Management has evaluated the contractual arrangements among Giganology Shenzhen, Shenzhen Xunlei and its shareholders and concluded that Giganology Shenzhen receives all of the economic benefits and absorbs all of the expected losses from Shenzhen Xunlei and has the power to direct the aforementioned activities that are significant to Shenzhen Xunlei's economic performance, and is the primary beneficiary of Shenzhen Xunlei. Therefore, Shenzhen Xunlei and its subsidiaries' results of operation, assets and liabilities have been included in our consolidated financial statements. We monitor the regulatory risk associated with these contractual arrangements. The details of how we manage the regulatory risk are described in "Certain risk and concentration" in note 26 to our audited consolidated financial statements for the years ended December 31, 2017, 2018 and 2019. Non-controlling interests represent the portion of the net assets of a subsidiary attributable to interests that are not owned by our company. The non-controlling interests are presented in the consolidated balance sheets, separately from equity attributable to the shareholders of our company. Non-controlling interests in the results of our company is presented on the face of the consolidated statements of comprehensive income as an allocation of the total income or loss for the year between non-controlling shareholders and the shareholders of our company.

Accounts Receivable, Net

Accounts receivable are presented net of allowance for doubtful accounts. We evaluate the creditworthiness of each customer at the time when services are rendered and continuously monitor the recoverability of the accounts receivable.

We use specific identification method 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 our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The allowance for doubtful accounts is based on the best facts available and is re-evaluated and adjusted on a regular basis as additional information is received.

Some of the factors that we consider in determining whether we record a bad debt allowance on an individual customer are:

- the customer's past payment history and whether it fails to comply with its payment schedule;
- whether the customer is in financial difficulty due to economic or legal factors;
- a significant dispute with the customer has occurred;
- other objective evidence which indicates non-collectability of the accounts receivable.

The allowances provided for accounts receivable was US$7.7 million as of December 31, 2018 and US$ 7.6 million as of December 31, 2019.

If we determine that an allowance is needed for a customer, we will discontinue business with them unless they start to resume payment. The accounts receivable is written-off when we cease pursuing collection. Any changes in our estimates may cause our operating results to fluctuate.

Taxation and Uncertain Tax Positions

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and tax loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which the difference is expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the consolidated statement of operations in the period that includes the enactment date. A valuation allowance is provided to reduce the carrying amount of deferred tax assets if it is considered more likely than not that some portion, or all, of the deferred tax assets will not be realized. The estimation of future taxable income involves significant judgement and estimates. Based on management's estimated future taxable income management concluded that it is more likely than not that the net operating losses carried forward can be utilized prior to their respective expiration dates.

We adopted the guidance regarding uncertain tax positions and evaluated our open tax positions that exist in each jurisdiction for each reporting period. If an uncertain tax position is taken or expected to be taken in a tax return, the tax benefit from that uncertain position is recognized in our consolidated financial statements if it is more likely than not that the position is sustainable upon examination by the relevant taxing authority.

We did not have any significant uncertain tax position and there was no effect on our financial position or results of operations as a result of implementing the new guidance. We recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense, if any.

Transition from PRC business tax to PRC value-added tax

VAT payable on goods sold or taxable labor services provided by a general VAT taxpayer for a taxable period is the net balance of the output VAT for the period after crediting the input VAT for the period. In addition to the product revenues currently subject to VAT at a rate of 13% (17% before May 1, 2018 and 16% before April 1, 2019), our advertising revenues, subscription revenue, online game revenue, revenue from cloud computing and live streaming revenue are now subject to VAT at a rate of 6%.

Commitments and Contingencies

In the normal course of business, we are subject to contingencies, such as legal proceedings and claims arising out of our business that cover a wide range of matters. Liabilities for such contingencies are recorded when it is probable that a liability has been incurred and the amount of the assessment can be reasonably estimated. In regards to legal cost, we recorded such costs as incurred.

Certain conditions may exist as of the date of the financial statements are issued, which may result in a loss to us, but which will only be resolved when one or more future events occur or fail to occur. Our management and legal counsel assess such contingent liabilities, and such assessment inherently involve an exercise of judgment. In assessing loss contingencies related to legal proceedings that are pending against us or unasserted claims that may result in such proceedings, we in consultation with our legal counsel and evaluate the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought therein.

If the assessment of a contingency indicates that it is probable that a material loss has been incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in our financial statements. If the assessment indicates that a potentially material loss contingency is not probable, but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss, if determinable and material, would be disclosed.

We are involved in a number of cases pending in various courts. These cases are substantially related to alleged copyright infringement and routine and incidental matters to its business, among others. Adverse results in these lawsuits may include awards of damages and may also result in, or even compel, a change in our business practices, which could impact our future financial results. We have incurred US$9.5 million, US$4.7 million and US$ 2.0 million legal and litigation related expenses for the years ended December 31, 2017, 2018 and 2019, respectively.

As of the date of this annual report, we have 24 lawsuits pending against us with an aggregate amount of claimed damages of approximately RMB82.0 million (US$11.9 million) which occurred before December 31, 2019. Among these 24 pending lawsuits, 20 of them were relating to the alleged copyright infringement in the PRC. We have accrued for US$2.8 million litigation related expenses in “Accrued expenses and other liabilities” in the consolidated balance sheet as of December 31, 2019, which is the most probable and reasonably estimable outcome.

We estimated the litigation compensation based on judgments handed down by the court, out-of-court settlements of similar cases as well as advices from our legal counsel. We are in the process of appealing certain judgments for which the losses had been accrued. Although the results of unsettled litigation and claims cannot be predicted with certainty, we do not expect that the outcome of the 24 lawsuits will result in the amounts accrued materially different from the range of reasonably possible losses. In the opinion of management, there was not at least a reasonable possibility we may have incurred a material loss, or a material loss in excess of a recorded accrual, with respect to loss contingencies for asserted legal and other claims. However, the outcome of litigation is inherently uncertain. Therefore, although management considers the likelihood of such an outcome to be remote, if one or more of these legal matters were resolved against us in a reporting period for amounts in excess of management’s expectations, our consolidated financial statements for that reporting period could be materially adversely affected.

Recent Accounting Pronouncements

See Item 18 of Part III, "Financial Statements—Note 2—Summary of significant accounting policies—Recent accounting pronouncements."

B. Liquidity and Capital Resources

We have financed our operations primarily by using our existing internal cash reserves and borrowing bank loans. As of December 31, 2019, we had US$265.3 million in cash and cash equivalents and short-term investments. As of the same date, we also had US$3.0 million restricted cash, which represents cash deposited in a bank account due to legal or contractual restrictions, and US$11.3 million outstanding bank loans for the construction of our headquarters building.

In respect of our revenues from customers in the advertising industry, although the general credit term for these customers is 90 days, we typically are willing to accept delayed repayment up to one year from the invoice date given the general practices we have with our customers in the advertising industry. Our practice and collection history may continue to have an impact on our liquidity.

In the future, we may rely on dividends and other distributions on equity paid by our wholly-owned PRC subsidiaries for our cash and financing requirements. There may be potential restrictions on the dividends and other distributions by our PRC subsidiaries. For instance, if Giganology Shenzhen, our PRC subsidiary, incurs debt on its own behalf in the future, the instruments governing the debt may restrict its ability to pay dividends or make other distributions to us. The PRC tax authorities may require us to adjust our taxable income under the contractual arrangements Giganology Shenzhen currently has in place with Shenzhen Xunlei in a way that would materially and adversely affect the latter's ability to pay dividends and other distributions to us. In addition, under PRC laws and regulations, Giganology Shenzhen, as a wholly foreign-owned enterprise in the PRC, may pay dividends only out of its accumulated profits as determined in accordance with PRC accounting standards and regulations. Wholly foreign-owned enterprises such as Giganology Shenzhen are required to set aside at least 10% of their accumulated after-tax profits each year, if any, to fund a statutory reserve fund, until the aggregate amount of such fund reaches 50% of their respective registered capital. At their discretion, wholly foreign-owned enterprises may allocate a portion of their after-tax profits based on PRC accounting standards to staff welfare and bonus funds. These reserve funds and staff welfare and bonus funds are not distributable as cash dividends. See "Item 3. Key Information—D. Risk factors—Risk related to our corporate structure—We may rely principally on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have. Any limitation on the ability of Giganology Shenzhen and Xunlei Computer to pay dividends to us could have a material adverse effect on our ability to conduct our business." In addition, our investment made as registered capital and additional paid in capital of our subsidiaries, VIE and VIE's subsidiaries are also subject to restrictions in their distribution and transfer according to the laws and regulations in China. Owing to the above, our subsidiaries, VIE and VIE's subsidiaries in China are restricted in their ability to transfer their net assets to us in terms of cash dividends, loans or advances. As of December 31, 2019, the amount of the restricted net assets, which represents registered capital and additional paid-in capital cumulative appropriations made to statutory reserves, was US$ 245.9 million.

As an offshore holding company, we are permitted, under PRC laws and regulations, to provide funding from the proceeds of our offshore fund raising activities to our PRC subsidiaries only through loans or capital contributions, and to our variable interest entity only through loans, subject to the satisfaction of the applicable government registration and approval requirements. See "Item 3. Key Information—D. Risk factors—Risks related to our corporate structure—PRC regulation of loans to, and direct investment in, PRC entities by offshore holding companies and governmental control of currency conversion may restrict or prevent us from making loans to our PRC subsidiaries and variable interest entity and its subsidiaries or making additional capital contributions to our PRC subsidiaries, which may materially and adversely affect our liquidity and our ability to fund and expand our business." As a result, uncertainties exist as to our ability to provide prompt financial support to our PRC subsidiaries or variable interest entity when needed. Notwithstanding the forgoing, Giganology Shenzhen may use its own retained earnings (as opposed to RMB converted from foreign currency denominated capital) to provide financial support to Shenzhen Xunlei either through extended payment terms on amounts due to Giganology Shenzhen from Shenzhen Xunlei, or via entrusted loans from Giganology Shenzhen to Shenzhen Xunlei, or direct loans to its nominee shareholders, which would be contributed to the variable interest entity as capital injection. Such direct loans to the nominee shareholders would be eliminated in the consolidated financial statements against the VIE's share capital.

We believe that our current cash and cash equivalents and anticipated cash flow from operations will be sufficient to meet our anticipated cash needs for the next 12 months. We may, however, need additional cash resources in the future if we experience changes in business conditions or other developments. We may also need additional cash resources in the future if we find and wish to pursue opportunities for investment, acquisition, capital expenditure or similar actions. If we determine that our cash requirements exceed the amount of cash and cash equivalents we have on hand, we may seek to issue debt or equity securities or obtain additional credit facilities. However, if the impact of the COVID-19 on the economy becomes prolonged and greater than expected, our supplies may be disrupted, our customers may reduce their demand for our products and services, and banks may demand us to repay bank loans before their maturity. Our liquidity and capital resources would be significantly affected if this were to happen. We will closely monitor the impact of the COVID-19 on the economy and on our company.

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

	For the Year Ended December 31,		
	2017	2018	2019
	(in thousands of US$)		
Net cash used in operating activities	(14,216)	(35,608)	(45,649)
Net cash generated from/(used in) investing activities	35,208	(69,357)	79,260
Net cash generated from financing activities	2,561	929	12,177
Net increase/(decrease) in cash , cash equivalents and restricted cash	23,553	(104,036)	45,788
Cash, cash equivalents and restricted cash at the beginning of year	199,504	233,479	122,930
Effect of exchange rates on cash, cash equivalents, and restricted cash	10,422	(6,513)	(3,270)
Cash, cash equivalents and restricted cash at end of year	233,479	122,930	165,448

As of December 31, 2019, we had cash or cash equivalents, including restricted cash, of US$165.4 million in total, including RMB343.7 million (US$49.3 million) and US$ 106.2 million located within the PRC, of which RMB190.4 million (US$27.3 million) and US$10.5 million was held by our VIE, Shenzhen Xunlei, and its subsidiaries. We also had cash or cash equivalents of RMB65 thousand (US$9,400), US$9.6 million, HK$2.2 million (US$0.3 million) and THB2.4 million (US$0.1 million) located outside of the PRC as of December 31, 2019.

Operating activities

Net cash used in operating activities amounted to US$ 45.6 million in 2019, which was primarily attributable to a net loss of US$53.4 million, adjusted for certain non-cash expenses consisting principally of the depreciation of property and equipment of US$5.8 million, share-based compensation of US$5.4 million, impairment of long-term investments of US$19.8 million, and a net change in working capital. The net change in working capital was primarily due to an increase in accounts receivable of US$8.7 million, which was in line with the increase of cloud computing revenues, an increase in accounts payable of US$2.1 million, which was due to longer payment term we made for our bandwidth purchase, and a decrease in inventories of US$3.4 million, which was due to the sale of Onething Cloud hardware.

Net cash used in operating activities amounted to US$35.6 million in 2018, which was primarily attributable to a net loss of US$39.5 million, adjusted for certain non-cash expenses consisting principally of depreciation of property and equipment of US$5.6 million, allowance for doubtful accounts of US$7.7 million, share-based compensation of US$5.3 million, impairment of long-term investments of US$7.8 million, and a net change in working capital. The net change in working capital was primarily due to a decrease in accounts receivable of US$13.3 million, which was the settlement from customers before the year ended December 31, 2018, a decrease in accounts payable of US$27.7 million which was in line with the decrease in bandwidth cost, and an increase in inventories of US$10.2 million which was in line with the increase in product sales.

Net cash used in operating activities amounted to US$14.2 million in 2017, which was primarily attributable to a net loss of US$37.8 million, adjusted for certain non-cash expenses consisting principally of depreciation and amortization expenses of US$10.0 million, impairment of receivables from and prepayments to Xunlei Kankan of RMB8.7 million, share-based compensation of US$8.3 million, and impairment of property and equipment, intangible assets and long-term investments of US$5.4 million, a net change in working capital. The net change in working capital was primarily due to an increase in accounts receivable of US$20.0 million, which was in line with the increase of our online advertising revenue and cloud computing revenue, an increase in prepayments and other current assets of US$11.4 million, an increase in accounts payable of US$9.0 million which was in line with the increase of bandwidth cost, an increase in accrued liabilities and other payable of US$26.1 million mainly attributable the increase in advance from customer of OneThing Cloud, accrued payroll, employees benefit provision and tax payable.

Investing activities

Net cash used in investing activities largely reflects purchases of property and equipment in connection with the expansion and upgrade of our technology infrastructure, purchases of intangibles assets, acquisition of long-term investments, payments to purchase short-term investments such as treasury products, and acquisition of constructions in progress, which represents the construction cost in connection with our construction of Xunlei headquarters building.

Net cash generated from investing activities amounted to US$ 79.3 million in 2019, primarily attributable to proceeds from disposal of short-term investments of US$450.7 million, which was partially offset by our purchase of short-term investments of US$355.3 million.

Net cash used in investing activities amounted to US$69.4 million in 2018, primarily attributable to proceeds from disposal of short-term investments US$223.7 million, which was partially offset by purchase of short-term investments of US$287.6 million.

Net cash generated from investing activities amounted to US$35.2 million in 2017, primarily attributable to proceeds from disposal of short-term investments of US$291.6 million, partially offset by purchase of short-term investments of US$244.8 million.

Financing activities

Net cash generated from financing activities amounted to US$ 12.2 million in 2019, primarily attributable to proceeds from bank borrowings of US$11.3 million.

Net cash generated from financing activities amounted to US$0.9 million in 2018, mainly represented the proceeds from government grant received.

Net cash generated from financing activities amounted to US$2.6 million in 2017, primarily attributable to government grants received of US$2.9 million, partially offset by payments for the repurchase of shares in the amount of US$0.4 million.

Capital expenditures

We made capital expenditures of US$8.9 million, US$4.1 million and US$ 14.7 million in the years ended December 31, 2017, 2018 and 2019, respectively. In the past, our capital expenditures were primarily used to purchase servers or other equipment for our business and pay for construction in progress. Our capital expenditures may increase in the near term as our business continues to grow.

C. Research and Development

We believe that our commitment to research and development is an important contributing factor in our success. As of December 31, 2019, we had a team of 640 engineers. We provide our engineers with various continuing training programs and opportunities. To maintain and enhance our leadership position in the market, we will continue to compete for engineering talent and invest in research and development in order to provide better services to our users, subscribers and advertisers.

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demand, commitments or events for the year ended December 31, 2019 that are reasonably likely to have a material and adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future results of operations or financial conditions.

E. Off-Balance Sheet Arrangements

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

F. Contractual Obligations

The following table sets forth our contractual obligations as of December 31, 2019:

	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(in thousands of US$)		
Bandwidth lease obligations	12,033	7,918	4,115	—	—
Capital obligations	22,510	21,453	1,057	—	—
Total	34,543	29,371	5,172	—	—

As of December 31, 2019, we had unconditional purchase obligations for switchboard, servers, office software and construction in process that had not been recognized in the amount of US$ 22.5 million.

G. Safe Harbor

See "Forward-looking Information."

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

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

Directors and Executive Officers	Age	Position/Title
Jinbo Li	44	Chairman and Chief Executive Officer
Sean Shenglong Zou	48	Co-Founder and Director
Hao Cheng	44	Co-Founder and Director
Yubo Zhang	43	President
Raymond Weimin Luo	47	Director and Chief Operating Officer
Peng Shi	32	Director
Hui Duan	40	Director
Jenny Wenjie Wu	45	Independent Director
Ya Li	50	Independent Director
Naijiang (Eric) Zhou	57	Chief Financial Officer

Mr. Jinbo Li has been our chairman and chief executive officer since April 2020. Mr. Li is a successful serial entrepreneur with more than 20 years' experience in China's internet and technology industry. Mr. Li was part of Xunlei's founding team and contributed to establishing and leading the core R&D team during the crucial early stage of Xunlei from 2004 to 2009. Mr. Li left Xunlei in January 2010 and acted as the chief executive officers of two internet ventures from 2010 to 2014. Mr. Li founded Itui International Inc., a company focusing on developing mobile applications for social networking services, in 2014 and acted as its chairman and chief executive officer since then. Mr. Li received his bachelor's degree in 1998 from Shandong University in China and master's degree in 2001 from Peking University in China.

Mr. Sean Shenglong Zou is one of our co-founders and served as our chief executive officer from our inception in February 2005 to July 2017 and chairman of the board from our inception in February 2005 to December 2017. Mr. Zou currently serves as a director of our company. Mr. Zou is an expert in distributed computing. Mr. Zou pioneered the theory of content-based multimedia indexing technology and resource discovery network that provides time-saving online experience for internet users and has led our company to revolutionize traditional internet acceleration by the technology and network. Mr. Zou received a master's degree in computer science from Duke University in the United States in 1998 and a bachelor's degree in computer science from University of Wisconsin-Madison in 1997.

Mr. Hao Cheng is our co-founder and has been serving as a director of our company since our inception in February 2005. Mr. Hao Cheng currently also holds management positions in several of our subsidiaries. Mr. Cheng has worked at Invison Ventures since January 2016. Prior to January 2016, Mr. Cheng served various management positions in several of our subsidiaries. For example, Mr. Cheng served as an executive director and the general manager of Xunlei Games Development (Shenzhen) Co. Ltd. from February 2010 to January 2016. Prior to joining us, Mr. Cheng managed the products, services, marketing and sales of the corporate search team at Baidu, Inc. Mr. Cheng received a master's degree in computer science from Duke University in the U.S. in 1999 and a bachelor's degree in mathematics from Nankai University in China in 1997.

Mr. Yubo Zhang has been appointed as our president since April 2020. Prior to rejoining us in April 2020, Mr. Zhang served as the chief executive officer of Beijing Nesound International Media Corp, Ltd., or Nesound, from April 2015 to April 2020. During his tenure at Nesound, Mr. Zhang combined the respective advantages of live broadcasting and traditional film & television businesses and built a multifaceted platform incorporating self-produced exclusive contents, star development plans and Internet services. Mr. Zhang joined our company for the first time in August 2005 and was one of the core founding members of our company. During his ten years with us, Mr. Zhang served various management positions including a senior vice president of our company and the president of a major subsidiary of our company from August 2005 to March 2015. Mr. Zhang received his bachelor's degree in mechanical design and manufacturing from Jilin University of Technology in China in 1999.

Mr. Raymond Weimin Luo has been serving as our chief operating officer and our director since April 2020. Mr. Luo has been an active entrepreneur and investor in China's internet industry since 2012. He was a managing partner at Hongtai Aplus Consumption Fund from 2018 to 2019, a venture partner at Morningside Capital from 2016 to 2018, and the chief executive officer of a supply chain company he founded from 2012 to 2016. Prior to that, Mr. Luo was the chief operating officer at Xunlei from 2006 to 2011. Mr. Luo received his bachelor's degree in biological engineering from Jinan University in China in 1993.

Mr. Peng Shi has been serving as a director of our company since April 2020. Mr. Shi has also been serving as the president of product at Beijing Itui Technology Co., Ltd since March 2018. Prior to joing Beijing Itui, Mr. Shi served as the general manager at Qutoutiao Inc. Beijing branch from January 2018 to March 2018, the product director of Toutiao.com, a Chinese news and information content platform operated by Beijing Bytedance Technology Co., Ltd, from 2016 to 2017, the product vice president of Quanmin.tv, a live streaming platform operated by Shanghai Maimiao Information Technology Co., Ltd. from 2015 to 2016, the senior product officer of UCWeb Inc from May 2014 to June 2015, a senior product manager at Baidu, Inc. from April 2013 to May 2014, and a product manager at Qihoo 360 Technology Co., Ltd. from March 2010 to April 2013. Mr. Shi received his bachelor's degree in software engineering from Beihai College of Beihang University in China in 2011.

Mr. Hui Duan has been serving as a director of our company since April 2020. Mr. Duan currently also serves as the chief technology officer of Beijing Itui Technology Co., Ltd. Prior to that, Mr. Duan founded his own company that provided HR SaaS products and services from October 2015 to 2017. From April 2008 to April 2015, Mr. Duan served various management positions at Xunlei including vice president and the chief executive officer of a major subsidiary of Xunlei. Mr. Duan received his bachelor's degree in computer science from Peking University in 2001 and EMBA degree from China Europe International Business School in 2015.

Ms. Jenny Wenjie Wu has been serving as our independent director since June 2014. Ms. Wu has also been serving as an independent non-executive director of Kingsoft Corporation Limited (3888.HK) since March 2013. Ms. Wu served as the chief investment officer of New Hope Group from November 2018 to February 2020. Prior to joining New Hope Group, Ms. Wu was a founding and managing partner of Baidu Capital from November 2016 to November 2018. Ms. Wu successively served as the deputy chief financial officer, the chief financial officer, and the chief strategy officer at Trip.com Group Limited (NASDAQ: TCOM) from December 2011 to November 2016. Ms. Wu was an equity research analyst covering China Internet and Media industries in Morgan Stanley Asia Limited and in Citigroup Global Markets Asia Limited from 2005 to 2011. Prior to that, Ms. Wu worked in the Department of Enterprises Operations and Management in China Merchants Holdings (International) Company Limited (0144.HK), a company listed on the Hong Kong Stock Exchange, from 2003 to 2005. Ms. Wu holds a Ph.D. degree in finance from the University of Hong Kong, a master's degree in philosophy in finance from the Hong Kong University of Science and Technology, and a master's degree and a bachelor's degree in economics from Nankai University, China. Ms. Wu is a Chartered Financial Analyst (CFA) since 2004.

Mr. Ya Li has been serving as our independent director since March 2017. Mr. Li founded Beijing Humanistic Intelligence Inc. in 2019 and currently serves as the chief executive officer of this company. Mr. Li currently is also a visiting research fellow and master's supervisor at Beijing University. From February 2015 to January 2019, Mr. Li served as the chief executive officer of Yidian Zixun. From May 2006 to September 2017, Mr. Li served successively as the chief operating officer, the chief financial officer, the president, and a director of Phoenix New Media (NYSE: FENG). From 2004 to 2006, Mr. Li served as the chief operating officer and the chief financial officer of Techedge Inc. From 2002 to 2006, Mr. Li served as the president of China Quantum Communications Inc. Mr. Li also served as directors for U.S. China Chamber of Commerce, Chinese Finance Society, National Council of Chinese Americans, and Council on U.S.-China Affairs from 1996 to 2005. Mr. Li holds an Executive MBA degree from the Wharton School at the University of Pennsylvania, a master degree in Computer Science from Temple University, and a bachelor degree in Control Systems Engineering from the University of Science & Technology of China.

Mr. Naijiang (Eric) Zhou has been serving as our chief financial officer since September 2017. Mr. Zhou has twenty years of professional experience covering corporate finance, financial planning and analysis, domestic and international investment project due diligence, and mutual fund and private equity investment research and management in the U.S. and in China. Most recently, Mr. Zhou was an interim chief financial officer at ChinaCache International Holdings Limited, a Nasdaq-listed company. Mr. Zhou served as a senior vice president of ChinaCache from September 2015 to June 2016. From February 2010 to December 2014, he served as the vice president of finance and the chief financial officer at Sutor Technology Group Limited. Prior to that, Mr. Zhou served in various roles, including an executive vice president and the chief financial officer at Richfield Investment Ltd., an equity research analyst at Roth Capital Partners, a principal financial planner at American Electric Power and a senior research analyst at U.S. Global Investors. Mr. Zhou obtained a bachelor's degree with honors in Petroleum Management Engineering from China Petroleum University, and an MBA in Finance and Ph.D. in Interdisciplinary Energy and Mineral Resources from the University of Texas at Austin. Mr. Zhou is a CFA charter holder.

B. Compensation

For the fiscal year ended December 31, 2019, we paid an aggregate of approximately US$0.6 million in cash to our executive officers, and we paid approximately US$ 0.1 million in cash compensation to two non-executive directors. In addition, we paid approximately US$0.2 million in pension, housing funds, transportation subsidies and commercial insurance to our executive officers, and we did not set aside or accrued any amount to provide such benefits to our non-executive directors. For share incentive grants to our officers and directors under our share incentive plan, see "—Share Incentive Plans." For restricted share grants outside the share incentive plan, see "—Share Incentive Plans."

Share Incentive Plans

We have adopted (i) a 2010 share incentive plan in December 2010, or the 2010 Plan, (ii) a 2013 share incentive plan in November 2013, as supplemented, or the 2013 Plan and (iii) a 2014 share incentive plan in April 2014, as supplemented, or the 2014 Plan. The purpose of the plans is to attract and retain the best available personnel by linking the personal interests of the members of the board, employees, and consultants to the success of our business and by providing such individuals with an incentive for outstanding performance to generate superior returns for our shareholders.

2010 Plan

Under the 2010 Plan and the seventh amended and restated shareholders' agreement dated as of April 24, 2014, the maximum number of shares in respect of which options, restricted shares, or restricted share units that may be granted is 26,822,828 shares. As of March 31, 2020, we had granted to certain executive officers and other employees under the 2010 Plan options (excluding those forfeited) to purchase an aggregate number of 10,978,050 common shares, among which 10,000 are outstanding. As of March 31, 2020, 7,369,315 restricted shares (excluding those forfeited) had been granted to certain executive officers and other employees under the 2010 Plan.

The following paragraphs summarize the terms of the 2010 Plan.

Types of awards . The following briefly describe the principal features of the various awards that may be granted under the 2010 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 in 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 by 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 treatment, 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* . Restricted share units represent the right to receive our common shares at a specified date in the future, subject to forfeiture of such right upon termination of employment or service during the applicable restriction period. If the restricted share units have not been forfeited, then we shall deliver to the holder unrestricted common shares that will be freely transferable after the last day of the restriction period as specified in the award agreement.

Plan administration . Before our shares are listed on a stock exchange, the 2010 Plan shall be administered by our board of directors. After our shares are listed on a stock exchange, the 2010 Plan shall be administered by our board of directors or the compensation committee of the board of directors (or a similar body) formed in accordance with applicable exchange rules. The plan administrator will determine the provisions and terms and conditions of each grant.

Award agreement . Options, restricted shares, or restricted share units granted under the 2010 Plan are evidenced by an award agreement that sets forth the terms, conditions, and limitations for each grant.

Option exercise price . The exercise price subject to an option shall be determined by the plan administrators which may be a fixed or variable price related to the fair market value of the subject of the grant. The exercise price may be amended or adjusted in the absolute discretion of the plan administrators, the determination of which shall be final, binding and conclusive. To the extent not prohibited by applicable laws or the rules of any exchange on which our securities are listed, a downward adjustment of the exercise prices of options shall be effective without the approval of the shareholders or the approval of the affected participants.

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

Term of the awards . The term of each option grant shall be stated in the award agreement, provided that the term shall not exceed 10 years from the date of the grant. As for the restricted shares and restricted share units, the plan administrator shall determine and specify the period of restriction in the award agreement.

Vesting schedule . In general, the plan administrator determines the vesting schedule, which is set forth in the award agreement. The administrator, in its discretion, may accelerate the vesting schedule of an award.

Transfer restrictions . Except as otherwise provided by the plan administrators, no option award shall be assigned, transferred, or otherwise disposed of other than by will or the laws of descent and distribution.

Termination . Unless terminated earlier, the 2010 Plan will expire automatically in December 2020. With the approval of our board of directors, the plan administrators may, at any time and from time to time, terminate, amend or modify the 2010 Plan. Our board of directors has the authority to amend or terminate the plan subject to shareholder approval to the extent necessary to comply with applicable law.

2013 Plan

Under the 2013 Plan, the maximum number of share awards that may be granted is 9,073,732 restricted shares, which have been issued to Leading Advice Holdings Limited, or Leading Advice, for the purposes of administrating the awards according to the 2013 Plan. As of March 31, 2020, 7,067,230 restricted shares (excluding those forfeited) have been granted to certain executive officers and other employees under the 2013 Plan.

The following paragraphs summarize the terms of the 2013 Plan.

***Plan administratio* n.** Before our shares are listed on a stock exchange, the 2013 Plan shall be administered by Leading Advice Holdings Limited or its designee. Leading Advice currently acts as an agent on behalf us to administer the 2013 Plan based on the instructions from us. The 2013 Plan is administered by our board of directors or the compensation committee of the board of directors (or a similar body) formed in accordance with applicable exchange rules. The administrator determines the grantees under the 2013 Plan.

Award agreement . Each award of restricted shares is evidenced by an award agreement that specifies the number of restricted shares so granted, the vesting schedule, the applicable provisions in the event the grantee’s employment or service terminates, and such other terms and conditions that the administrator shall determine in its sole discretion.

Eligibility . The restricted shares may be granted to members of our senior management, consisting of our chief operating officer, chief technical officer, vice presidents, or their equivalents, and counsel or consultant to our company.

Vesting schedule . Each grant of restricted shares will be subject to a vesting schedule determined solely by the administrator. Once vested, the restricted shares will no longer be subject to forfeiture and other restrictions contained in the award agreement, unless otherwise specified therein.

Shareholder rights . Grantees of restricted shares will not be entitled to any shareholder rights (including the right to dividends) on unvested portions of the restricted shares. They will be entitled to dividends on the vested portions of the restricted shares. The administrator will hold all vested portions of share awards for the benefit of the grantees and exercise the voting rights with respect of those shares. Currently, Leading Advice exercises the voting power on behalf of the grantees regarding their vested restricted shares and it will solicit voting instruction from each grantee and vote in accordance with such instruction.

Forfeiture or repurchase of the awards . In the event that the award recipient ceases employment with us or ceases to provide services to us during the applicable restriction period, restricted shares that are at that time subject to restrictions shall be forfeited or repurchased in accordance with the award agreement, unless otherwise waived in whole or in part by the administrator.

Acceleration . The administrator may accelerate the time at which any restrictions shall lapse or be removed.

Transfer restrictions . Except as otherwise provided by the plan administrators or the applicable shareholders agreement, no share award shall be assigned, transferred, or otherwise disposed of other than by will or the laws of descent and distribution.

Termination . Unless terminated earlier, the 2013 Plan will expire automatically in November 2023. With the approval of our board of directors, the plan administrators may, at any time and from time to time, terminate, amend or modify the 2013 Plan. Our board of directors has the authority to amend or terminate the plan subject to shareholder approval to the extent necessary to comply with applicable law.

2014 Plan

Under the 2014 Plan, the maximum number of share awards that may be granted is 14,195,412 restricted shares, which are currently registered under the name of Leading Advice Holdings Limited for the purposes of administrating the awards according to the 2014 Plan. As of March 31, 2020, 9,263,350 restricted shares (excluding those forfeited) had been granted to certain executive officers and other employees under the 2014 Plan.

The following paragraphs summarize the terms of the 2014 Plan.

Plan administration . Before our shares are listed on a stock exchange, the 2014 Plan shall be administered by Leading Advice Holdings Limited or its designee. Leading Advice currently acts as an agent on behalf us to administer the 2014 Plan based on the instructions from us. The 2014 Plan is administered by our board of directors or the compensation committee of the board of directors (or a similar body) formed in accordance with applicable exchange rules. The administrator determines the grantees under the 2014 Plan.

Award agreement . Each award of restricted shares is evidenced by an award agreement that specifies the number of restricted shares so granted, the vesting schedule, the applicable provisions in the event the grantee's employment or service terminates, and such other terms and conditions that the administrator shall determine in its sole discretion.

Eligibility . The restricted shares may be granted to members of our directors, senior management, employees, advisors and consultants of our company.

Vesting schedule. Each grant of restricted shares will be subject to a vesting schedule determined solely by the administrator. Once vested, the restricted shares will no longer be subject to forfeiture and other restrictions contained in the award agreement, unless otherwise specified therein.

Shareholder rights . Grantees of restricted shares will not be entitled to any shareholder rights (including the right to dividends) on unvested portions of the restricted shares. They will be entitled to dividends on the vested portions of the restricted shares. The administrator will hold all vested portions of share awards for the benefit of the grantees and exercise the voting rights with respect of those shares. Currently, Leading Advice exercises the voting power on behalf of the grantees regarding their vested restricted shares and it will solicit voting instruction from each grantee and vote in accordance with such instruction.

Forfeiture or repurchase of the awards . In the event that the award recipient ceases employment with us or ceases to provide services to us during the applicable restriction period, restricted shares that are at that time subject to restrictions shall be forfeited or repurchased in accordance with the award agreement, unless otherwise waived in whole or in part by the administrator.

Acceleration . The administrator may accelerate the time at which any restrictions shall lapse or be removed.

Transfer restrictions . Except as otherwise provided by the plan administrators or the applicable shareholders agreement, no share award shall be assigned, transferred, or otherwise disposed of other than by will or the laws of descent and distribution.

Termination . Unless terminated earlier, the 2014 Plan will expire automatically in April 2024. With the approval of our board of directors, the plan administrators may, at any time and from time to time, terminate, amend or modify the 2014 Plan. Our board of directors has the authority to amend or terminate the plan subject to shareholder approval to the extent necessary to comply with applicable law.

The following table summarizes, as of March 31, 2020, the outstanding options and restricted shares granted to our executive officers, directors, and other individuals as a group under our share incentive plans.

Name	Number of restricted shares or options to purchase common shares awarded [(1)]	Exercise price (US$/share)	Date of grant	Date of expiration
Lei Chen	*	—	June 25, 2016	—
	*	—	November 3, 2014	—
Naijiang (Eric) Zhou	*	—	March 1, 2018	—
Jenny Wenjie Wu	*	—	June 23, 2014	—
	*	—	April 13, 2018	—
Ya Li	*	—	March 7, 2017	—
	*	—	April 13, 2018	—
Other grantees as a group	4,294,000	†	†	†
Total	5,674,000			

(1) Only restricted shares were granted to our directors and officers. For other grantees, the awards we granted consist of restricted shares and options. The numbers in this column do not include the common shares issued to grantees upon exercise of vested options and the vesting of restricted shares.

* Less than one percent of our total outstanding share capital.

† As of March 31, 2020, the outstanding options held by other grantees as a group had an exercise price of US$3.97. The options and restricted shares were granted on various dates from March 1, 2014 through August 1, 2019. Each option will expire after seven or eight years from the date of grant.

Employment Agreements

We have entered into employment agreements with each of our senior executive officers. We may terminate a senior executive officer's employment for cause at any time by giving written notice for certain acts of the officer, including: (i) conviction of a felony or act of fraud, misappropriation or embezzlement; (ii) gross negligence or dishonest to the detriment of our company; and (iii) material breach of the employment agreement. We may also terminate a senior executive officer's employment upon at least two months' prior written notice. A senior executive officer may terminate his or her employment by giving two-months' or three-months' prior notice.

Each senior executive officer has agreed that he or she shall not, at any time during the period of employment or after the termination of the period of employment, except for the benefit of our company, use or disclose any confidential information to any person, corporation or other entity without our written consent. Upon termination of the employment or at any other time when requested by us, the officer should promptly deliver to our company all documents and materials of any nature pertaining to his or her work with us and should provide written certification of his or her compliance with the employment agreement. Under no circumstances can the officer, following his or her termination, in his or her possession any property of our company, or any documents or materials containing any confidential information. The officer should not, during the employment term, (i) improperly use or disclose any proprietary information or trade secrets of any former employer or other person or entity with which the officer has a duty to keep in confidence information acquired by such officer, if any, or (ii) bring into the premises of our company any document or confidential or proprietary information belonging to the former employer unless consented to in writing by such employer. The officer will indemnify us and hold us harmless from and against all claims, liabilities, damages and expenses.

Each officer also agrees that during the term of employment and within one year of termination of employment, he or she will not approach clients, customers or contacts of our company or other persons or entities introduced to such officer in the his/her capacity as a representative of our company for the purposes of doing business with such persons or entities which will harm the business relationship between our company and such persons or entities. Unless consented to by us, the officer should not assume employment with or provide services as a director or otherwise for any of our competitors, or engage in any competitor as a principal, partner, licensor or otherwise. The officer will not seek, directly or indirectly, by the offer of alternative employment or other inducement whatsoever, to solicit the services of any of our employees as at or after the date of the termination of such officer's employment, or in the year preceding such termination.

C. Board Practices

Board of Directors

Our board of directors consists of eight directors. A director is not required to hold any shares in our company to qualify to serve as a director. All the powers of our company to borrow money and to mortgage or charge its undertaking, property and uncalled capital, or any part thereof and to issue debentures, debenture stock and other securities whenever money is borrowed or as a security for any debt, liability or obligation of our company or any third party, may only be carried out jointly by our chief executive officer and chief financial officer.

Committees of the Board of Directors

We have established an audit committee, a compensation committee and a nominating and corporate governance 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 Ms. Jenny Wenjie Wu and Mr. Ya Li, and is chaired by Ms. Jenny Wenjie Wu. Our board of directors has determined that each of Ms. Jenny Wenjie Wu and Mr. Ya Li satisfies the "independence" requirements of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, and Rule 5605(a)(2) of the NASDAQ Listing Rules. 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 significant matters or difficulties encountered by the external auditors during the course of their audits 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 significant matters as to the adequacy of our internal controls and any special procedures adopted by the external auditors in light of 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

Compensation committee

Our compensation committee consists of Ms. Jenny Wenjie Wu, Mr. Ya Li and Mr. Jinbo Li, and is chaired by Mr. Jinbo Li. Our board of directors has determined that each of Ms. Jenny Wenjie Wu and Mr. Ya Li satisfies the "independence" requirements of Rule 5605(a)(2) of the NASDAQ Listing Rules. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated upon. The compensation committee is responsible for, among other things:

- reporting regularly to the board.

- reviewing the total compensation package for our two most senior executives and making recommendations to the board with respect to it;

- approving and overseeing the total compensation package for our executives other than the two most senior executives;

- reviewing the compensation of our directors and making recommendations to the board with respect to it; and

- 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.

Corporate governance and nominating committee

Our corporate governance and nominating committee consists of Ms. Jenny Wenjie Wu, Mr. Ya Li and Mr. Raymond Weimin Luo, and is chaired by Mr. Raymond Weimin Luo. Our board of directors has determined that each of Ms. Jenny Wenjie Wu and Mr. Ya Li satisfies the "independence" requirements of Rule 5605(a)(2) of the NASDAQ Listing Rules. The corporate governance and 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 corporate governance and 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 corporate governance and nominating committee itself;

- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken; and

- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to ensure proper compliance.

Duties of Directors

Under Cayman Islands law, our directors owe fiduciary duties to our company, including a duty of loyalty, a duty to act honestly, and a duty to act in what they consider in good faith to be in our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also have a duty to exercise the skill they actually possess and such care and diligence that a reasonably prudent person would exercise in comparable circumstances. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than what may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved to-wards an objective standard with regard to the required skill and care, and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association, as amended from time to time. Our company may have the right to seek damages if a duty owed by our directors is breached. A shareholder may in certain circumstances have rights to damages if a duty owed by the directors is breached.

Terms of Directors and Executive Officers

Our directors may be elected by an ordinary resolution of our shareholders, or by the affirmative vote of a simple majority of our directors (which should include one non-independent director) present and voting at a meeting of our board of directors, and shall hold office until the expiration of his term and until his successor has been elected and qualified, or until such time as they are removed from office by ordinary resolution or the unanimous written resolution of all shareholders. A director will be removed from office automatically (i) if a simple majority of all directors determine at a duly called and constituted board meeting that such director has been guilty of actual fraud or willful neglect in performing his duties as a director, or (ii) if a director is notified of, and fails to attend, an aggregate of three duly called and constituted board meetings within any 365-day period. In addition, the office of a director will be vacated if such director (a) dies, becomes bankrupt or makes any arrangement or composition with his creditors, (b) is found to be or becomes of unsound mind, or (c) resigns his office by notice in writing to us.

D. Employees

As of December 31, 2019, we had 1,070 employees, including 121 in general administration, 839 in research and development and 110 in sales and marketing. We group our employees into three categories—research and development, sales and marketing and general administration. As required by PRC regulations, we participate in employee benefit plans organized by government authorities, including pensions, work-related injury benefits, medical benefits, maternity benefits, unemployment benefit and housing fund plans. We have granted stock options and restricted shares to management and key employees in order to reward their services and provide them with equity incentives. We maintain good employee relations and have not experienced any material labor disputes since our inception.

E. Share Ownership

For information regarding the share ownership of our directors and officers, see "Item 7. Major Shareholders and Related Party Transactions—A. Major Shareholders." For information as to stock options granted to our directors, executive officers and other employees, see "Item 6. Directors, Senior Management and Employees—B. Compensation—Share Incentive Plans."

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

Except as specifically noted, the following table sets forth information with respect to the beneficial ownership of our shares as of April 15, 2020 held by:

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

Percentage of beneficial ownership is based on 339,814,941 total outstanding common shares as of April 15, 2020, excluding (i) 9,519,144 common shares issued to Leading Advice Holdings Limited for grants under our 2013 Plan and 2014 Plan that remained then unexercised or unvested, and (ii) 19,543,120 common shares, consisting of shares issued to our depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plans and shares repurchased by us under our 2015 and 2016 repurchase programs but not yet cancelled.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. These rules generally provide that a person is the beneficial owner of securities if such person has or shares the power to vote or direct the voting of securities, or to dispose or direct the disposition of securities or has the right to acquire such powers within 60 days. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days of April 15, 2020, including through the exercise of any option, warrant or other right or the conversion of any other security, in both the numerator and the denominator. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Common Shares Beneficially Owned	
	Number	% †
Directors and executive officers:**		
Jinbo Li (1)	135,320,239	39.8%
Sean Shenglong Zou (2)	22,931,611	6.8%
Hao Cheng	*	*
Yubo Zhang	—	—
Raymond Weimin Luo	—	—
Peng Shi	—	—
Hui Duan	—	—
Jenny Wenjie Wu	*	*
Ya Li	*	*
Naijiang (Eric) Zhou	*	*
All directors and executive officers as group	161,997,127	47.7%
Principal shareholders:		
Itui International Inc. (3)	135,320,239	39.8%
Yong Rong (HK) Asset Management Limited (4)	49,398,310	14.5%

Notes:

* Less than 1% of the total outstanding common shares.

** The business address of Messrs Jinbo Li, Sean Shenglong Zou, Yubo Zhang, Raymod Weimin Luo, and Naijiang (Eric) Zhou and Ms. Jenny Wenjie Wu is 21-23/F, Block B, Building #12, 18 Shenzhen Bay ECO-Technology Park, Keji South Road, Yuehai Street, Nanshan District, Shenzhen, 518057, the People's Republic of China. The business address of Hao Cheng is CITIC Mangrove Bay 10A-1402. The business address of Mr. Peng Shi and Mr. Hui Duan is Room 407, Taixing Building, No.11 Huayuan East Road, Haidian District. Beijing 100089, China. The business address of Mr. Ya Li is Building #14-1601, Xincheng Guoji, No. 6 Chaowai Street, Chaoyang District, Beijing 100020, China.

† For each person and group included in this column, percentage ownership is calculated by dividing the number of 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, 2020, by the sum of (i) the total number of outstanding common shares as of April 15, 2020, 339,814,941, and (ii) the number of common shares underlying share options, restricted shares, and warrants held by such person or group that are exercisable within 60 days of April 15, 2020.

(1) Mr. Jinbo Li does not hold any common shares of our company directly. Mr. Jinbo Li, through his holding vehicle, owns 17.7% of the total outstanding shares (equal to 51.8% of the total voting power of all outstanding shares) of Itui International Inc., which in turn owns 135,320,239 common shares of our company. By virtual of his controlling interest in Itui International Inc., Mr. Jinbo Li is deemed to be a beneficial owner of 135,320,239 common shares of our company.

(2) Represents (i) 10,931,611 common shares directly held by Vantage Point Global Limited, a British Virgin Islands company which is 100% beneficially owned by Mr. Zou through a family trust, and (ii) 12,000,000 common shares held by Eagle Spirit LLC, a Delaware limited liability company, which is wholly owned by a United States irrevocable trust with Mr. Zou as the settler, and Mr. Zou is the sole director of Eagle Spirit LLC.

(3) Represents 135,320,239 common shares held by Itui International Inc., a limited liability company incorporated under the laws of the Cayman Islands. Mr. Jinbo Li, our chairman and chief executive officer, through his holding vehicle, owns 17.7% of the total outstanding shares (equal to 51.8% of the total voting power of all outstanding shares) of Itui International Inc. Xiaomi Ventures Limited owns 14.9% of the total outstanding shares of Itui International Inc. and has a veto right in determining how Itui International Inc.'s voting power should be exercised when Itui International Inc. votes as a shareholder of our company on certain matters in relation to our company. As a result, Mr. Jinbo Li and Xiaomi Ventures Limited are deemed to be beneficial owners of, and share voting and dispositive power over, 135,320,239 common shares held by Itui International Inc. Xiaomi Ventures Limited is wholly owned by Xiaomi Corporation, a limited liability company organized under the laws of the Cayman Islands and listed on the Hong Kong Stock Exchange (Stock code: 1810). The business address of Xiaomi Ventures Limited is Xiaomi Campus, No. 33 Xi Erqi Middle Road, Haidian District, Beijing, the People's Republic of China. The business address of Itui International Inc. is Room 407, 4/F, Taixing Building, 11 Huayuan East Road, Haidian District, Beijing, the People's Republic of China.

(4) Represents 9,879,662 ADSs directly held by Yong Rong (HK) Asset Management Yong Rong Global Excellence Fund. The registered address of Yong Rong (HK) Asset Management Limited is Suite 308, 30/F, Two Exchange Square, 8 Connaught Place, Central, Hong Kong.

To our knowledge, as of April 15, 2020, 208,772,849 of our outstanding common shares are held by three record holders in the United States including 196,772,845 common shares held by The Bank of New York Mellon, the depositary of our ADS program. The number of our common shares held by The Bank of New York Mellon include 19,543,120 common shares (i) issued to the depositary bank for bulk issuance of ADSs reserved for future issuances upon the exercise or vesting of awards granted under our share incentive plans, and (ii) repurchased by our company in 2016, 2017 and 2018. None of our shareholders has informed us that he or she is affiliated with a registered broker-dealer or is in the business of underwriting securities. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

B. Related Party Transactions

Contractual arrangements with our PRC variable interest entity and its shareholders

Due to current legal restrictions on foreign ownership and investment in value-added telecommunications services in China, we conduct our operations in China principally through a series of contractual arrangements with our variable interest entity and its shareholders in China. For a description of these contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure."

Shareholders agreement

In connection with the issuance of our series E preferred shares, we entered into a seventh amended and restated shareholders agreement in April 2014 with our shareholders and relevant parties therein. Except for the registration rights, all preferred shareholders' rights automatically terminated upon the completion of our initial public offering. Additionally, the co-founders have agreed to the transfer restrictions imposed on an aggregate number of 39,934,162 common shares beneficially owned by the co-founders. Accordingly, the co-founders are unable to transfer the relevant shares to any third party until April 24, 2019 or April 24, 2018, as the case may be. The registration rights we granted to certain of our shareholders expired on the fifth anniversary of the completion of our initial public offering in June 2014.

Employment agreements

See "Item 6. Directors, Senior Management and Employees—B. Compensation—Employment agreements."

Share incentives

See "Item 6. Directors, Senior Management and Employees—B. Compensation—Share incentive plans."

In relation to our 2013 Plan and 2014 Plan, we have appointed Leading Advice Holdings Limited, or Leading Advice, as the administer of both plans. On behalf of us, Leading Advice executes actions based on our instruction to select the eligible grantees, to determine the number of awards and the conditions and provision of such awards, including but not limited to the vesting schedule and acceleration of the awards.

Leading Advice is not entitled to the following rights in relation to the shares registered under its name: (i) dividends, (ii) voting powers prior to vesting of relevant shares and (ii) transfer of the unvested portion of the awards or awards that have not been granted. In addition, upon the liquidation or the dissolution of Leading Advice or the expiration of the relevant plan, common shares not granted as awards shall be transferred back to us at no consideration.

For the awards that have been granted and become vested, Leading Advice will solicit voting instructions from each grantee, and vote in accordance with such instructions. The grantees will be entitled to dividends and have the right to request Leading Advice to transfer vested awards to a transferee designated by the grantees.

Advances extended to certain directors

We extended advances amounting to RMB60,000 to Mr. Shenglong Zou and RMB40,000 to Mr. Chuan Wang, our former chairman, in 2014. These advances were used for general business purposes, to set up certain companies in the PRC which we plan to use to conduct a part of our business and consolidate into the financial statements of our company in the future. As of the December 31, 2019, the advances to Mr. Shenglong Zou and Mr. Chuan Wang remain outstanding.

Game sharing arrangement with Zhuhai Qianyou Technology, Co., Ltd.

In November 2011, we obtained an exclusive game operation right from Zhuhai Qianyou Technology, Co., Ltd., or Zhuhai Qianyou, our equity investee, which is specialized in developing online games. According to the agreement in relation to such game operation right that we entered into with Zhuhai Qianyou, we need to share revenues derived by the licensed games with Zhuhai Qianyou. Game sharing cost paid and payable to Zhuhai Qianyou was approximately US$84,000 in 2017, US$9,000 in 2018 and nil in 2019. As of December 31, 2017, 2018 and 2019, the amount of unpaid and outstanding game sharing cost we owed to Zhuhai Qianyou was approximately US$10,000, US$2,000 and US$2,000, respectively.

Intellectual property framework agreement between Shenzhen Xunlei and Xunlei Computer

On December 24, 2013, Shenzhen Xunlei and Xunlei Computer entered into a technology development and software license framework agreement. The term of the agreement is two years from the date of its execution.

Under this framework agreement, Xunlei Computer provides Shenzhen Xunlei with technology development services according to Shenzhen Xunlei's business needs. Any new intellectual property resulting from the technology development services is owned by Xunlei Computer, and cannot be substituted or sub-licensed to any third party by Shenzhen Xunlei without the prior written consent of Xunlei Computer. During the term of the framework agreement, with respect to each technology development project, Shenzhen Xunlei and Xunlei Computer will separately sign technology development (services) agreements, which set out the specific terms and amount of consideration, all subject to the terms of the framework agreement.

In addition, under the framework agreement, Xunlei Computer grants Shenzhen Xunlei a non-exclusive and limited right to use certain specified proprietary software that Xunlei Computer owns. With respect to the licensing of each software, Shenzhen Xunlei and Xunlei Computer will separately sign software licensing agreements, which will set out the specific terms and the amount of licensing fee, all subject to the terms of the framework agreement.

In relation to cooperation under the framework agreement, Xunlei Computer and Shenzhen Xunlei entered into four agreements in 2013 for Xunlei Computer's technology development services and its software license and Giganology Shenzhen has agreed to the execution of these agreements and the relevant services and licenses between Xunlei Computer and Shenzhen Xunlei.

For the years ended December 31, 2017, 2018 and 2019, the aggregate amount of the fees that have been incurred by Shenzhen Xunlei for the technology development services and the software license provided by Xunlei Computer under the framework agreement was RMB11.9 million, RMB45.3 million and RMB 44.7 million (US$6.5 million), respectively.

Transactions with Xiaomi

In December 2013, we entered into a Cooperation Framework Agreement with Millet Communication Technology Co., Ltd., or Millet Communication, a company controlled by one of our shareholders, Xiaomi Ventures Limited. Parties would enter into separate agreements to carry detailed cooperation.

Xunlei Accelerator Mobile Pre-installing Services Agreement. In 2014, we entered into a Xunlei Accelerator Mobile Pre-installing Services Agreement, or the Pre-installing Services Agreement, with Beijing Xiaomi Mobile Software Co., Ltd., or Beijing Xiaomi, a company controlled by one of our shareholders, Xiaomi Ventures Limited. Through such cooperation, Xiaomi phones would be pre-installed with our mobile acceleration applications and Xiaomi phone users would have access to our acceleration services. We provided such pre-installing service at no charge which was consistent with our pre-installing agreements with other unrelated parties. The Pre-installing Services Agreement had a term of one year, which is renewed on a yearly basis. Parties renewed such agreement in 2015 and 2016. In 2017, we entered into a supplemental agreement of the Pre-installing Services Agreement, or the Supplemental Agreement, with another Xiaomi group company, Guangzhou Millet Information Service Co., Ltd., or Guangzhou Millet. Pursuant to the Supplemental Agreement, Guangzhou Millet replaced Beijing Xiaomi under the Pre-installing Services Agreement. Parties further agreed in the Supplemental Agreement that Guangzhou Millet will share with us a portion of the revenue generated from the advertising services offered by Guangzhou Millet through Xunlei Accelerator that we pre-installed in Xiaomi's mobile phones as compensation for technology solution services we provided to Guangzhou Millet. The Supplemental Agreement had a term of two years from mid-June 2017 to mid-June 2019 and was automatically extended for another two years from mid-June 2019 to mid-June 2021. In 2019, we recognized a revenue of US$2.5 million from Guangzhou Millet. As of December 31, 2019, the amount of outstanding revenue from Guangzhou Millet was US$1.4 million, which was settled in January 2020.

Cloud Computing Service Agreement . We entered into an agreement with Millet Communication in 2015, an agreement with Beijing Xiaomi in 2017 and an agreement with Xiaomi Technology in April 2019 to provide cloud computing services at the market price based on the actual usage. Millet Communication, Beijing Xiaomi and Xiaomi Technology are companies controlled by one of our shareholders, Xiaomi Ventures Limited. In 2019, our total cloud computing revenue were US$1.8 million from Beijing Xiaomi and US$0.9 million from Xiaomi Technology. As of December 31, 2019, the amount of outstanding cloud computing revenue was nil from Beijing Xiaomi and US$0.2 million from Xiaomi Technology.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

We have been involved in legal proceedings related to our business from time to time and expect to continue to be involved in such proceedings in the future. Internet services and content providers such as ours are frequently involved in litigation based on intellectual property-related claims. See "Item 3. Key Information—D. Risk factors—Risks related to our business—We face and expect to continue to face copyright infringement claims and other related claims, including claims based on content available through our services, which could be time-consuming and costly to defend and may result in damage awards, injunctive relief and/or court orders, divert our management's attention and financial resources and adversely impact our business."

We were subject to a number of lawsuits in China for alleged copyright infringements over the years, a number of which are still outstanding as of the date of this annual report. In addition, two putative shareholder class action lawsuits have been filed in the United States District Court for the Southern District of New York against our company and certain current and former officers and directors of our company: *Dookeran v. Xunlei Limited, et al.* (filed on January 18, 2018, Case No. 18-cv-467 (S.D.N.Y.)), and *Peng Li v. Xunlei Limited, et al.* (filed on January 24, 2018, Case No. 18-cv-646 (S.D.N.Y.)). Purporting to sue on behalf of all investors who purchased or acquired Xunlei stock from October 10, 2017 to January 11, 2018, plaintiffs allege that certain statements regarding OneCoin in the company's press releases and on a quarterly investor call were false and misleading because, among other things, they failed to disclose that OneCoin was a disguised "initial coin offering" and "initial miner offering" and constituted "unlawful financial activity." Plaintiffs seek to recover under Sections 10(b) and 20(a) of the U.S. Securities Exchange Act of 1934 and Rule 10b-5 thereunder. On April 12, 2018, the court consolidated the actions under the caption *In re Xunlei Limited Securities Litigation* , No. 18-cv-467 (PAC) and appointed lead plaintiffs who filed a consolidated amended compliant on June 4, 2018. We filed a motion to dismiss the amended compliant on August 3, 2018. In September 2019, the U.S. District Judge for the Southern District of New York. Paul A. Crotty dismissed the two consolidated federal securities class action with prejudice because Xunlei's use of blockchain technology to reward OneCoin (later named as LinkToken) to customers for sharing excess storage and bandwidth did not amount to an initial coin offering and thus did not violate Chinese law. As our OneCoin rewarding program was not illegal, the court concluded we did not make a misrepresentation or omit material facts in failing to describe the Rewards Program as an illegal initial coin offering. The court also ruled that the complaint failed to plead facts giving rise to a strong inference of an intent to deceive, manipulate, or defraud.

Although legal proceedings are inherently uncertain and their results cannot be predicted, we have not been, nor are we currently a party to or aware of, any legal proceeding, investigation or claim that, in the view of our management, is likely to materially and adversely affect our business, financial position or results of operations.

Dividend Policy

We have not previously declared or paid cash dividends. Subject to our ongoing financial performance, cash position, budget and business plan and market conditions, we may consider paying special dividends. However, we do not plan to pay dividends 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 rely principally on dividends from our subsidiaries in China for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC subsidiaries to pay dividends to us. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulation on dividend distributions."

Our board of directors has discretion as to whether to distribute dividends, subject to applicable laws. In addition, our shareholders may by ordinary resolution declare dividends, but no dividend may exceed the amount recommended by our board of directors. 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. Under Cayman Islands law, we may declare and pay dividends on our shares only out of our profit or our share premium account, provided always that even if our company has sufficient profit or share premium, we may not pay a dividend if this would result in our company being unable to pay our debts as they fall due in the ordinary course of business. If we pay any dividends on our common shares, we will pay those dividends which are payable in respect of the common shares underlying our ADSs to the depositary, as the registered holder of such common shares, and the depositary then will pay such amounts to our ADS holders in proportion to the common shares underlying the ADSs held by such ADS holders, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. See "Item 12. Description of Securities Other than Equity Securities—D. American Depositary Shares." Cash dividends on our 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

Our ADSs have been listed on The NASDAQ Global Select Market since June 24, 2014. Our ADSs currently trade on The NASDAQ Global Select Market under the symbol "XNET." One ADS represented five common shares.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs have been listed on NASDAQ Global Select Market since June 24, 2014 under the symbol "XNET."

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issues

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

We incorporate by reference into this annual report the description of our eighth amended and restated memorandum and seventh amended and restated articles of association contained in our F-1 registration statement (File No. 333-196221), initially filed with the SEC on June 12, 2014. The eighth amended and restated memorandum and seventh amended and restated articles of association were adopted by our shareholders by special resolutions passed on June 11, 2014, and became effective immediately upon completion of our initial public offering of our common shares represented by ADSs.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company" or elsewhere in this annual report on Form 20-F.

D. Exchange Controls

See "Item 4. Information on the Company—Business Overview—Regulation— Regulation on foreign exchange control and administration."

E. Taxation

Cayman Islands Taxation

According to Maples and Calder (Hong Kong) LLP, our Cayman Islands legal counsel, the Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or after execution brought within, the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

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

People's Republic of China Taxation

Under the PRC EIT Law, an enterprise established outside the PRC with "de facto management bodies" within the PRC is considered a "resident enterprise" of the PRC. A circular issued by the SAT on April 22, 2009 clarified that dividends and other income paid by such resident enterprises will be considered PRC-source income and subject to PRC withholding tax, currently at a rate of 10%, when paid to non-PRC enterprise shareholders. Under the implementation regulations to the EIT Law, a "de facto management body" is defined as a body that has material and overall management and control over the manufacturing and business operations, personnel and human resources, finances and properties of an enterprise. In addition, the circular mentioned above specifies that certain offshore enterprises controlled by PRC resident enterprises will be classified as PRC resident enterprises if the following are located or resident in the PRC: senior management personnel and departments that are responsible for daily production, operation and management; financial and personnel decision making bodies; key properties, accounting books, the company seal, and minutes of board meetings and shareholders' meetings; and half or more of the senior management or directors having voting rights. We do not believe we would be treated as a "resident enterprise" for PRC tax purposes even if the criteria for "de facto management body" as set forth in the circular mentioned above were deemed applicable to us. See "Item 3. Key Information—D. Risk factors—Risks related to doing business in China—Our global income may be subject to PRC taxes under the PRC EIT Law, which may have a material adverse effect on our results of operations." However, if the PRC tax authorities determine that we are a PRC resident enterprise for enterprise income tax purposes, we may be required to withhold a 10% withholding tax from dividends we pay to our non-resident enterprise shareholders, including the holders of our ADSs and non-resident enterprise holders may be subject to PRC tax on gains realized on the sale or other disposition of ADSs or common shares. It is unclear whether our non-PRC individual shareholders (including our ADS holders) would be subject to any PRC tax on dividends or gains in the event we are determined to be a PRC resident enterprise. If any PRC tax were to apply to such dividends or gains, it would generally apply at a rate of 20% (unless a reduced rate is available under an applicable tax treaty).

If we are deemed to be a PRC resident enterprise and our non-resident enterprise shareholders (including our ADS holders) are subject to PRC tax as described above, the withholding agent will be required to withhold enterprise income tax on payments of dividends to such investors. The withholding agent must obtain a tax withholding registration and withhold the enterprise income tax from each payment made to non-resident enterprise shareholders and file a report to the competent tax authorities. Where the withholding agent fails or is unable to perform its withholding obligation, the non-resident enterprise shareholders must pay the tax due to the applicable tax authorities within seven days after the payment is made or due. We, as the withholding agent, will be required to obtain a tax withholding registration and withhold the applicable enterprise income tax in order to comply with the above requirements. It is not clear who the withholding agent would be if tax is due on capital gains. In the event that we or our non-resident enterprise shareholders (including our ADS holders) fail to comply with the above procedures, we or our non-resident enterprise shareholders (including our ADS holders) may be ordered to rectify the non-compliance or be subject to a fine of no more than RMB10,000. Failure by us to withhold the income tax fully and timely may result in a fine of 50% to three times of the unpaid tax and failure by our ADS holders to pay the tax fully and timely may result in late payment penalties, or a fine of 50% to three times of the unpaid tax.

In addition, if we are treated as a PRC resident enterprise for enterprise income tax purposes, we may be eligible for the benefits of the income tax treaty between the PRC and other jurisdictions in which we may derive income, such as the United States. However, if we are treated as a PRC resident enterprise, we do not expect to withhold at treaty rates if any withholding is required on dividends we pay to our non-resident shareholders (including our ADS holders) notwithstanding such holders may be eligible for the income tax treaty between their resident jurisdictions and the PRC. The United States—PRC tax treaty generally limits PRC withholding on dividends to a rate of 10%. Investors should consult their tax advisors regarding the availability of treaty benefits and the procedure for claiming a refund, if any.

If we are not deemed a PRC resident enterprise, no PRC income tax will be withheld from dividends distributed by us and no PRC income tax will be payable on gains realized from the sale or other disposition of our shares or ADSs by the non-resident holders of our shares or ADSs. SAT Circular 7 further clarifies that, where a non-resident enterprise derives income by acquiring and selling shares in an offshore listed enterprise in the public market, such income shall not be subject to PRC tax. However, given the uncertainty concerning the application of SAT Public Notice 37 and SAT Circular 7, we and our non-PRC resident investors may be at risk of being required to file a return and being taxed under SAT Public Notice 37 and SAT Circular 7, and we may be required to expend valuable resources to comply with SAT Public Notice 37 and SAT Circular 7 or to establish that we should not be taxed under SAT Public Notice 37 and SAT Circular 7 in the future.

United States Federal Income Tax Considerations

The following discussion is a summary of the 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 as "capital assets" (generally, property held for investment) under the United States Internal Revenue Code of 1986, as amended, or the Code. This discussion is based upon existing United States federal income tax law, which is subject to differing interpretations or change, possibly with retroactive effect. No ruling has been sought from the Internal Revenue Service (the "IRS") with respect to any United States federal income tax consequences described below, and there can be no assurance that the IRS or a court will not take a contrary position. This discussion does not address all aspects of United States federal income taxation that may be important to particular investors in light of their individual investment circumstances, including investors subject to special tax rules (for example, certain financial institutions, banks, insurance companies, regulated investment companies, real estate investment trusts, broker-dealers, traders in securities that elect mark-to-market treatment, partnerships and their partners, and tax-exempt organizations (including private foundations), holders who are not U.S. Holders, cooperatives, pension plans, U.S. expatriates, persons who acquired ADSs or common shares pursuant to the exercise of any employee share option or otherwise as compensation, 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, holders 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 discussion does not discuss any state, local, alternative minimum tax, non-United States tax, non-income tax (such as gift or estate tax), or the Medicare tax considerations. U.S. Holders are urged to consult their tax advisors 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 discussion, 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 laws 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 under the Code.

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. Accordingly, deposits or withdrawals of common shares for ADSs will generally not be subject to United States federal income tax.

Passive Foreign Investment Company Considerations

Based on the market price of our ADSs and the composition of assets (in particular, the retention of a large amount of cash), we believe that we were a passive foreign investment company ("PFIC") for United States federal income tax purposes for the taxable year ended December 31, 2019, and we will very likely be classified as a PFIC for our current taxable year ending December 31, 2020 unless the market price of our ADSs increases and/or we invest a substantial amount of the cash and other passive assets we hold in assets that produce or are held for the production of non-passive income. 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, if, in the case of any particular taxable year, either (i) 75% or more of its gross income for such year consists of certain types of "passive" income or (ii) 50% or more of the value of its assets (generally determined on the basis of a quarterly average) during such year is attributable to assets that produce or are held for the production of passive income. For this purpose, cash is categorized as a passive asset and the company's unbooked intangibles associated with active business activities may generally be classified as non-passive assets. Passive income generally includes, among other things, dividends, interest, rents, royalties, and gains from the disposition of passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock.

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 even if we cease to meet the threshold requirements for PFIC status, unless a U.S. Holder makes a taxable "deemed sale" election that may allow the U.S. Holder to eliminate the continuing PFIC status under certain circumstances.

The United States federal income tax rules that apply if we are classified as a PFIC for our current or future taxable years are generally discussed below under "Passive foreign investment company rules."

Dividends

Subject to the discussion below under "Passive foreign investment company rules," any cash distributions (including the amount of any PRC tax 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 depositary, 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 treated 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 lower applicable capital gains 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) generally will be considered to be a qualified foreign corporation (i) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information program, or (ii) 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. Our ADSs are currently listed on the NASDAQ Global Select Market. We believe that the ADSs will be readily tradable on an established securities market in the United States for so long as our ADSs continue to be listed on the NASDAQ Global Select Market. 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 the reduced tax rate. There can be no assurance that our ADSs will continue to be considered readily tradable on an established securities market in later years. Furthermore, as mentioned above, we believe that we were a PFIC for the taxable year ended December 31, 2019, and we will very likely be classified as a PFIC for our current taxable year ending December 31, 2020. Each non-corporate U.S. Holder is advised to consult their tax advisors regarding the availability of the lower capital gains rate applicable to qualified dividend income for any dividends we pay with respect to the common shares and ADSs. Dividends received on our ADSs or common shares will not be eligible for the dividends received deduction allowed to corporations.

Dividends will generally be treated as passive income from foreign sources for United States foreign tax credit purposes. 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 our ADSs or common shares. The rules governing the foreign tax credit are complex. U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances. 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 withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes.

Sale or Other Disposition of ADSs or Common Shares

Subject to the discussion below under "Passive foreign investment company rules," a U.S. Holder will generally 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 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. Long-term capital gain of non-corporate U.S. Holders is generally eligible for a reduced rate of taxation. The deductibility of a capital loss is subject to limitations. In the event that gain from the disposition of the ADSs or common shares is subject to tax in the PRC, a U.S. Holder that is eligible for the benefits of the income tax treaty between the United States and the PRC may elect to treat the gain as PRC source income. U.S. Holders are advised to consult its tax advisors regarding the tax consequences if a PRC 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

As mentioned above, we believe that we were a PFIC for the taxable year ended December 31, 2019, and we will very likely be classified as a PFIC for our current taxable year ending December 31, 2020. 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 United States federal income 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 percent of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs or common shares), and (ii) any gain realized on the sale or other disposition, including, under certain circumstance, a pledge, of ADSs or common shares. Under the PFIC rules:

- the excess distribution and/or gain will be allocated ratably over the U.S. Holder's holding period for the ADSs or common shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are classified as a PFIC, or a pre-PFIC year, will be taxable as ordinary income;
- the amount allocated to each prior taxable year, other than a pre-PFIC year, will be subject to tax at the highest tax rate in effect 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 or VIE entities is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. Holders are advised to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries or VIE entities.

As an alternative to the foregoing rules, a U.S. Holder of "marketable stock" in a PFIC may make a mark-to-market election with respect to our ADSs, provided that the ADSs are regularly traded on the NASDAQ Global Select Market. In addition, we do not expect that holders of common shares that are not represented by ADSs will be eligible to make a mark-to-market election. Our ADSs may be regularly traded, but no assurances may be given in this regard. 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 an effective mark-to-market election, in each year that we are a PFIC any gain recognized upon the sale or other disposition of the ADSs will be treated as ordinary income and loss will be treated as ordinary loss, but only to the extent of the net amount previously included in income as a result of the mark-to-market election.

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

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

If a U.S. Holder owns our ADSs or common shares during any taxable year that we are a PFIC, the holder generally will be required to file annual reports with the IRS. U.S. Holders are advised to consult their tax advisors concerning the United States federal income tax consequences of purchasing, holding and disposing ADSs or common shares 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 IRS 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 its tax advisors regarding the application of the United States information reporting rules to its particular circumstances.

Certain U.S. Holders who hold "specified foreign financial assets", including stock of a non-U.S. corporation that is not held in an account maintained by a U.S. "financial institution," whose aggregate value exceeds US$50,000 during the tax year, may be required to attach to their tax returns for the year certain specified information. An individual who fails to timely furnish the required information may be subject to a penalty. U.S. Holders who are individuals should consult their own tax advisors regarding their reporting obligations under this legislation.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F within four months after the end of each fiscal year, which is December 31. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the Commission at 1-800-SEC-0330. The SEC also maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish The Bank of New York Mellon, the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

In accordance with NASDAQ Stock Market Rule 5250(d), we will post this annual report on Form 20-F on our website at http://ir.xunlei.com. In addition, we will provide hardcopies of our annual report free of charge to shareholders and ADS holders upon request.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Market Risk

Foreign exchange risk

Our financing activities are denominated mainly in U.S. dollars while interest bearing loan we borrowed this year for the construction of our headquarters building is denominated in RMB. The Renminbi, or RMB, is not freely convertible into foreign currencies. Remittances of foreign currencies into the PRC and conversion of foreign currencies into RMB 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. The revenues and expenses of our subsidiaries, and the consolidated VIE and its subsidiaries are generally denominated in RMB and their assets and liabilities are denominated in RMB. We do not believe that we currently have any significant direct foreign exchange risk and have not used any derivative financial instruments to hedge our exposure to such risk. Although in general, our exposure to foreign exchange risks should be limited, the value of your investment in our ADSs will be affected by the exchange rate between the U.S. dollar and the RMB because the value of our business is effectively denominated in RMB, while the ADSs will be traded in U.S. dollars.

The conversion of RMB into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. Since June 2010, the RMB has fluctuated against the U.S. dollar, at times significantly and unpredictably. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the U.S. dollar in the future.

To the extent that we need to convert U.S. dollars into RMB for our operations, appreciation of the RMB against the U.S. dollar would have an adverse effect on the RMB amount we receive from the conversion. Conversely, if we decide to convert RMB 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 RMB would have a negative effect on the U.S. dollar amounts available to us.

As of December 31, 2019, we had RMB-denominated cash and cash equivalents, and short-term investments of RMB 325.0 million, HKD-denominated cash and cash equivalents, restricted cash and short-term investments of HKD2.2 million, THB-denominated cash and cash equivalents, restricted cash and short-term investments of THB2.4 million and U.S. dollar-denominated cash, cash equivalents and short-term investments of US$218.4 million. We also had RMB-denominated restricted cash of RMB20.8 million. Assuming we had converted RMB345.8 million into U.S. dollars at the exchange rate of RMB6.9762 for US$1.00 on December 31, 2019 released by the State Administration of Foreign Exchange of the PRC, our U.S. dollar cash balance would have had a US$49.6 million increase. If the RMB had depreciated by 10% against the U.S. dollar, our U.S. dollar cash balance would have had a US$44.6 million increase instead. Assuming we had converted US$218.4 million into RMB at the exchange rate of RMB6.9762 for US$1.00 on December 31, 2019 released by the State Administration of Foreign Exchange of the PRC, our RMB cash balance would have had a RMB1.5 billion increase. If the RMB had depreciated by 10% against the U.S. dollar, our RMB cash balance would have had a RMB1.7 billion increase instead.

Interest rate risk

Our exposure to interest rate risk primarily relates to the interest income generated by excess cash, which is mostly held in interest-bearing bank deposits. We have not used derivative financial instruments in our investment portfolio. Interest earning instruments carry a degree of interest rate risk. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in market interest rates. However, our future interest income may fall short of expectations due to changes in market interest rates.

Item 12. Description of Securities Other than Equity Securities

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Fees and Charges Our ADS holders May Have to Pay

The Bank of New York Mellon, the depositary of our ADS program, collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid. The depositary's corporate trust office at which the ADSs will be administered is located at 101 Barclay Street, New York, New York 10286. The depositary's principal executive office is located at One Wall Street, New York, New York 10286.

Persons depositing or withdrawing shares must pay:	For:
$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	• Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property • Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
$0.05 (or less) per ADS	• Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs	• Distribution of securities distributed to holders of deposited securities which are distributed by the depositary to ADS holders
$0.05 (or less) per ADSs per calendar year	• Depositary services
Registration or transfer fees	• Transfer and registration of shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw shares
Expenses of the depositary	• Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement) • converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	• As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	• As necessary

Fees and Other Payments Made by the Depositary to Us

The depositary has agreed to reimburse us for our expenses incurred in connection with the establishment of our ADS facility including, investor relations expenses, roadshow expenses, legal fees, stock exchange listing fees or any direct or indirect expenses incurred in connection with the establishment of the facility. The depositary has also agreed to provide additional reimbursements to us based on the applicable performance indicators relating to our ADS facility, including ADS issuance and cancellation fees, cash dividend fees and depositary servicing fees. In addition, the depositary has agreed to waive the issuance fees for ADSs issued (i) in connection with our follow-on equity offerings, (ii) to our founders and senior management, and (iii) in connection with our employee incentive plans. In 2019, we received approximately US$ 0.22 million (after withholding tax) from the depositary.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

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

Based upon that evaluation, our management, with the participation of our chief executive officer and chief financial officer, has concluded that as of December 31, 2019, our disclosure controls and procedures were effective in ensuring that the information required to be disclosed by us in the reports that we file and furnish under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, 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 such term is defined in Rule 13a-15(f) under the Exchange Act, for our company. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with generally accepted accounting principles, including 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 a company's assets, (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules promulgated by the Securities and Exchange Commission, our management, including our chief executive officer and chief financial officer, assessed the effectiveness of internal control over financial reporting as of December 31, 2019 using the criteria set forth in the report "Internal Control — Integrated Framework (2013)" published by the Committee of Sponsoring Organizations of the Treadway Commission (known as COSO). Based on this evaluation, management concluded that our in internal control over financial reporting was effective as of December 31, 2019.

Our independent registered public accounting firm, PricewaterhouseCoopers Zhong Tian LLP, has audited the effectiveness of our company's internal control over financial reporting as of December 31, 2019, as stated in its report, which appears on page F-2 of this annual report on Form 20-F.

Attestation Report of the Registered Public Accounting Firm

This annual report on Form 20-F includes an attestation report of the company's independent registered public accounting firm because we are a large accelerated filer and we are no longer qualified as an "emerging growth company" as defined under the JOBS Act as of December 31, 2019.

Changes in Internal Control over Financial Reporting

Other than as described above, there were no changes in our internal controls over financial reporting occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Item 16A. Audit Committee Financial Expert

Our board of directors has determined that each of Ms. Jenny Wenjie Wu and Mr. Ya Li, our independent directors (under the standards set forth in Rule 5605(a)(2) of the NASDAQ Listing Rules and Rule 10A-3 under the Securities Exchange Act of 1934) and chairman of our audit committee, is an audit committee financial expert.

Item 16B. Code of Ethics

Our board of directors has adopted a code of business conduct and ethics that applies to our directors, officers and employees, including certain provisions that specifically apply to our chief executive officer, chief financial officer, other executive officers as defined under Rule 405 under the Securities Act of 1933, as amended, senior finance officer, controller, senior vice presidents and any other persons who perform similar functions for us. We have filed our code of business conduct and ethics as Exhibit 99.1 to our registration statement on Form F-1 (File Number 333-196221), as amended, initially filed with the SEC on May 23, 2014. The code is also available on our official website under the corporate governance section at our investor relations website http://ir.xunlei.com. We hereby undertake to provide to any person without charge, a copy of our code of business conduct and ethics within ten working days after we receive such person's written request.

Our chairman and chief executive officer, Mr. Jinbo Li, currently also serves as the chairman and chief executive officer of Itui International Inc., our shareholder holding approximately 39.8% of our outstanding share capital as of April 15, 2020. Mr. Jinbo Li is the founder and a shareholder of Itui International Inc. Section III of our code of business conduct and ethics provides that no employee shall serve on a board of directors or trustees or on a committee of any entity (whether profit or not-for-profit) whose interests could reasonably be expected to conflict with those of the Company. Employees must obtain prior approval from the board of directors before accepting any such board or committee position. The Company may revisit its approval of any such position at any time to determine whether an employee's service in such position is still appropriate. Section III also provides that no employee may have any financial interest (ownership or otherwise) in any other business or entity if such interest requires the employee to devote time to it during such employee's working hours at the Company. On April 11 , 2020, our board of directors granted Mr. Jinbo Li a waiver from compliance with the above provisions of our code of business conduct and ethics so that Mr. Jinbo Li is able to simultaneously serve as the chairman and the chief executive officer at both our company and Itui International Inc.

Item 16C. Principal Accountant Fees and Services

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by PricewaterhouseCoopers Zhong Tian LLP, our principal external auditors, for the periods indicated.

	2017		2018		2019	
			(in US$)			
Audit fees [(1)]	US$	758,028	US$	754,903	US$	905,356
Audit-related fees [(2)]	US$	—	US$	—	US$	—
All other fees [(3)]	US$	—	US$	—	US$	—

(1) "Audit fees" represents the aggregate fees billed for each of the fiscal years listed for professional services rendered by our principal accountant for the audit of our annual financial statements or services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements for each of the fiscal years listed.

(2) "Audit-related fees" represents the aggregate fees billed for each of the fiscal years listed for assurance and related services by our principal accountant that are reasonably related to the performance of the audit or review of our financial statements and are not reported under "audit fees" above.

(3) "All other fees" represents the aggregate fees billed in each of the fiscal years listed for products and services provided by our principal accountant, other than the services reported in "audit fees" and "audit-related fees" above.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by our independent auditor, including audit services, audit-related services and other services as described above, other than those for de minimis services which are approved by the audit committee prior to the completion of the audit. Our independent auditor only provides us with audit services. Our audit committee has approved all of our audit fees for the year ended December 31, 2019.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

As a Cayman Islands company listed on the NASDAQ Global Select Market, we are subject to the corporate governance standards under the NASDAQ Stock Market Rules. Under Nasdaq Stock Market Rule 5615(a)(3), a foreign private issuer such as us may follow its home-country corporate governance practices in lieu of certain of the Nasdaq Stock Market Rules corporate governance requirements. We strive to comply with most of the Nasdaq corporate governance practices to ensure a high standard of corporate governance. However, our current corporate governance practices differ from Nasdaq corporate governance requirements for U.S. companies in certain respects, as summarized below:

Nasdaq Marketplace Rule 5620(a) requires each issuer to hold an annual meeting of shareholders no later than one year after the end of the issuer's fiscal year-end. The practices of our home country, the Cayman Islands, do not require us to hold annual shareholders meetings every year. We have elected to adopt this practice and did not hold an annual meeting of shareholders for fiscal year 2019. We may, however, hold annual shareholders meeting in the future.

Nasdaq Stock Market Rule 5605(b)(1) requires a Nasdaq-listed company to have a board of directors composed of at least a majority of independent directors. The practices of our home country, the Cayman Islands, do not require us to have a majority of the board of directors composed of independent directors at this time. We have elected to adopt this practice and do not have a board of directors composed of at least a majority of independent directors.

Nasdaq Stock Market Rule 5605(c)(2) requires a Nasdaq-listed company to have an audit committee composed of at least three independent members. The practices of our home country, the Cayman Islands, do not require us to have a three-member audit committee at this time. We have elected to adopt this practice and have an audit committee composed of two independent members.

Nasdaq Stock Market Rule 5605(e)(1) requires a Nasdaq-listed company to have a nominations committee composed solely of independent directors to select or recommend for selection director nominees. The practices of our home country, the Cayman Islands, do not require that any of the members of a company's nominations committee be independent directors. We have elected to adopt this practice in order to utilize the experience of Mr. Raymond Weimin Luo and our corporate governance and nominating committee is not composed solely of independent directors.

Nasdaq Stock Market Rule 5605(d)(2) requires a Nasdaq-listed company to have a compensation committee composed solely of independent directors. The practices of our home country, the Cayman Islands, do not require that any of the members of a company's compensation committee be independent directors. We have elected to adopt this practice in order to utilize the experience of Mr. Jinbo Li and our compensation committee is not composed solely of independent directors.

Maples and Calder (Hong Kong) LLP, our Cayman Islands counsel, has provided a letter to the NASDAQ Stock Market certifying that under Cayman Islands law, we are not required to follow the above corporate governance standards.

Other than the above, there are no significant differences between our corporate governance practices and those followed by U.S. domestic companies under NASDAQ Stock Market Rules.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements

We have elected to provide financial statements pursuant to Item 18.

Item 18. Financial Statements

The consolidated financial statements of Xunlei Limited, its subsidiaries and its variable interest entity and its subsidiaries are included at the end of this annual report.

Item 19. Exhibits

Exhibit Number	Description of Document
1.1	Eighth amended and restated memorandum and seventh amended and restated articles of association of the Registrant (incorporated by reference to Exhibit 3.2 of our registration statement on Form F-1, as amended (file no. 333-196221), filed with the SEC on June 12, 2014)
2.1	Registrant's specimen American depositary receipt (included in Exhibit 2.3)
2.2	Registrant's specimen certificate for common shares (incorporated by reference to Exhibit 4.2 of our registration statement on Form F-1, as amended (file no. 333-196221), filed with the SEC on June 12, 2014)
2.3	Deposit agreement among the Registrant, the depositary and holders of American depositary receipts, dated June 23, 2014 (incorporated by reference to Exhibit 4.3 to the Registrant's registration statement on Form F-1, as amended (File No. 333-196221), filed with the Securities and Exchange Commission on June 12, 2014)
2.4*	Description of securities
4.1	Seventh amended and restated shareholders agreement among the Registrant and its subsidiaries, Shenzhen Xunlei Networking Technologies Co., Ltd. and its subsidiaries, shareholders of the Registrant and other parties thereto, dated April 24, 2014 (incorporated by reference to Exhibit 4.4 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on June 12, 2014)
4.2	Series E preferred share purchase agreement, among the Registrant, Xiaomi Ventures Limited and other parties therein, dated as of February 13, 2014 (incorporated by reference to Exhibit 4.6 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.3	Warrant issued by the Registrant to Xiaomi Ventures Limited dated as of March 5, 2014 (incorporated by reference to Exhibit 4.7 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.4	Warrant issued by the Registrant to Skyline Global Company Holdings Limited, dated as of March 5, 2014 (incorporated by reference to Exhibit 4.8 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.5	Supplemental agreement to Series E preferred share purchase agreement, among the Registrant, Xiaomi Ventures Limited and other parties therein, dated as of March 20, 2014 (incorporated by reference to Exhibit 4.9 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.6	Series E preferred share purchase agreement, among the Registrant, King Venture Holdings Limited, Morningside China TMT Special Opportunity Fund, L.P., Morningside China TMT Fund III Co-Investment, L.P. and IDG Technology Venture Investment V, L.P., dated as of April 3, 2014 (incorporated by reference to Exhibit 4.10 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.7	2010 share incentive plan (incorporated by reference to Exhibit 10.1 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.8	2013 share incentive plan (incorporated by reference to Exhibit 10.2 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.9	2014 share incentive plan (incorporated by reference to Exhibit 10.4 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)

4.10	Letter agreement signed by Leading Advice Holdings Limited in relation to 2013 share incentive plan of the Registrant, dated March 20, 2014 (incorporated by reference to Exhibit 10.3 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.11	Letter agreement signed by Leading Advice Holdings Limited in relation to 2014 share incentive plan of the Registrant, dated May 5, 2014 (incorporated by reference to Exhibit 10.5 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.12	Letter agreement signed by Leading Advice Holdings Limited in relation to 2013 share incentive plan and 2014 share incentive plan of the Registrant, dated May 19, 2014 (incorporated by reference to Exhibit 10.6 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.13	Form of indemnification agreement with the Registrant's directors and officers (incorporated by reference to Exhibit 10.7 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on June 12, 2014)
4.14	Form of employment agreement between the Registrant and Executive Officers of the Registrant (incorporated by reference to Exhibit 10.8 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on June 12, 2014)
4.15	English translation of business operation agreement among Giganology Shenzhen, Shenzhen Xunlei and the shareholders of Shenzhen Xunlei, dated November 15, 2006, as amended on March 1, 2012 and further amended on September 29, 2016 (incorporated by reference to Exhibit 4.15 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 20, 2017)
4.16	English translation of equity pledge agreement among Giganology Shenzhen and the shareholders of Shenzhen Xunlei dated November 15, 2006, as amended on May 10, 2011, March 1, 2012 and March 10, 2014 (incorporated by reference to Exhibit 10.10 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.17	English translation of power of attorney between Giganology Shenzhen and Shenglong Zou, dated May 10, 2011 (incorporated by reference to Exhibit 10.11 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.18	English translation of power of attorney between Giganology Shenzhen and Hao Cheng, dated May 10, 2011 (incorporated by reference to Exhibit 10.12 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.19	English translation of power of attorney between Giganology Shenzhen and Fang Wang, dated May 10, 2011 (incorporated by reference to Exhibit 10.13 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.20	English translation of power of attorney between Giganology Shenzhen and Jianming Shi, dated May 10, 2011 (incorporated by reference to Exhibit 10.14 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.21	English translation of power of attorney between Giganology Shenzhen and Guangzhou Shulian Information Investment Co., Ltd., dated May 10, 2011 (incorporated by reference to Exhibit 10.15 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.22	English translation of exclusive technical support and services agreement between Giganology Shenzhen and Shenzhen Xunlei, dated September 16, 2005, as amended on November 15, 2006 and March 10, 2014 (incorporated by reference to Exhibit 10.16 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.23	English translation of exclusive technology consulting and training agreement between Giganology Shenzhen and Shenzhen Xunlei, dated September 16, 2005, as amended on November 15, 2006 and March 10, 2014 (incorporated by reference to Exhibit 10.17 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.24	English translation of proprietary technology license contract between Giganology Shenzhen and Shenzhen Xunlei, dated March 1, 2012 (incorporated by reference to Exhibit 10.18 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.25	English translation of intellectual properties purchase option agreement between Giganology Shenzhen and Shenzhen Xunlei dated March 1, 2012, as amended on March 10, 2014 (incorporated by reference to Exhibit 10.19 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.26	English translation of loan agreement among Giganology Shenzhen, Guangzhou Shulian Information Investment Co., Ltd., Sean Shenglong Zou, Hao Cheng, Fang Wang and Jianming Shi, dated December 22, 2010, as amended on March 1, 2012 and March 10, 2014 (incorporated by reference to Exhibit 10.20 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)

4.27	English translation of loan agreement between Giganology Shenzhen and Sean Shenglong Zou, dated May 10, 2011, as amended on March 1, 2012 (incorporated by reference to Exhibit 10.21 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.28	English translation of equity interests disposal agreement between Giganology Shenzhen, Guangzhou Shulian Information Investment Co., Ltd., Sean Shenglong Zou, Hao Cheng, Fang Wang and Jianming Shi, dated November 15, 2006, as amended on May 10, 2011 and further amended on September 29, 2016 (incorporated by reference to Exhibit 4.28 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 20, 2017)
4.29	English translation of technology development and software license framework agreement between Shenzhen Xunlei and Xunlei Computer dated December 24, 2013 (incorporated by reference to Exhibit 10.23 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on May 23, 2014)
4.30	Content protection agreement by and between Shenzhen Xunlei Networking Technologies Co., Ltd. and other parties thereto dated May 22, 2014 (incorporated by reference to Exhibit 10.24 of our registration statement on Form F-1 (file no. 333-196221) filed with the SEC on June 12, 2014)
4.31	English summary of Assets and Business Transfer Agreement by and between Shenzhen Xunlei Networking Technologies Co., Ltd., Beijing Kingsoft Cloud Network Technology Co., Ltd., Zhuhai Kingsoft Cloud Science and Technology Co., Ltd. and Beijing Kingsoft Cloud Science and Technology Co., Ltd. dated September 2, 2014 (incorporated by reference to Exhibit 4.31 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 20, 2015)
4.32	English translation of the Equity Transfer Agreement dated as of May 13, 2015 by and between Shenzhen Xunlei Networking Technologies Co., Ltd., Beijing Nesound International Media Corp., Ltd. and Shenzhen Xunlei Kankan Information Technologies Co., Ltd. (incorporated by reference to Exhibit 4.32 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 21, 2016)
4.33	English translation of the Business and Assets Transfer Agreement dated as of May 14, 2015 by and among Shenzhen Xunlei Networking Technologies Co., Ltd., Beijing Nesound International Media Corp., Ltd. and Shenzhen Xunlei Kankan Information Technologies Co., Ltd. (incorporated by reference to Exhibit 4.33 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 21, 2016)
4.34	English summary of General Contract for the Construction of Xunlei Building dated April 24, 2018 between Shenzhen Xunlei Networking Technologies Co., Ltd. and China Construction Second Engineering Bureau Ltd. (incorporated by reference to Exhibit 4.34 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 29, 2019)
4.35	English translation of the Financing Agreement dated January 2, 2019 between Shenzhen Xunlei Networking Technologies Co., Ltd. and Shanghai Pudong Development Bank Co., Ltd. Shenzhen Branch (incorporated by reference to Exhibit 4.35 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 29, 2019)
4.36	English translation of the Maximum Mortgage Contract dated January 2, 2019 between Shenzhen Xunlei Networking Technologies Co., Ltd. and Shanghai Pudong Development Bank Co., Ltd. Shenzhen Branch (incorporated by reference to Exhibit 4.36 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 29, 2019)
4.37	English translation of the Irrevocable Letter of Guarantee of Maximum Amount dated March 15, 2018 between Shenzhen Xunlei Networking Technologies Co., Ltd. and China Merchants Bank Shenzhen Branch (incorporated by reference to Exhibit 4.37 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 29, 2019)
4.38	English translation of the Credit Agreement dated March 15, 2018 between Shenzhen Xunlei Networking Technologies Co., Ltd. and China Merchants Bank Shenzhen Branch (incorporated by reference to Exhibit 4.38 of our annual report on Form 20-F (file no. 001-35224) filed with the SEC on April 29, 2019)
4.39*	English translation of the Credit Agreement dated June 20, 2019 between Shenzhen Xunlei Networking Technologies Co., Ltd. and China Merchants Bank Shenzhen Branch
8.1*	List of principal subsidiaries and variable interest entity of the Registrant

11.1	Code of business conduct and ethics of the Registrant (incorporated by reference to Exhibit 99.1 of our Registration Statement on Form F-1 (file no. 333-196221) filed with the Securities and Exchange Commission on June 12, 2014)
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
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 King & Wood Mallesons
15.3*	Consent of PricewaterhouseCoopers Zhong Tian LLP, an 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 Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith

** Furnished herewith

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing its annual report on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Xunlei Limited

By: /s/ Jinbo Li
Name: Jinbo Li
Title: Chairman of the Board and Chief Executive Officer

Date: April 28 , 2020

Index to consolidated financial statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Xunlei Limited

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Xunlei Limited and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive loss, of changes in shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2019, 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, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 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, 2019, 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. 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
Shenzhen, the People's Republic of China
April 28, 2020

We have served as the Company's auditor since 2014.

Xunlei Limited
Consolidated Balance Sheets

(Amounts expressed in thousands of United States dollars ("USD"), except for number of shares and per share data)	Note	As at December 31, 2018	As at December 31, 2019
Assets			
Current assets:			
Cash and cash equivalents	4	122,930	162,465
Short-term investments	5	196,538	102,847
Accounts receivable, net	6	19,391	27,533
Inventories	7	12,667	5,537
Due from related parties	24	1,137	1,658
Prepayments and other current assets	8	10,236	16,543
Total current assets		**362,899**	**316,583**
Non-current assets:			
Retricted cash	2(e)	—	2,983
Long-term investments	9	33,638	26,365
Deferred tax assets	22	5,690	1,118
Property and equipment, net	10	21,903	38,770
Right-of-use assets	11	—	8,747
Intangible assets, net	12	9,991	9,426
Goodwill	2(l)	20,717	20,382
Other long-term prepayments and receivables	8	593	313
Total assets		**455,431**	**424,687**
Liabilities			
Current liabilities:			
Accounts payable (including accounts payable of the consolidated variable interest entities ("VIE") and its subsidiaries without recourse to the Company of USD 48,276 and USD 45,162 as of December 31, 2018 and 2019, respectively)		22,629	24,213
Due to related parties (including due to related parties of the consolidated VIE and its subsidiaries without recourse to the Company of USD 298 and USD 2 as of December 31, 2018 and 2019, respectively)	24	5,234	5,002
Contract liabilities and deferred income, current portion (including contract liabilities and deferred income, current portion of the consolidated VIE and its subsidiaries without recourse to the Company of USD 29,794 and USD 31,988 as of December 31, 2018 and 2019, respectively)	13	30,295	31,988
Income tax payable (including income tax payable of the consolidated VIE and its subsidiaries without recourse to the Company of USD 2,437 and USD 2,436 as of December 31, 2018 and 2019, respectively)		2,503	2,550
Accrued liabilities and other payables (including accrued liabilities and other payables of the consolidated VIE and its subsidiaries without recourse to the Company of USD 158,288 and USD 191,406 as of December 31, 2018 and 2019, respectively)	14	44,065	42,840
Held-for-sale liabilities (including held-for-sale liabilities of the consolidated VIE and its subsidiaries without recourse to the Company of USD 3,309 and nil as of December 31, 2018 and 2019, respectively)		3,309	—
Lease liabilities, current portion (including lease liabilities, current portion of the consolidated VIE and its subsidiaries without recourse to the Company of nil and USD 4,621 as of December 31, 2018 and 2019, respectively)	11	—	4,693
Total current liabilities		**108,035**	**111,286**

Xunlei Limited
Consolidated Balance Sheets (Continued)

(Amounts expressed in thousands of United States dollars ("USD"), except for number of shares and per share data)	Note	As at December 31, 2018	As at December 31, 2019
Non-current liabilities:			
Contract liabilities and deferred income, non-current portion (including contract liabilities and deferred income, non-current portion of the consolidated VIE and its subsidiaries without recourse to the Company of USD 1,850 and USD 1,223 as of December 31, 2018 and 2019, respectively)	13	1,850	1,223
Deferred tax liabilities (including deferred tax liabilities of the consolidated VIE and its subsidiaries without recourse to the Company of USD 1,366 and USD 1,179 as of December 31, 2018 and 2019, respectively)	22	1,366	1,179
Bank borrowings (including bank borrowing of the consolidated VIE and its subsidiaries without recourse to the Company of nil and USD 11,324 as of December 31, 2018 and 2019, respectively)	15	—	11,324
Lease liabilities, non-current portion (including lease liabilities, non-current portion of the consolidated VIE and its subsidiaries without recourse to the Company of nil and USD 4,073 as of December 31, 2018 and 2019, respectively)	11	—	4,132
Total liabilities		**111,251**	**129,144**
Commitments and contingencies	26		
Equity			
Common shares (368,877,209 shares issued and 336,522,780 shares outstanding as of December 31, 2018; 368,877,205 shares issued and 339,165,241 shares outstanding as of December 31, 2019)	16	84	85
Additional paid-in-capital		466,624	472,052
Accumulated other comprehensive loss		(12,748)	(13,425)
Statutory reserves		5,132	5,132
Treasury shares (32,354,429 shares and 29,711,964 shares as of December 31, 2018 and 2019, respectively)		8	7
Accumulated deficits		(113,804)	(166,973)
Total Xunlei Limited's shareholders' equity		**345,296**	**296,878**
Non-controlling interests	19	(1,116)	(1,335)
Total liabilities and shareholders' equity		**455,431**	**424,687**

The accompanying notes are an integral part of these consolidated financial statements.

Xunlei Limited
Consolidated Statements of Comprehensive Loss

(Amounts expressed in thousands of USD, except for number of shares and per share data)	Note	Years ended December 31, 2017	2018	2019
Net revenues				
Service revenue		169,017	177,528	172,998
Product revenue		32,894	54,604	8,269
Total revenues, net of rebates and discounts	2(q),2(y)	201,911	232,132	181,267
Business taxes and surcharges		(1,328)	(1,528)	(602)
Net revenues		**200,583**	**230,604**	**180,665**
Cost of revenues				
Service	20	(96,391)	(84,033)	(92,732)
Product	20	(21,485)	(31,634)	(7,181)
Total cost of revenues		**(117,876)**	**(115,667)**	**(99,913)**
Gross profit		**82,707**	**114,937**	**80,752**
Operating expenses				
Research and development expenses		(66,947)	(76,763)	(68,571)
Sales and marketing expenses		(19,888)	(35,322)	(31,820)
General and administrative expenses		(36,517)	(40,833)	(38,930)
Assets impairment loss, net of recoveries		(13,556)	(6,348)	2,147
Total operating expenses		**(136,908)**	**(159,266)**	**(137,174)**
Operating loss		**(54,201)**	**(44,329)**	**(56,422)**
Interest income		1,967	1,183	1,897
Interest expense		(239)	(239)	(75)
Other income, net	21	7,880	2,810	5,861
Share of loss from equity investees		(1,875)	(307)	—
Loss from continuing operations before income tax		**(46,468)**	**(40,882)**	**(48,739)**
Income tax benefits/(expenses)	22	2,252	89	(4,676)
Net loss from continuing operations		**(44,216)**	**(40,793)**	**(53,415)**
Discontinued operations	3			
Income from discontinued operations before income taxes		7,538	1,533	—
Income tax expenses		(1,131)	(230)	—
Net profit from discontinued operations		6,407	1,303	—
Net loss for the year		**(37,809)**	**(39,490)**	**(53,415)**
Less: net profit/(loss) attributable to the non-controlling interest		13	(212)	(246)
Net loss attributable to Xunlei Limited		**(37,822)**	**(39,278)**	**(53,169)**

Xunlei Limited
Consolidated Statements of Comprehensive Loss (Continued)

(Amounts expressed in thousands of USD, except for number of shares and per share data)	Note	Years ended December 31, 2017	2018	2019
Net loss for the year		(37,809)	(39,490)	(53,415)
Other comprehensive income/(loss): Currency translation adjustments, net of tax		6,413	(5,539)	(650)
Comprehensive loss		**(31,396)**	**(45,029)**	**(54,065)**
Less: comprehensive loss attributable to non-controlling interest		(172)	(34)	(219)
Comprehensive loss attributable to Xunlei Limited		**(31,224)**	**(44,995)**	**(53,846)**
Earnings/(loss) per share for common shares, basic				
Continuing operations	23	(0.13)	(0.12)	(0.16)
Discontinued operations	23	0.02	0.00	0.00
Total loss per share for common shares, basic		(0.11)	(0.12)	(0.16)
Earnings/(loss) per share for common shares, diluted				
Continuing operations	23	(0.13)	(0.12)	(0.16)
Discontinued operations	23	0.02	0.00	0.00
Total loss per share for common shares, diluted		(0.11)	(0.12)	(0.16)
Weighted average number of common shares used in calculating continuing operations				
Basic	23	331,731,963	334,965,987	337,845,675
Diluted	23	331,731,963	334,965,987	337,845,675

The accompanying notes are an integral part of these consolidated financial statements.

Xunlei Limited
Consolidated statements of changes in shareholders' equity

(Amounts expressed in thousands of USD,except for number of shares and per share data)	Common shares		Treasury stock		Additional paid-in capital	Accumulated deficits	Statutory reserves	Accumulated other comprehensive loss	Total Xunlei Limited's shareholders' equity	Non-controlling interest	Total equity
	Shares	Amount	Shares	Amount							
Balance at January 1, 2017	330,545,000	83	38,332,209	9	453,347	(36,704)	5,132	(13,629)	408,238	(1,988)	406,250
Issuance of common shares for exercised share options	4,000	—	(4,000)	—	11	—	—	—	11	—	11
Repurchase of common shares	(465,350)	(1)	465,350	1	(358)	—	—	—	(358)	—	(358)
Share-based compensation	—	—	—	—	8,330	—	—	—	8,330	—	8,330
Restricted shares vested	3,559,910	1	(3,559,910)	(1)	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	(37,822)	—	—	(37,822)	13	(37,809)
Currency translation adjustments	—	—	—	—	—	—	—	6,598	6,598	(185)	6,413
Balance at December 31, 2017	333,643,560	83	35,233,649	9	461,330	(74,526)	5,132	(7,031)	384,997	(2,160)	382,837
Share-based compensation	—	—	—	—	5,294	—	—	—	5,294	—	5,294
Restricted shares vested	2,879,220	1	(2,879,220)	(1)	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	(39,278)	—	—	(39,278)	(212)	(39,490)
Currency translation adjustments	—	—	—	—	—	—	—	(5,717)	(5,717)	152	(5,565)
Contribution by non-controlling interest holders	—	—	—	—	—	—	—	—	—	197	197
Acquisition of a subsidiary	—	—	—	—	—	—	—	—	—	907	907
Balance at December 31, 2018	336,522,780	84	32,354,429	8	466,624	(113,804)	5,132	(12,748)	345,296	(1,116)	344,180
Share-based compensation	—	—	—	—	5,428	—	—	—	5,428	—	5,428
Restricted shares vested	2,642,465	1	(2,642,465)	(1)	—	—	—	—	—	—	—
Cancellation of common shares	(4)	—	—	—	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	(53,169)	—	—	(53,169)	(246)	(53,415)
Currency translation adjustments	—	—	—	—	—	—	—	(677)	(677)	27	(650)
Balance at December 31, 2019	339,165,241	85	29,711,964	7	472,052	(166,973)	5,132	(13,425)	296,878	(1,335)	295,543

The accompanying notes are an integral part of these consolidated financial statements.

Xunlei Limited
Consolidated Statements of Cash Flows

(Amounts expressed in thousands of USD except for number of shares and per share data)	Years ended December 31, 2017	2018	2019
Cash flows from operating activities			
Net loss for the year	(37,809)	(39,490)	(53,415)
Adjustments to reconcile net loss to net cash generated from/(used in) operating activities			
—Depreciation of property and equipment	7,948	5,595	5,824
—Amortization of intangible assets	2,101	1,231	1,200
—Amortization of the right-of-use assets	—	—	5,634
—Allowance for doubtful accounts	27	7,680	19
—Impairment/(recovery) of receivables from and prepayments to Kankan	8,723	(1,516)	(2,147)
—Loss on disposal of property and equipment	85	37	144
—Share-based compensation	8,330	5,294	5,428
—Share of loss from equity investees	1,875	307	—
—Investment income from short-term investments	(728)	(1,117)	(1,708)
—Impairment of property and equipment	20	—	—
—Impairment of inventories	—	200	3,578
—Impairment of intangible assets	4,833	—	—
—Impairment of long-term investments	596	7,794	19,831
— Net unrealized gains on long-term investments	(491)	—	(10,907)
—Investment income on disposal of long-term investment	—	—	(579)
—Interest expense accrued on long-term payable	239	239	75
—Deferred taxes	(2,214)	1,748	4,361
—Deferred government grants	(3,493)	(1,050)	(1,735)
Changes in operating assets and liabilities:			
—Accounts receivable	(20,040)	13,256	(8,739)
—Prepayments and other assets	(11,418)	(2,000)	772
—Due from/to related parties	(4,879)	11,457	(684)
—Accounts payable	9,037	(27,728)	2,086
—Inventories	(2,925)	(10,178)	3,435
—Contract liabilities	(510)	7,680	(664)
—Income tax payable	339	(390)	98
—Accrued liabilities and other payables	26,138	(14,657)	(12,580)
—Lease liabilities	—	—	(4,976)
Net cash used in operating activities	**(14,216)**	**(35,608)**	**(45,649)**
Cash flows from investing activities			
Purchase of short-term investments	(244,781)	(287,553)	(355,294)
Proceeds from disposal of short-term investments	291,568	223,738	450,687
Proceeds from disposal of property and equipment	23	442	576
Proceeds from disposal of long-term investments	191	—	528
Purchase of intangible assets	(481)	(2,121)	(433)
Acquisition of long-term investments	(2,793)	—	(2,838)
Repayment of loans from employees	423	201	711
Acquisition of property and equipment	(5,318)	(1,419)	(3,084)
Payment for construction in progress	(3,624)	(2,645)	(11,593)
Net cash generated from/(used in) investing activities	**35,208**	**(69,357)**	**79,260**
Cash flows from financing activities			
Repurchase of shares	(358)	—	—
Governments grants received	2,908	732	853
Proceeds from exercise of vested share options	11	—	—
Contribution by non-controlling	—	197	—
Proceeds from bank borrowings	—	—	11,324
Net cash generated from financing activities	**2,561**	**929**	**12,177**

Xunlei Limited
Consolidated Statements of Cash Flows (Continued)

(Amounts expressed in thousands of USD except for number of shares and per share data)	**Years ended December 31,**		
	2017	**2018**	**2019**
Net increase/(decrease) in cash, cash equivalents and restricted cash	**23,553**	**(104,036)**	**45,788**
Cash, cash equivalents, and restricted cash at beginning of year	199,504	233,479	122,930
Effect of exchange rates on cash and cash equivalents, and retricted cash	10,422	(6,513)	(3,270)
Cash, cash equivalents, and restricted cash at end of year	**233,479**	**122,930**	**165,448**
Supplemental disclosure of cash flow information			
Income tax paid	—	—	(142)
Non cash investing and financing activities			
—Acquisition of property and equipment in form of other payables	(2,774)	(1,093)	(321)

The accompanying notes are an integral part of these consolidated financial statements.

(Amounts in US dollars unless otherwise stated)

1. Organization and nature of operations

Xunlei Limited, previously known as Giganology Limited, (the "Company") was incorporated under the law of the Cayman Islands ("Cayman") as a limited liability company on February 3, 2005. The Company completed its initial public offering ("IPO") on June 24, 2014 on the NASDAQ Global Market. Each American Depositary Shares ("ADSs") of the Company represents five common shares.

These consolidated financial statements include the financial statements of the Company, its subsidiaries, its variable interest entity ("VIE") and the VIE's subsidiaries (collectively referred to as the "Group"). As of December 31, 2019, the Company's major subsidiaries, VIE and VIE's subsidiaries are as follows:

Name of entities	Place of incorporation	Period of incorporation	Relationship	% of direct or indirect economic ownership	Principal activities
Shenzhen Xunlei Networking Technologies Co., Ltd. ("Shenzhen Xunlei")	People's Republic of China ("PRC")	January 2003	VIE	100%	Development of software, provision of online and related advertising, membership subscription and online game services; as well as sales of software licenses
Giganology (Shenzhen) Co., Ltd. ("Giganology Shenzhen")	PRC	June 2005	Subsidiary	100%	Development of computer software and provision of information technology services to related companies
Shenzhen Xunlei Wangwenhua Co., Ltd. (formerly known as "Shenzhen Fengdong Networking Technologies Co., Ltd.") ("Wangwenhua")	PRC	December 2005	VIE's subsidiary	100%	Development of software for related companies, provision of advertising services and production of broadcast television programs
Shenzhen Zhuolian Software Co., Ltd. (formerly known as "Xunlei Software (Shenzhen) Co., Ltd.") ("Zhuolian Software")	PRC	January 2010	VIE's subsidiary	100%	Provision of software technology development for related companies
Xunlei Games Development (Shenzhen) Co., Ltd. ("Xunlei Games")	PRC	February 2010	VIE's subsidiary	70 % (note 19)	Development of online game and computer software for related companies and provision of advertising services

(Amounts in US dollars unless otherwise stated)

1. Organization and nature of operations (Continued)

Name of entities	Place of incorporation	Period of incorporation	Relationship	% of direct or indirect economic ownership	Principal activities
Xunlei Network Technologies Limited ("Xunlei BVI")	British Virgin Islands	February 2011	Subsidiary	100%	Holding company
Xunlei Network Technologies Limited ("Xunlei HK")	Hong Kong	March 2011	Subsidiary	100%	Holding company and development of computer software
Xunlei Computer (Shenzhen) Co., Ltd. ("Xunlei Computer")	PRC	November 2011	Subsidiary	100%	Development of computer software and provision of information technology services
Shenzhen Onething Technologies Co., Ltd. ("Onething")	PRC	September 2013	VIE's subsidiary	100%	Development of computer software, sale of hardware, and provision of information technology services
Beijing Xunjing Technologies Co., Ltd. (formerly known as "Wangxin Century Technologies (Beijing) Co., Ltd.") ("Beijing Xunjing")	PRC	October 2015	VIE's subsidiary	100%	Development of computer software and provision of information technology services
Shenzhen Crystal Interactive Technologies Co., Ltd. ("Crystal Interactive")	PRC	May 2016	VIE's subsidiary	100%	Development of computer software and provision of information technology services
Beijing Onething Technologies Co., Ltd. ("Beijing Onething")	PRC	January 2017	VIE's subsidiary	100%	Provision of technology services and development of computer software

(Amounts in US dollars unless otherwise stated)

1. Organization and nature of operations (Continued)

Name of entities	Place of incorporation	Period of incorporation	Relationship	% of direct or indirect economic ownership	Principal activities
HK Onething Technologies Ltd.	Hong Kong	December 2017	subsidiary	100%	Development of cloud computing technology and provision of related services
Henan Tourism Information Co., Ltd. (“Henan Tourism”)	PRC	June 2018	VIE’s subsidiary	80 % (note 19)	Software development, tourism consulting and other related services
Xi’an Onething Blockchain Technologies Co., Ltd. (“Xi’an Onething”)	PRC	July 2018	VIE’s subsidiary	100%	Development and research of blockchain technology and computer software
Onething Co., Ltd. (Thailand) (“Thailand Onething”)	Thailand	July 2018	subsidiary	49 % (note 19)	Development of cloud computing technology and provision of related services

Note: The English names of the PRC companies represent management’s translation of the Chinese names of these companies as they have not adopted formal English names.

The Group engages primarily in the provision of premium downloading services to its members, online advertising services on its websites and mobile phone applications, sales of bandwidth, sales of cloud computing hardwares, platform for live streaming services, online game platforms for game developers and users, and other internet value added services.

To comply with the PRC laws and regulations that prohibit or restrict foreign ownership of companies that provide online advertising services, operate online games, and hold Internet Content Provider (‘‘ICP’’) license, the Company conducts its business through Shenzhen Xunlei, its consolidated VIE.

Through the various agreements enacted among the Company, Giganology Shenzhen, a wholly owned subsidiary of the Company, Shenzhen Xunlei and legal shareholders of Shenzhen Xunlei (the “Restructuring”), the Company received all of the economic benefits and residual interest and absorbed all of the risks and expected losses from Shenzhen Xunlei.

1. Organization and nature of operations (Continued)

Details of certain key agreements with the VIE are as follows:

— **Loan Agreements** between Giganology Shenzhen and the shareholders of Shenzhen Xunlei— Giganology Shenzhen provided interest-free loans of RMB 9 million to the legal shareholders of Shenzhen Xunlei for them to make contributions as registered capital into Shenzhen Xunlei. The term of these agreements last for two years from the date it was signed, and will be automatically extended afterwards on a yearly basis until each legal shareholder of Shenzhen Xunlei has repaid the loans in its entirety in accordance with the loan agreement. The legal shareholders would not be allowed to transfer their interests in Shenzhen Xunlei without prior consent of Giganology Shenzhen. According to the loan agreements, the loans can only be repaid in the form of common shares of Shenzhen Xunlei. At any time during the term of the loan agreements, Giganology Shenzhen may, at their sole discretion, requires any of the legal shareholders of Shenzhen Xunlei to repay all or any portion of their outstanding loan under the agreement.

Under a separate loan agreement between Giganology Shenzhen and Mr. Sean Shenglong Zou as a legal shareholder of Shenzhen Xunlei, Giganology Shenzhen made an additional interest-free loan of RMB20 million to Mr. Sean Shenglong Zou, the entire amount of which was contributed to the registered capital of Shenzhen Xunlei, increasing the registered capital of Shenzhen Xunlei to RMB 30 million. The term of this agreement last for two years from the date it was signed, and will be automatically extended afterwards on a yearly basis until Mr. Zou has repaid the loan in its entirety in accordance with the loan agreement. This loan will be deemed to be repaid when all equity interest held by the shareholders in Shenzhen Xunlei has been transferred to Giganology Shenzhen or its designated parties. At any time during the term of this loan agreement, the Company may, at their sole discretion, require all or any portion of the outstanding loan under the agreement to be repaid.

— **Business Operation Agreements** between Giganology Shenzhen and Shenzhen Xunlei—Under these agreements, Giganology Shenzhen has the rights to direct the operating activities of Shenzhen Xunlei, including the appointment of senior management. The legal shareholders of Shenzhen Xunlei also transferred all their shareholders' rights to Giganology Shenzhen. The term of this agreement will expire in 2016 and may be extended with Giganology Shenzhen's confirmation prior to the expiration date. For instance, in May 2011, Shenzhen Xunlei sought and obtained consent from Giganology Shenzhen and the Company to increase its registered capital by RMB20 million and to revise its articles of association accordingly. This agreement expired on November 15, 2016 and has been extended to 2026.

— **Equity Pledge Agreement** between Giganology Shenzhen and the legal shareholders of Shenzhen Xunlei—Under this agreement, the legal shareholders of Shenzhen Xunlei pledged all of their equity interests in Shenzhen Xunlei to Giganology Shenzhen. If Shenzhen Xunlei and/or its legal shareholders breach their contractual obligations under this agreement, Giganology Shenzhen, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests.

— **Power of Attorney** —Each legal shareholder of Shenzhen Xunlei appointed Giganology Shenzhen as its attorney-in-fact to exercise their shareholders' rights in Shenzhen Xunlei, including shareholders' voting rights. Each power of attorney will remain in force for 10 years starting from 2011 unless the business operation agreement among Giganology Shenzhen, Shenzhen Xunlei and the legal shareholders of Shenzhen Xunlei is terminated in advance. This period may be extended at Giganology Shenzhen's discretion.

1. Organization and nature of operations (Continued)

— **Service Agreements** between Giganology Shenzhen and Shenzhen Xunlei—Under various service agreements, Giganology Shenzhen will provide services including technical support, training, as well as consulting services to Shenzhen Xunlei in exchange for a service fee. These service agreements include the Exclusive Technology Support and Services Agreement, the Exclusive Technology Consulting and Training Agreement and the Software and Proprietary Technology License Contract. Giganology Shenzhen is entitled to service fees equal to 20%, 20% and 40% of the pre-tax operating profit of Shenzhen Xunlei according to the terms and provisions of these agreements, respectively (in aggregate 80% of pre-tax operating profit of Shenzhen Xunlei). In addition, these agreements also allow both parties to review and adjust the above mentioned percentage every six months according to the business operation and income of Shenzhen Xunlei so as to enable Giganology Shenzhen to extract substantially all the after tax operating profit of Shenzhen Xunlei. The amount of service fees payable from Shenzhen Xunlei to Giganology Shenzhen for the years ended December 31, 2017, 2018 and 2019 was USD 1,155,000, USD 825,000 and USD 811,000, respectively.

For the Exclusive Technology Support and Services Agreement and the Exclusive Technology Consulting and Training Agreement, the term of these agreements will expire in 2025 and may be extended with Giganology Shenzhen's written confirmation prior to the expiration date. Giganology Shenzhen is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Shenzhen Xunlei.

For the Proprietary Technology License Contract, the term of this contract will expire in 2022 and may be extended with Giganology Shenzhen's written confirmation prior to the expiration date. Giganology Shenzhen grants Shenzhen Xunlei a non-exclusive and non-transferable right to use Giganology Shenzhen's proprietary technology. Shenzhen Xunlei can only use the proprietary technology to conduct business according to its authorized business scope. Giganology Shenzhen or its designated representative(s) owns the rights to any new technology developed due to implementation of this contract.

—Intellectual Properties Purchase Option Agreement between Giganology Shenzhen and Shenzhen Xunlei. Giganology Shenzhen has an option to acquire Shenzhen Xunlei's intellectual properties at the lowest price permissible by the then-applicable PRC laws and regulation. The term of this contract will expire in 2022 and may be automatically extended for an additional 10 years at Giganology Shenzhen's discretion.

— **Call Option Agreement** —Giganology Shenzhen has an option to acquire all of the outstanding shares of Shenzhen Xunlei at a purchase price equal to RMB 1 or the lowest price permissible by the then-applicable PRC laws and regulation. The term of the agreement will expire in 2022 and may be extended at Giganology Shenzhen's discretion.

As a result of these agreements (collectively defined as "Structured Service Contracts"), Giganology Shenzhen can exercise effective control over Shenzhen Xunlei, receives all of the economic benefits and residual interest and absorbs all of the risks and expected losses from Shenzhen Xunlei as if it were the sole shareholder, and has an exclusive option to purchase all of the equity interest in Shenzhen Xunlei at a minimal price. Therefore, Giganology Shenzhen is considered the primary beneficiary of Shenzhen Xunlei and accordingly Shenzhen Xunlei's results of operations, assets and liabilities have been consolidated in the Company's financial statements.

1. Organization and nature of operations (Continued)

VIE-Related Risks

It is possible that the Group's operation of certain of its operations and businesses through VIEs could be found by PRC authorities to be in violation of PRC laws and regulations prohibiting or restricting foreign ownership of companies that engage in such operations and businesses. While the Group's management considers the possibility of such a finding by PRC regulatory authorities under current laws and regulations to be remote, on January 19, 2015, the Ministry of Commerce of the PRC, or (the "MOFCOM") released on its Website for public comment a proposed PRC law (the "Draft FIE Law") that appears to include VIEs within the scope of entities that could be considered to be foreign invested enterprises (or "FIEs") that would be subject to restrictions under existing PRC law on foreign investment in certain categories of industry. Specifically, the Draft FIE Law introduces the concept of "actual control" for determining whether an entity is considered to be an FIE. In addition to control through direct or indirect ownership or equity, the Draft FIE Law includes control through contractual arrangements within the definition of "actual control." If the Draft FIE Law is passed by the People's Congress of the PRC and goes into effect in its current form, these provisions regarding control through contractual arrangements could be construed to reach the Group's VIE arrangements, and as a result the Group's VIEs could become explicitly subject to the current restrictions on foreign investment in certain categories of industry. The Draft FIE Law includes provisions that would exempt from the definition of foreign invested enterprises entities where the ultimate controlling shareholders are either entities organized under PRC law or individuals who are PRC citizens.

On December 26, 2018, the Standing Committee of National People's Congress published the Draft FIE Law on its official website for public consultation (the "2018 Draft Foreign Investment Law"). The 2018 Draft Foreign Investment Law does not explicitly recognize the variable interest entity structure as a form of foreign investment. Since the 2018 Draft Foreign Investment Law remains silent with respect to the variable interest entity structure as a form of foreign investment, the validity of the Group's VIE structure as a whole and each of the agreements comprising VIEs will not be affected by the 2018 Draft Foreign Investment Law. It leaves leeway for government's future regulation of the variable interest entity structure. According to the deliberation and voting results from the final session of the 13 th National People's Congress on March 15, 2019, the FIE Law has been enacted and there was no substantial change to the 2018 Draft Foreign Investment Law. However, it is possible that future laws, administrative regulations, or provisions of the State Council may recognize the variable interest entity structure as a form of foreign investment but at the same time impose additional requirements/restrictions on the contractual arrangements. It is also possible that further laws, administrative regulations, or provisions of the State Council may explicitly exclude the variable interest entity structure as a form of foreign investment.

If a finding was made by PRC authorities under existing laws and regulations and becomes effective, the Group's operation of certain of its operations and businesses through VIEs, regulatory authorities with jurisdiction over the licensing and operation of such operations and businesses would have broad discretion in dealing with such a violation, including levying fines, confiscating the Group's income, revoking the business or operating licenses of the affected businesses, requiring the Group to restructure its ownership structure or operations, or requiring the Group to discontinue all or any portion of its operations. Any of these actions could cause significant disruption to the Group's business operations, and have a severe adverse impact on the Group's cash flows, financial position and operating performance.

In addition, it is possible that the contracts among the Group, the Group's VIEs and shareholders of its VIEs would not be enforceable in China if PRC government authorities or courts were to find that such contracts contravene PRC law and regulations or are otherwise not enforceable for public policy reasons. In the event that the Group was unable to enforce these contractual arrangements, the Group would not be able to exert effective control over the affected VIEs. Consequently, such VIE's results of operations, assets and liabilities would not be included in the Group's consolidated financial statements. If such were the case, the Group's cash flows, financial position and operating performance would be severely adversely affected. The Group's contractual arrangements with respect to its consolidated VIEs are approved and in place. The Group's management believes that such contracts are enforceable, and considers the possibility remote that PRC regulatory authorities with jurisdiction over the Group's operations and contractual relationships would find the contracts to be unenforceable.

2. Summary of significant accounting policies

(a) Basis of presentation and use of estimates

The consolidated financial statements of the Group have been prepared in accordance with accounting principles generally accepted in the United States of America (''U.S. GAAP''). Significant accounting policies followed by the Group in the preparation of the accompanying consolidated financial statements are summarized below.

The Restructuring was accounted for at historical costs. The assets and liabilities of Shenzhen Xunlei are consolidated in the Company's financial statements at carryover basis.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the accompanying consolidated financial statements and related disclosures. Actual results could differ materially from these estimates. Significant accounting estimates reflected in the Group's consolidated financial statements mainly include allowance for doubtful accounts, valuation allowance of deferred tax assets, impairment assessment of goodwill and impairment assessment of long-lived assets. In addition, the Group uses assumptions in a valuation model to estimate the fair value of share options granted, warrants issued and underlying common shares.

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.

(b) Consolidation

The consolidated financial statements include the financial statements of the Company, its subsidiaries, VIE for which the Company is the primary beneficiary and its subsidiaries. All significant transactions and balances among the Company, its subsidiaries, VIE and its subsidiaries 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 power, or has the power to appoint or remove the majority of the members of the board of directors to cast majority of votes at meetings of the board of directors or to govern the financial and operating policies of the investee under a statute or agreement among the shareholders or equity holders.

An entity is considered to be a VIE if the entity's equity holders do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties.

The Group consolidates entities for which the Company is the primary beneficiary if the entity's other equity holders do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties.

In determining whether the Company or its subsidiary is the primary beneficiary of a VIE, the Company considered whether it has the power to direct activities that are significant to the VIE's economic performance, including the power to appoint senior management, right to direct company strategy, power to approve capital expenditure budgets, and power to establish and manage ordinary business operation procedures and internal regulations and systems.

Management has evaluated the contractual arrangements among Giganology Shenzhen, Shenzhen Xunlei and its shareholders and concluded that Giganology Shenzhen receives all of the economic benefits and absorbs all of the expected losses from Shenzhen Xunlei and has the power to direct the aforementioned activities that are significant to Shenzhen Xunlei's economic performance, and is the primary beneficiary of Shenzhen Xunlei. Therefore, Shenzhen Xunlei and its subsidiaries' results of operation, assets and liabilities have been included in the Group's consolidated financial statements. Management monitors the regulatory risk associated with these contractual arrangements. See note 27 for further discussion.

2. Summary of significant accounting policies (Continued)

(b) Consolidation (Continued)

Non-controlling interests represent the portion of the net assets of a subsidiary attributable to interests that are not owned by the Company. The non-controlling interests are presented in the consolidated balance sheets, separately from equity attributable to the shareholders of the Company. Non-controlling interests in the results of the Group is presented on the face of the consolidated statements of comprehensive income as an allocation of the total income or loss for the year between non-controlling shareholders and the shareholders of the Company.

(c) Discontinued operations

When disposals that represent a strategic shift that has (or will have) a major effect on the entity's results and operations would qualify as discontinued operations. Discontinued operations are reported when a component of an entity comprising operations and cash flows that can be clearly distinguished, operationally and for financial reporting purposes, from the rest of the entity is classified as held for disposal or has been disposed of, if the component either (1) represents a strategic shift or (2) have a major impact on an entity's financial results and operations. Examples include a disposal of a major geographical location, line of business, or other significant part of the entity, or disposal of a major equity method investment. In the consolidated statement of comprehensive income, result from discontinued operations is reported separately from the income and expenses from continuing operations and prior periods are presented on a comparative basis. Cash flows for discontinuing operations are presented separately in note 3. In order to present the financial effects of the continuing operations and discontinued operations, revenues and expenses arising from intra-group transactions are eliminated except for those revenues and expenses that are considered to continue after the disposal of the discontinued operations.

Non-current assets or disposal groups are classified as held for sale assets when the carrying amount is to be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset or disposal group must be available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such assets or disposal groups and the sale must be highly probable. Non-current assets classified as held for sale and disposal groups are measured at the lower of their carrying or fair value less costs to sell.

(d) Foreign currency translation

The Company's reporting and functional currency is the United States Dollar (''USD''). Xunlei BVI and Xunlei HK's functional currency is the USD. The functional currency of other subsidiaries, VIE and its subsidiaries located in the PRC is the Renminbi (''RMB''), which is their respective local currency. Transactions denominated in foreign currencies are remeasured into the functional currency at the exchange rates prevailing on the transaction dates. Financial assets and liabilities denominated in foreign currencies are remeasured into the functional currency using the applicable exchange rates prevailing at the balance sheet date. The resulting exchange gains and losses from foreign currency transactions are included in other income (loss) within the consolidated statements of comprehensive income.

The Company uses the monthly average exchange rate for the year and the exchange rates at the balance sheet date to translate the operating results and financial position, respectively, of its subsidiaries whose functional currency is other than the USD. The resulting translation differences are recorded in cumulated translation adjustments, a component of shareholders' equity.

The exchange rate used is the one released by Chinese State Administration of Foreign Exchange.

2. Summary of significant accounting policies (Continued)

(e) Cash and cash equivalents and restricted cash

Cash and cash equivalents include cash on hand, cash in bank and time deposits placed with banks or other financial institutions, which have original maturities of three months or less and are readily convertible to known amounts of cash.

Cash that is restricted as to withdrawal or for use or pledged as security is reported separately on the face of the consolidated balance sheets, and is included in the total cash, cash equivalents, and restricted cash in the consolidated statements of cash flows. The Group's restricted cash is substantially cash balance on deposit required by its business partners, commercial banks and the court.

(f) Short-term investments

Short-term investments include deposits placed with banks with original maturities of more than three months but within one year and investments in financial instruments with a variable interest rate indexed to the performance of underlying assets. In accordance with *ASC 825 Financial Instruments* , for investments in financial instruments with a variable interest rate indexed to 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 the fair value are reflected in the consolidated statements of comprehensive income. Interest generated from short term investments are recorded when interest payments are received at the maturity date. It is recorded as "Other income, net" on the statement of comprehensive income and measured based on the actual amount of interest the Group received.

(g) Fair value of financial instruments

The Group's financial instruments consist principally of cash and cash equivalents, short-term investments, accounts receivable, other receivables, amounts due from/(to) related parties, accounts payable, and other payables. The carrying value of these balances, with the exception of short-term investments (see note 2 (f)), approximates their fair value due to the current and short term nature of these balances.

(h) Accounts receivable, net

Accounts receivable are presented net of allowance for doubtful accounts. The Group evaluates the creditworthiness of each customer at the time when services are rendered and continuously monitor the recoverability of the accounts receivable.

The Group uses specific identification method 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 allowances might be required. The allowance for doubtful accounts is based on the best facts available and is re-evaluated and adjusted on a regular basis as additional information is received.

Some of the factors that the Group considers in determining whether a bad debt allowance is recorded on an individual customer are:

1) the customer's past payment history and whether it fails to comply with its payment schedule;

2) whether the customer is in financial difficulty due to economic or legal factors;

3) a significant dispute with the customer has occurred;

4) the objective evidence which indicates non-collectability of the accounts receivable.

2. Summary of significant accounting policies (Continued)

(h) Accounts receivable, net (Continued)

The allowances provided for accounts receivable from continuing operations as of December 31, 2018 and 2019 were USD 7,709,000 and USD 7,604,000, respectively.

If the Group determines that an allowance is needed for a customer, the Group will discontinue business with it unless they start to resume payment. The accounts receivable is written-off when the Group ceases to pursue collection. Any changes in the estimates may cause the Group's operating results to fluctuate.

(i) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined using actual cost on a weighted average basis. Net realizable value is the amount that can be realized from the sale of the inventory in the normal course of business after allowing for the costs of realization.

(j) Long-term investments

The Group holds investments in privately held companies. Prior to adopting ASU 2016-01, *Financial Instruments* on January 1, 2018, for those investments over which the Group does not have significant influence and without readily determined fair value, the Group carried the investment at cost and only adjusted for other-than-temporary declined in fair value and distribution of earnings that exceed the Group’s share of earnings.

On January 1, 2018, the Group adopted ASU 2016-01, *Financial Instruments* , and started to measure long-term equity investments, other than equity method investments, at fair value through earnings. For those investments over which the Group does not have significant influence and without readily determinable fair value, the Group elected to record these investments at cost, less impairment, and plus or minus subsequent adjustments for observable price changes. Under this measurement alternative, changes in the carrying value of equity investments will be required to be made whenever there are observable price changes in orderly transactions for the identical or similar investment of the same issuer.

Management regularly evaluates the impairment of long-term equity investments based on performance and financial position of the investee as well as other evidence of market value. Such evaluation includes, but not limited to, reviewing the investee’s cash position, recent financing, projected and historical financial performance, cash flow forecasts and financing needs. An impairment loss recognised equal to the excess of the investment costs over its fair value at the end of each reporting period for which the assessment is made. The fair value would then become the new cost basis of investment.

During the years ended December 31, 2017, 2018 and 2019 the Group recognized an impairment of USD 0.6 million, USD 7.79 million and USD 19.83 million, respectively. During the years ended December 31, 2017, 2018 and 2019, the Group recognized share of loss of equity investees of USD 1.3 million , USD 0.3 million and nil from Shenzhen Mojinggou Information Services Co., Ltd. (previously known as Xunlei Big Data Information Service Co., Ltd.) (“Big Data”) and Zhuhai Qianyou Technology, Co., Ltd. (“Zhuhai Qianyou”) respectively.

2. Summary of significant accounting policies (Continued)

(k) 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 asset at the end of the estimated useful life as a percentage of the original cost. If the Group commits to a plan to abandon a long-lived asset before the end of its previous estimated useful life, depreciation shall be revised to reflect a shortened useful life.

	Estimated useful lives	Residual rate
Servers and network equipment	3-5 years	5%
Computer equipment	5 years	5%
Furniture, fittings and office equipment	3-5 years	5%
Motor vehicles	5 years	5%
Leasehold improvements	Shorter of lease term or 3 years	—

Repair and maintenance costs are expensed as incurred. Expenditures that substantially increase an asset's useful life are capitalized. Upon sale or disposal, 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 loss. The cost and related accumulated depreciation are removed from the balance sheets.

(l) Goodwill

Goodwill represents the excess of the purchase consideration over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed from the acquired entity as a result of the Company's acquisitions of interests in its subsidiaries and consolidated VIEs. Goodwill is not amortized but is tested for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that it might be impaired. The Company first assesses qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. In the qualitative assessment, the Company considers primary factors such as industry and market considerations, overall financial performance of the reporting unit, and other specific information related to the operations. Based on the qualitative assessment, if it is more likely than not that the fair value of each reporting unit is less than the carrying amount, the quantitative impairment test is performed.

In performing the two-step quantitative impairment test, the first step compares the fair values of each reporting unit to its carrying amount, including goodwill. If the fair value of each reporting unit exceeds its carrying amount, goodwill is not considered to be 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 goodwill to the carrying value of a reporting unit's 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 the purposes of evaluating goodwill impairment and does not result in an entry to adjust the value of any assets or liabilities. Application of a goodwill impairment test requires significant management judgment, including the identification of reporting units, allocation of assets, liabilities and goodwill to reporting units, and determination of the fair value of each reporting unit.

No goodwill impairment losses were recognized for the years ended December 31, 2017, 2018 and 2019 based on the impairment test performed by the Group.

2. Summary of significant accounting policies (Continued)

(m) Intangible assets

Intangible assets, which include computer software, internal use software development costs, online game licenses, domain names, land use rights and audio-visual license, are carried at cost less accumulated amortization and impairment loss, if any. Exclusive game licenses are amortized using the straight-line method over their licensing period of three years. Computer software and domain name are amortized using the straight-line method over their estimated useful life of five years. Land use right is amortized using the straight-line method over their estimated useful life of thirty years. Audio-visual license acquired is amortized using the straight-line method over its estimated useful life of nine years.

(n) Impairment of long-lived assets

For other long-lived assets, the Group evaluates its long-lived assets for impairment whenever events or changes in circumstances 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 be received from use of the assets and their eventual disposition at the lowest level of identifiable cash flows. 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. If the Group identifies an impairment, the carrying value of the asset will be reduced to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values.

(o) Commitments and contingencies

In the normal course of business, the Group is subject to contingencies, such as legal proceedings and claims arising out of its business, that cover a wide range of matters. Liabilities for such contingencies are recorded when it is probable that a liability has been incurred and the amount of the assessment can be reasonably estimated. In regards to legal cost, the Group recorded such costs as incurred.

Certain conditions may exist as of the date the financial statements are issued, which may result in a loss to the Group, but which will only be resolved when one or more future events occur or fail to occur. The Group's management and its legal counsel assess such contingent liabilities, and such assessment inherently involves an exercise of judgment. In assessing loss contingencies related to legal proceedings that are pending against the Group or unasserted claims that may result in such proceedings, the Group, in consultation with its legal counsel, evaluates the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought therein.

If the assessment of a contingency indicates that it is probable that a material loss has been incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in the Group's financial statements. If the assessment indicates that a potentially material loss contingency is not probable, but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss, if determinable and material, would be disclosed.

2. Summary of significant accounting policies (Continued)

(p) Operating leases

On January 1, 2019, the Group adopted *ASC Topic 842 Leases ("ASC 842")* to revise the accounting for leases. The adoption of new lease standard requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet.

Lessees shall follow the requirements to classify most leases as either financing or operating using principles similar to previous lease accounting. In the statement of comprehensive income, a lessee shall present both of the following: a) For finance leases, the interest expense on the lease liability and amortization of the right-of-use asset are not required to be presented as separate line items and shall be presented in a manner consistent with how the entity presents other interest expense and depreciation or amortization of similar assets, respectively; b) For operating leases, lease expense shall be included in the lessee's income from continuing operations.

The Group adopted ASC 842 on a modified retrospective basis and did not restate comparative periods. The adoption of ASC 842 resulted in the recognition of right-of-use asset and related lease liabilities of approximately USD11.8 million and USD11.4 million, respectively, which were reported on the consolidated balance sheet as of January 1, 2019. The Group have elected the short-term lease exemption for all leases with a lease term of 12 months. Payments associated with short-term leases are recognized on a straight-line basis as an expense in profit or loss.

The standard also requires a lessee to recognize a single lease cost related to operating lease, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. The net profit after tax had not to be materially impacted as a result of adopting the new rules.

With the adoption of ASC 842, The Group assesses, at contract inception, whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. In determining the appropriate discount rate to use in calculating the present value of contractual lease payments, Management regularly evaluates the lessee's incremental borrowing rate as of January 1, 2019, as the rate implicit in the lease cannot be readily determined.

See note 11 for additional disclosures on operating lease arrangements.

(q) Revenue recognition

The Group adopted ASC Topic 606 *Revenue from Contracts with Customer* ("ASC 606"), from January 1, 2018, using the modified retrospective method. Revenues for the years ended December 31, 2018 and 2019 were presented under ASC 606, and revenues for the year ended December 31, 2017 were not adjusted and continue to be presented under ASC Topic 605, *Revenue Recognition* . The core principle of the ASC 606 is an entity should recognize revenues to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Adoption had no significant impact on the consolidated financial statements. Significant accounting policy and relevant disclosure have been updated hereinafter.

2. Summary of significant accounting policies (Continued)

(q) Revenue recognition (Continued)

Revenue is recognized when or as the control of the services or goods is transferred to the customer. Depending on the terms of the contract and the laws that apply to the contract, control of the services and goods may be transferred over time or at a point in time.

A contract liability is the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. Contract costs includes incremental costs of obtaining a contract and costs to fulfil a contract.

The Group generates revenues from various streams. Net revenues presented in the consolidated statements of loss represent revenues from service and product sales net off sales discount, value-added tax and related surcharges. The Group operates a prepaid virtual items system, under which, prepaid virtual items at fixed face value are sold to third parties. Virtual items purchased can be used to subscribe for membership or purchase of virtual items in online games and live streaming, as discussed below. Virtual items sold but not yet consumed by the users are recorded as "Contract liabilites" and upon consumption, they are recognized as membership subscription, online game revenue and live streaming revenue according to the respective prescribed revenue recognition policies addressed below.

The Group's revenue recognition policies effective on the adoption date of ASC 606 are as follows:

(I) Subscription revenues

The Group operates a VIP membership program where VIP members can have access to high speed online acceleration services, online streaming and other access privileges. The membership fee is time-based and is collected up-front from subscribers except in the cases when they elect to pay via their mobile operators. The membership fee is collected when the subscribers pay for the monthly phone bills. The terms of time-based subscriptions range from one month to twelve months, with the subscribers having the option to renew the contract. The receipt of subscription fee is initially recorded as contract liabilities. The Group satisfies its various performance obligations by providing services throughout the subscription period and revenue is recognized rateably over the period of subscription as services are rendered. Unrecognized portion beyond 12 months from balance sheet date is classified as a long-term liability. The Group evaluated the principal versus agent criteria and determined that the Group is the principal in the transaction and accordingly record revenue on a gross basis. In determining whether to report revenues gross for the amount of subscription revenue, the Group assesses whether it maintains the principal relationship with the VIP members, whether it bears the credit risk and whether it establishes prices for the end users. Service fees levied by online system, fixed phone line and mobile payment channels (''Payment handling charges'') are recorded as the cost of revenues in the same period as the revenue for the membership fee is recognized.

(II) Advertising revenues

Advertising revenues are derived principally from arrangements where the customers pay to place their advertisements on the Group's platform over a particular period of time. It includes multiple performance obligations, primarily for advertisements to be displayed in different spots at different times, placed under different formats including but are not limited to videos, banners, links, logos and buttons. Advertisements on the Group's platform 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. The Group enters into advertising contracts with third party advertising agencies that represents advertisers, as well as directly with advertisers. A typical contract term would range from a few days 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.

2. Summary of significant accounting policies (Continued)

(q) Revenue recognition (Continued)

(II) Advertising revenues (Continued)

Where the Group's customers purchase multiple advertising spaces with different display periods in the same contract, the Group allocates the total consideration to the various advertising elements based on their relative fair values and recognizes revenue for the different elements over their respective display periods. The Group determines the fair values of different advertising elements based on the prices charged when these elements were sold on a standalone basis. The Group recognizes revenue on the elements delivered and defers the recognition of revenue for the fair value of the undelivered elements until the remaining obligations have been satisfied. Where all of the elements within an arrangement are delivered uniformly over the agreement period, the revenue is recognized on a straight line basis over the contract period.

Transactions with third party advertising agencies

For contracts entered into with third party advertising agencies, the third party advertising agencies will in turn sell the advertising services to advertisers. Revenue is recognized ratably over the contract period of display.

The Group provides sales incentives in the forms of discounts and rebates to third party advertising agencies based on purchase volume. As the advertising agencies are viewed as the customers in these transactions, revenue is recognized based on the price charged to the agencies, net of sales incentives provided to the agencies. Sales incentives are estimated and recorded at the time of revenue recognition based on the contracted rebate rates and estimated sales volume based on historical experience.

Transactions with third party advertising platforms

Xunlei began to cooperate with third party advertising platforms such as Guangdiantong and Baidu since the fourth quarter in 2015. In this business model, advertisers put their content on third party advertising platforms and platforms will dispatch the advertising content to Xunlei's platforms by certain analysis systematically. As the third party advertising platforms are viewed as customers in these transactions, revenue is recognized monthly based on the data publicized on third party platforms and the price charged to these advertising platforms.

Transactions with advertisers

The Group also enters into advertisement contracts directly with advertisers. Under these contracts, similar to transactions with third party advertising agencies, the Group recognizes revenue ratably over the contract period of display. The terms and conditions, including price, are fixed according to the contract between the Group and the advertisers. The Group also performs credit assessment of all advertisers prior to entering into contracts. Revenue is recognized based on the amount charged to the advertisers, net of discounts.

The Group has estimated and recorded sales rebates provided to the agencies and advertisers of USD 440,000, USD 394,000 and nil for the years ended December 31, 2017, 2018 and 2019, respectively.

(III) Live streaming revenue

The Group operates live streaming platform and users can purchase virtual gifts which they can then send to performers in the live streaming platform. The consumption of each virtual gift sold to users is considered as the performance obligation. The Group does not have further obligations to the user after the virtual gifts are consumed immediately or after the stated period for time-based items. The revenue from consumable item is recognized at fair value of the virtual items, as Xunlei is the principal in this arrangement, based on actual consumption of virtual items by the paying users. The revenue from time-based item is recognized over the duration of stated period of the item.

2. Summary of significant accounting policies (Continued)

(q) Revenue recognition (Continued)

(IV) Other internet value-added services

(i) Revenues from cloud computing

As part of the Group's cloud computing business, the Group engages in sale of OneThing Cloud. OneThing Cloud is a personal cloud hardware device that allows users to share their idle bandwidth with the Group, in exchange for LinkTokens. LinkTokens are not convertible into cash but they can be used to redeem products and services offered in the LinkTokens Mall. LinkTokens represent an obligation to deliver future services by the operator of the LinkToken program.

Prior to April 1, 2019, the bandwidth shared by the users in exchange for LinkTokens is an identifiable benefit which the Group can reasonably estimate fair value. The benefit that the Group receives from user's contribution of bandwidth is independent from OneThing Cloud that the Group sells to users.

In April 2019, the Group transferred the operation of LinkTokens, including the issuance and redemption obligation of LinkTokens, as well as the LinkTokens Mall to a third party, Beijing LinkChain Co., Ltd. ("Beijing LinkChain"). Upon completion of the transfer, users could continue to share their idle bandwidth with the Group in exchange for the LinkTokens issued by Hainan LinkChain Networking Technology Co., Ltd. ("Hainan LinkChain"), a wholly-owned subsidiary of Beijing LinkChain, (note 8 and 21). In addition, the Group is obligated to pay to Hainan LinkChain a pre-determined amounts per active user of OneThing Cloud who shared their idle bandwidth with the Group.

The Group primarily sells OneThing Cloud to individuals through online e-commerce platforms before 2019 and corporate customers starting from 2019. The performance obligation is satisfied when the item is dispatched to the end customers.

The core business concept of cloud computing is to collect idle uplink capacity from individuals with reward, and deliver those collected computing resources to online video streaming platforms. On a monthly basis, the Group records the bandwidth it delivers and recognizes revenue from these online video streamers under contractual rates applied (price per GB of bandwidth multiplies total GBs of bandwidth per month).

Revenue is recognized net of return allowances when the products are delivered and title passes to customers. Return allowances, which reduce net revenues, are estimated based on historical experiences. Product warranties are estimated and recognized at the time the Company recognizes revenue. The warranty period is 1 year. The Company accrues warranty liabilities at the time of sale, based on historical and projected incident rates and expected future warranty costs.

(ii) Online game revenues

Online games web games, mobile games and PC 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. The utilization of the virtual item is considered performance obligation by the Group and revenue is allocated to each performance obligation on a relative stand-alone selling price basis, which are determined based on the prices charged to customers. 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 game.

Pursuant to contracts signed between the Group and game developers, revenue from the sale of virtual items are shared based on a pre-agreed ratio for each game. The Group enters into non-exclusive contracts with game developers.

2. Summary of significant accounting policies (Continued)

(q) Revenue recognition (Continued)

(IV) Other internet value-added services (Continued)

(ii) Online game revenues (Continued)

Non-exclusive game licensed contracts

The games under non-exclusive licensed contracts are maintained, hosted and updated by the game developers. The Group mainly provides access to the platform and limited after-sale services to the game players. The determination of whether to record these revenues using the gross or net method is based on an assessment of various factors; the primary factors are whether the Group acts as the principal in offering services to the game players or as agent in the transaction, and the specific requirements of each contract. The Group determined that for non-exclusive game licensed arrangements, the third party game developers are the principal given that the game developers design and develop the game services offered, have reasonable latitude to establish prices of game virtual items, and are responsible for maintaining and upgrading the game content and virtual items. Accordingly, the Group records online game revenue, net of the portion remitted to the game developers.

Given that online games are managed and administered by the game developers for non-exclusive licensed games, the Group does not have access to the data on the consumption details and the types of virtual items purchased by the game players. The Group has adopted a policy to recognize revenues relating to both consumable and perpetual items over the shorter of 1) estimated lives of the games and 2) the estimated lives of the user relationship with the Group, which were approximately one to ten months for the periods presented.

Adjustments arising from the changes of estimated lives of virtual items are applied prospectively as such changes are resulted from new information indicating a change in the game player behavioral patterns.

Exclusive licensing game contracts

For exclusive licensing contracts with game developers, the games are maintained and hosted by the Group. Accordingly, the Group is determined to be the principal, the Group records online game revenue on a gross basis, with the amount remitted to the game developers reported as cost of revenue. Payment handling charges are recognized as cost of revenues when the related revenues are recognized.

For exclusive licensed games which are maintained on the Group’s server, the Group has access to the data on the consumption details and types of virtual items purchased by the game players. The Group does not maintain information on consumption details of virtual items, and only have limited information related to the frequency of log-ons. Given that a substantial portion of the virtual items purchased by the game players in exclusive licensed games are perpetual items, management determined that it would be most appropriate to recognize revenue over the shorter of 1) estimated lives of the games and 2) the estimated lives of the user relationship with the Group, which were approximately one to six months for the periods presented. Revenues related to consumable items are recognized immediately upon consumption.

2. Summary of significant accounting policies (Continued)

(q) Revenue recognition (Continued)

(IV) Other internet value-added services (Continued)

(ii) Online game revenues (Continued)

Exclusive licensing game contracts (Continued)

Game players can purchase prepaid virtual items which can be used to purchase virtual items via online channels. The Group incurs service fees levied by those payment channels, and such payment expenses are recorded as the cost of revenues when the related revenues are recognized.

For non-exclusive games and exclusive licensed games, the Group estimates the life of virtual items to be the shorter of the estimated lives of the games and the estimated lives of the user relationship. The estimated user relationship period is based on data collected from those users who have purchased virtual items. To estimate the life of the user relationship, the Group maintains a software system that captures the following information for each user: the date of first log-on, the date the user ceases to play the game and frequency of log-ons. The Group estimates the life of the user relationship to be the weighted average period from the first purchase of a virtual item to the date the user ceases to play the game based on the frequency of log-ons.

To estimate the life of the games, the Group considers both games that they operate as well as games in the market that are of a similar nature. The Group categorizes these games by their nature, such as simulation games, role playing games and others, which appeal to players belonging to different demographics. The Group estimates that the life of each group of the games to be the average period from the date of launch for such games to the date the games are expected to be removed from the website or terminated altogether. When the Group launches a new game, they estimate the life of the game and user relationship based on lives of other similar games in the market until the new game establishes its own history. The Group also considers the game's profile, attributes, target audience, and its appeal to players of different demographic groups in estimating the user relationship period.

The consideration of user relationship 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. Adjustments arising from the changes of estimated lives of virtual items are applied prospectively as such changes are resulted from new information indicating a change in the game player behavioral patterns. Any changes in the estimates of lives of virtual items may result in the Group's revenues being recognized on a basis different from prior periods and may cause the Group's operating result to fluctuate. The Group periodically assesses the estimated lives of the virtual items and any changes from prior estimates are accounted for prospectively. Any adjustments arising from changes in user relationship 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* .

The Group entered into a legally binding agreement to sell its web game business in December 2017. Web game revenue recognized from discontinued operations was USD 11,428,000, USD 656,000 and nil for the years ended December 31, 2017, 2018 and 2019, respectively.

2. Summary of significant accounting policies (Continued)

(r) Sales and marketing expenses

Sales and marketing expenses comprise primarily of salary, benefits of sales and marketing personnel and external advertising and market promotion expenses. The external advertising and market promotion expenses from continuing operations amounted to approximately USD 10,345,000, USD 22,935,000 and USD 20,974,000 for the years ended December 31, 2017, 2018 and 2019, respectively.

Shipping and handling fee is recorded in sales and marketing expenses.

(s) General and administrative expenses

General and administrative expenses consist primarily of salary and benefits, professional service fees, legal expenses and other administrative expenses.

(t) Research and development costs

The Group incurred research and development costs to develop its downloading software and bandwidth crowdsourcing technologies to enhance the competitive advantages of the Group’s key products, such as Xunlei Accelerator and cloud computing services. Costs incurred during the research phase are expensed as incurred. Costs incurred for the development of the downloading software and bandwidth crowdsourcing technologies prior to the establishment of technological feasibility, which is when a working model is available, are expensed when incurred. The development costs qualified for capitalization have been immaterial for the periods presented.

In addition, the Group incurred other research and development costs in relation to software used to support its operations. Any development costs qualified for capitalization were immaterial for the periods presented.

(u) Taxation and uncertain tax positions

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements’ carrying amounts of existing assets and liabilities and their respective tax bases and tax loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which the difference is expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the consolidated statement of operations in the period that includes the enactment date. A valuation allowance is provided to reduce the carrying amount of deferred tax assets if it is considered more likely than not that some portion, or all, of the deferred tax assets will not be realized. The estimation of future taxable income involves significant judgement and estimates. Based on management's estimated future taxable income, management concluded that it is more likely than not that the net operating losses carried forward can be utilized prior to their respective expiration dates. The Group adopted the guidance regarding uncertain tax positions and evaluated its open tax positions that exist in each jurisdiction for each reporting period. If an uncertain tax position is taken or expected to be taken in a tax return, the tax benefit from that uncertain position is recognized in the Group’s consolidated financial statements if it is more likely than not that the position is sustainable upon examination by the relevant taxing authority. The Group did not have any significant uncertain tax position and there was no effect on its financial condition or results of operations as a result of implementing the new guidance. The Group recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense, if any.

2. Summary of significant accounting policies (Continued)

(u) Taxation and uncertain tax positions (Continued)

Transition from PRC Business Tax to PRC Value Added Tax

VAT payable on goods sold or taxable labor services provided by a general VAT taxpayer for a taxable period is the net balance of the output VAT for the period after crediting the input VAT for the period. In addition to the product revenues currently subject to VAT at a rate of 13% (16% before April 1, 2019 and 17% before May 1, 2018), the Group's advertising revenues, subscription revenue, online game revenue, revenue from cloud computing services and live streaming revenue are now subject to VAT at a rate of 6%.

According to the policy of the PRC State Tax Bureau, starting from April 1, 2019 enterprises that engage in postal services, telecommunication services and consumer services are entitled to claim 110% of the input tax incurred as tax credit in determining VAT payable.

(v) Retirement benefits

Full-time employees of the Company's subsidiaries, consolidated VIE and its subsidiaries in the PRC participate in a government mandated multi-employer defined contribution plan pursuant to which certain pension benefits, medical care, unemployment insurance, employee housing fund and other welfare benefits are provided to employees. Chinese labor regulations require that the subsidiaries and VIEs of the Company make contributions to the government for these benefits based on certain percentages of the employees' salaries. The Group has no legal obligation for the benefits beyond the contributions made. The total amounts from continuing operations for such employee benefits, which are expensed as incurred, were USD 10,123,000, USD 12,501,000 and USD 12,337,000 for the years ended December 31, 2017, 2018 and 2019, respectively.

(w) Share-based compensation

The Group measures share-based compensation at the grant date based on the fair value of the award determined using the Black-Scholes option pricing model. As the Group has granted share options and restricted shares with service-only condition, the Group elected to recognize compensation costs net of estimated forfeitures on a straight line basis over the requisite service period, which is generally the same as the vesting period. The amount of compensation cost recognized at any date is at least equal to the portion of the grant-date value of the award that is vested at that date.

(x) Government subsidies

The Group receives subsidies from the local PRC government for general use or purchase of equipment. General-use subsidies which are not subject to any conditions or specific use requirements are recorded as subsidy income in the consolidated statements of operations. Subsidies for purchase of equipment are recorded as deferred government grant when received, and are recorded as other income over the expected useful life of the assets after the related equipment has been purchased.

2. Summary of significant accounting policies (Continued)

(y) Segment reporting

The Group's Chief Executive Officer has been identified as the chief operating decision maker, who reviews consolidated operating results of the Group when making decisions about allocating resources and assessing performance of the Group as a whole. The Group has internal reporting of revenue, cost and expenses that does not distinguish between segments, and reports costs and expense by nature as a whole. The Group does not distinguish between markets or segments for the purpose of internal reporting. Management has determined that the Group operates and manages its business as a single segment which is the operation of its online media platform, over 99% of revenues of the Group were derived from mainland China.

An analysis of the different types of revenues for the years ended December 31, 2017, 2018 and 2019 are summarized as follows:

Revenue from continuing operations	**Years ended December 31,**		
(In thousands)	**2017**	**2018**	**2019**
Subscription revenue	84,956	81,877	81,532
Product revenue (note a)	32,894	54,604	8,269
Advertising revenue	22,484	27,781	15,643
Live streaming revenue	17,977	31,031	26,920
Cloud computing service and other internet value-added services (note b)	43,600	36,839	48,903
Total	201,911	232,132	181,267

Note a: Product revenue comprise sales of OneThing Cloud devices and hard disks.

Note b: Other internet value-added services mainly comprise provision of technical services and online game.

(z) Net loss per share

Net basic loss per share is computed by dividing net loss attributable to holders of common shares by the weighted-average number of common shares outstanding during the year using the two class method. Using the two class method, net loss is allocated between common shares and other participating securities based on their participating rights.

Net diluted loss per share is calculated by dividing net loss attributable to common shareholders as adjusted for the effect of dilutive common equivalent shares, if any, by the weighted-average number of common and dilutive common equivalents shares outstanding during the year. Dilutive equivalent shares are excluded from the computation of diluted loss per share if their effects would be anti-dilutive. Common share equivalents consist of the common shares issuable upon the conversion of the stock options, using the treasury stock method.

(aa) Comprehensive income

Comprehensive income is defined as the change in equity of a Group during the period from transactions and other events and circumstances excluding transactions resulting from investments from shareholders and distributions to shareholders. Accumulated other comprehensive income, as presented on the accompanying consolidated balance sheets, consists of cumulative translation adjustment.

2. Summary of significant accounting policies (Continued)

(bb) Profit appropriation and statutory reserves

The Group's subsidiaries, consolidated VIE and its subsidiaries incorporated in the PRC are required on an annual basis to make appropriations of retained earnings set at certain percentage of after-tax profit determined in accordance with PRC accounting standards and regulations ("PRC GAAP"). Appropriation to the statutory general reserve should be at least 10% of the after-tax net income determined in accordance with the legal requirements in the PRC until the reserve is equal to 50% of the entities' registered capital. The Group is not required to make appropriation to other reserve funds and the Group does not have any intentions to make appropriations to any other reserve funds.

The general reserve fund can only be used for specific purposes, such as setting off the accumulated losses, enterprise expansion or increasing the registered capital. Appropriations to the general reserve funds are classified in the consolidated balance sheets as statutory reserves.

There are no legal requirements in the PRC to fund these reserves by transfer of cash to restricted accounts, and the Group does not do so.

The following table presents the balances of registered capital, additional paid-in-capital and statutory reserves of entities within the Group incorporated in China as of December 31, 2018 and 2019 for the Group's reporting purpose in China as determined under generally accepted accounting principles in China:

(In thousands)	December 31, 2018	December 31, 2019
Paid-in capital	139,140	240,625
Additional paid-in capital	161	161
Statutory reserves	5,132	5,132
Total	144,433	245,918

Relevant laws and regulations permit payments of dividends by the PRC subsidiaries and affiliated companies only out of their retained earnings, if any, as determined in accordance with respective accounting standards and regulations. Accordingly, the above balances are not allowed to be transferred to the Company in terms of cash dividends, loans or advances.

(cc) Dividends

Dividends are recognized when declared. No dividends were declared for the years ended December 31, 2017, 2018 and 2019. 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.

2. Summary of significant accounting policies (Continued)

(dd) Recent accounting pronouncements

Simplifying the Test for Goodwill Impairment . In January 2017, the Financial Accounting Board ("FASB") issued issued ASU 2017-04 *Simplifying the Test for Goodwill Impairment.* The guidance removes Step 2 of goodwill impairment tests, 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 is to 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 Group does not expect the adoption to have a material impact on its consolidated financial statements.

Financial instruments—Credit losses . In June 2016, the FASB issued ASU 2016-13 , *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will result in more timely recognition of credit losses. ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019. In November 2019, the FASB issued ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses* . ASU 2019-11 requires entities to include expected recoveries of the amortized cost basis previously written off or expected to be written off in the valuation account for purchased financial assets with credit deterioration. In addition, the amendments in this update clarify and improve various aspects of the guidance for ASU 2016-13. The Group does not expect the adoption to have a material impact on its consolidated financial statements.

I *ncome Tax (Topic 740): Simplifying the Accounting for Income Taxes* . In December 2019, the FASB issued ASU 2019-12, Income Tax (Topic 740): Simplifying the Accounting for Income Taxes. ASU 2019-12 removes certain exceptions for recognizing deferred taxes for equity method investments, performing intraperiod allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for goodwill and allocating taxes to members of a consolidated group. ASU 2019-12 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company is currently evaluating the effect of the disclosure requirements of ASU 2019-12 will have on its consolidated financial statements and does not expect the impact to have a material effect on its consolidated financial statements.

3. Discontinued operations

In December 2017, the Company signed a contract ("Disposal Agreement") to divest its web game business, a major line of the Group's online game business, to Shenzhen Xunyi Network Technology Corp., Ltd. ("Buyer"), a company operated by a few former core members of Xunlei's web game business. The total sales price was RMB 4,180,000 (equivalent to approximately USD 640,000). The disposal is due to a shift of strategy to allow the Group better manage its internal resources, including internal traffic referral and corporate allocation. The disposal was completed in January 2018 and related gain of USD 1.4 million was recognized.

As part of the disposal and according to the Disposal Agreement, Xunlei agreed to assist the Buyer to collect and pay certain receivables and payables of the web game business for a period of no longer than one year after the completion of disposal. In addition, the Buyer agreed to enter into business cooperation services with Xunlei, including purchase of advertising services in the next 24 months, after signing the Disposal Agreement, under a separate negotiated term. Relevant business cooperation agreements have been signed in January 2018 at market term.

3. Discontinued operations (Continued)

Results of the discontinued operation

USD (In thousands)	2017	2018
Revenues, net of rebates and discounts	11,428	656
Business taxes and surcharges	(27)	(1)
Net revenues	11,401	655
Cost of revenues	(522)	(16)
Gross profit	**10,879**	**639**
Operating expenses		
Research and development expenses	(2,217)	(419)
Sales and marketing expenses	(1,025)	(63)
General and administrative expenses	(99)	(18)
Total operating expenses	**(3,341)**	**(500)**
Operating income	7,538	139
Gain on disposal of web game	—	1,394
Income tax expenses	(1,131)	(230)
Income from discontinued operations	**6,407**	**1,303**

Cash flows generated from the discontinued operation

USD (In thousands)	2017	2018
Net cash generated from operating activities	5,585	1,065
Net cash used in investing activities	(13)	—
Net cash flow for the year	**5,572**	**1,065**

4. Cash and cash equivalents

Cash and cash equivalents represent cash on hand, cash held at bank, and time deposits placed with banks or other financial institutions, which have original maturities of three months or less. Cash on hand and cash held at bank balance as of December 31, 2018 and 2019 primarily consist of the following currencies:

	December 31, 2018		December 31, 2019	
(In thousands)	Amount	USD equivalent	Amount	USD equivalent
RMB	247,352	36,040	322,972	46,296
USD	85,351	85,351	115,805	115,805
Hong Kong Dollar (“HKD”)	8,532	1,089	2,202	283
Thai Baht (“THB”)	14,624	450	2,417	81
Total		122,930		162,465

As at December 31, 2018 and 2019, included in the cash and cash equivalents are time deposits with original maturities of three months or less, of nil and USD 34,000,000 respectively, primarily consist of USD.

5. Short-term investments

(In thousands)	December 31, 2018	December 31, 2019
Time deposits	141,059	102,555
Investments in financial instruments (note)	55,479	292
Total	196,538	102,847

Note: The investments were issued by commercial banks in the PRC with a variable interest rate indexed to performance of underlying assets. Since these investments’ maturity dates are within one year, they are classified as short-term investments.

Time deposits and investments in financial instruments are stated on the balance sheets at the principal amount plus accrued interest. Interest income is recorded in “Other income, net” in the consolidated statements of comprehensive loss.

6. Accounts receivable, net

(In thousands)	December 31, 2018	December 31, 2019
Accounts receivable	27,100	35,137
Less: Allowance for doubtful accounts	(7,709)	(7,604)
Accounts receivable, net	19,391	27,533

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

(In thousands)	December 31, 2017	December 31, 2018	December 31, 2019
Balance at beginning of the year	119	31	7,709
Additions	27	7,680	19
Write-off	(122)	—	—
Exchange difference	7	(2)	(124)
Balance at end of the year	31	7,709	7,604

The top 10 customers accounted for about 60% and 63% of accounts receivable as of December 31, 2018 and 2019, respectively.

7. Inventories

(In thousands)	December 31, 2018	December 31, 2019
Hardware devices (note)	12,377	9,091
Others	483	162
Less: Impairment	(193)	(3,716)
Total	**12,667**	**5,537**

Note: Hardware devices mainly include OneThing Cloud and hard disks.

OneThing Cloud is a hardware, which can be used as remote downloader, personal cloud storage and file management device. It can also act as a micro server between users and Xunlei, which enables users to share their idle uplink capacity with Xunlei.

The inventory written down was USD 193,000 and USD 3,523,000 for the years ended December 31, 2018 and 2019, respectively.

8. Prepayments and other current assets

(In thousands)	December 31, 2018	December 31, 2019
Current portion:		
Advance to suppliers (note a)	3,021	3,579
Interest-free loans to employees (note b)	3,616	3,185
Rental and other deposits	2,604	1,990
Advance to employees for business purposes	180	211
Interest receivable	—	4
Prepaid management insurance	192	249
Prepayment for taxation	69	936
Receivable related to Linktoken disposal (note c)	—	3,536
Proceed receivable (note d)	—	1,105
Others	554	1,748
Total of prepayments and other current assets	10,236	16,543
Non-current portion:		
Low-interest loans to employees, non-current portion	593	313
Total of long-term prepayments and other assets	593	313

Notes:

(a) Advances to suppliers primarily include prepaid expenses for service fees.

(b) The Group had entered into loan contracts with certain employees as at December 31, 2018, under which the Group provided interest-free loans or low-interest loans to these employees. The loan amounts vary amongst different employees from repayable on demand to repayable in equal installments on a monthly basis over a term of 8 to 10 years. The balances classified as current represented loan amounts that are repayable on demand or repayable within the next twelve months from the balance sheet date.

(c) In September 2018, Onething entered into a sale and purchase agreement with Beijing LinkChain to dispose of the operation and related assets and liabilities of LinkToken program. In June 2019, certain supplemental agreements were entered into with Beijing LinkChain and Hainan LinkChain, the rights and obligations related to LinkToken program was transferred to Hainan LinkChain.

The purchase consideration together with the balance of held-for-sale liabilities, being the carrying amount of deferred revenue from the LinkTokens issued before the transfer, were recognized as disposal gains to the Group upon completion of the disposal in April 2019.

The receivable related to Linktoken disposal as of December 31, 2019 included the consideration receivable due from Hainan LinkChain and the amount recoverable from expenses paid on behalf of Hainan LinkChain.

(d) Proceed receivable of USD 1,105,000 was the consideration receivable from the partial disposal of the equity interests in Shenzhen Arashi Vision Interative Technology Co., Ltd. ("Shenzhen Arashi").

9. Long-term investments

(In thousands)	December 31, 2018	December 31, 2019
Equity method investments:		
Balance at beginning of the year	311	—
Share of loss and impairment from equity investees	(307)	—
Exchange differences	(4)	—
Balance at end of the year	—	—
Equity interests without a readily determinable fair value:		
Balance at beginning of the year	42,430	33,638
Additions	—	2,838
Disposal	—	(1,055)
Net unrealized gains on investments held	—	10,907
Exchange difference	(998)	(132)
Less: impairment loss on long-term investments (i)	(7,794)	(19,831)
Balance at end of the year	33,638	26,365
Total long-term investments	**33,638**	**26,365**

Details of the Group's ownership of the long-term investments are as follows:

Investee	Percentage of ownership of shares as of December 31, 2018	Percentage of ownership of shares as of December 31, 2019
Equity method investments:		
Zhuhai Qianyou	19.00%	19.00%
Big Data	28.77%	28.77%
Equity interests without a readily determinable fair value:		
Guangzhou Yuechuan Network Technology Co., Ltd.	9.30%	9.30%
Shanghai Guozhi Electronic Technology Co., Ltd.	16.80%	16.80%
Guangzhou Hongsi Network Technology Co., Ltd.	19.90%	19.90%
Chengdu Diting Technology Co., Ltd.	12.74%	12.74%
Xiamen Diensi Network Technology Co., Ltd.	14.25%	14.25%
11.2 Capital I, L.P.	2.03%	2.03%
Cloudtropy (i)	9.69%	9.69%
Shanghai Lexiang Technology Co., Ltd. ("Shanghai Lexiang") (i) (iii)	14.12%	13.54%
Hangzhou Feixiang Data Technology Co., Ltd.	28.00%	28.00%
Shenzhen Meizhi Interactive Technology Co., Ltd.	9.40%	9.40%
Beijing Yunhui Tianxia Technology Co., Ltd.	13.70%	13.70%
Shenzhen Arashi (ii)	11.63%	8.73%
Beijing Cloudin Technology Limited Co., Ltd. ("Beijing Cloudin") (i) (iv)	4.61%	4.12%
Tianjin Kunzhiyi Network Technology Co., Ltd.	19.99%	19.99%
Quanxun Huiju Networking Technology (Beijing) Co., Ltd. (Quanxun Huiju) (v)	—	5.4%

(i) In 2019, the Group recognized impairment against its investments in Shanghai Lexiang, Cloudtropy and Beijing Cloudin of USD 14,518,000, USD 4,213,000 and USD 1,100,000, respectively after considering the latest operation status and financial and liquidity position of respective investees.

(ii) In 2019, the fair value change in the equity of investment in Shenzhen Arashi was USD 12,083,000, which was measured based on the observable market transaction. The Group also disposed 1.25% of the equity interest in Shenzhen Arashi in January 2019, which results in a gain of USD 579,000. As of December 31, 2019, the equity interest held by the Group in Shenzhen Arashi was 8.73%.

(iii) In 2019, the fair value change in the equity of investment in Shanghai Lexiang was USD 1,176,000, which was measured based on the indicative valuation from the capital injection in January 2019.

9. Long-term investments (Continued)

(iv) In 2019, a reorganization was undertaken by Cloudin Technology (Cayman) Limited, pursuant to which the VIE structure was removed and the investee company was changed to Beijing Cloudin, and the equity interest held by the Group was changed from 4.61% to 4.12%.

(v) In July 2019, Shenzhen Xunlei made an equity investment of USD 2,838,000 to acquire 5.4% equity interest of Quanxun Huiju, which is a privately-held company.

10. Property and equipment

Property and equipment consist of the following:

(In thousands)	**December 31, 2018**	**December 31, 2019**
Servers and network equipment	39,870	39,130
Computer equipment	1,889	1,762
Furniture, fixtures and office equipment	838	806
Motor vehicles	476	406
Leasehold improvements	3,190	6,566
Total original costs	46,263	48,670
Less: Accumulated depreciation	(31,125)	(28,357)
Less: Accumulated impairment	(10)	(4)
Sub-total	15,128	20,309
Construction in progress	6,775	18,461
Total	21,903	38,770

Depreciation expense recognized for the years ended December 31, 2017, 2018 and 2019 are summarized as follows:

(In thousands)	**December 31, 2017**	**December 31, 2018**	**December 31, 2019**
Cost of revenues	7,647	5,018	5,198
General and administrative expenses	277	245	317
Sales and marketing expenses	—	1	9
Research and development expenses	24	331	300
Total	7,948	5,595	5,824

Impairment loss of USD 20,000 has been recognized for the year ended December 31, 2017. No impairment loss was recognized for the years ended December 31, 2018. Impairment loss of USD 6,000 has been reversed for the year ended December 31, 2019 due to disposal.

11. Right-of-use assets and lease liabilities

The right-of-use assets represented the office lease in the Group, are amortized over the lease terms, which are greater than 1 year but less than 3 years. Right-of-use assets for long-term operating leases were as bellow:

(In thousands)	**Office leases**
Balance at January 1, 2019 on adoption of ASC 842 Leases	11,819
Additions	3,830
Modification of operating lease	(1,107)
Amortization	(5,634)
Effect of foreign currency exchange differences	(161)
Net book amount at December 31, 2019	8,747

During the year ended December 31, 2019, the general and administrative expenses for long-term operating lease was USD 6,077,000 (2018:USD 3,761,000). A charge of USD 301,000 was recognized in relation to short-term lease in 2019 (2018:USD 21,000). The future minimum payments under non-cancellable short-term operating leases of office rental will be USD 60,000 in 2020. The discount rate related to operating lease was 5.5%, and the weighted average remaining lease term was 2 years.

The total cash payments in respect of operating lease was USD 5,419,000 for the year ended December 31, 2019.

The undiscounted cash payment for each of the next five years as of December 31, 2019 is:

(In thousands)	
2020	5,034
2021	3,000
2022	1,279
Total undiscounted payments	9,313
Less: effect of discounting	488
Discounted lease liabilities	**8,825**

Future lease payments under operating leases, based on ASC 842 *Leases* that were superseded upon the Company's adoption of ASC 842 *Leases* on January 1, 2019, as of December 31, 2018 were as follows:

(In thousands)	
2019	6,231
2020	4,527
2021	2,633
	13,391

12. Intangible assets, net

	December 31, 2018				**December 31, 2019**			
(In thousands)	**Cost**	**Amortization**	**Impairment**	**Net book value**	**Cost**	**Amortization**	**Impairment**	**Net book value**
Land use rights	4,847	(872)	—	3,975	4,769	(1,017)	—	3,752
Acquired computer software	2,099	(1,546)	—	553	2,391	(1,433)	—	958
Online game licenses	6,007	(5,278)	(729)	—	5,910	(5,193)	(717)	—
Audio-visual licenses	5,714	(251)	—	5,463	5,621	(905)	—	4,716
	18,667	(7,947)	(729)	9,991	18,691	(8,548)	(717)	9,426

12. Intangible assets, net (Continued)

Amortization expense recognized for the years ended December 31, 2017, 2018 and 2019 are summarized as follows:

	Years ended December 31		
(In thousands)	**2017**	**2018**	**2019**
Cost of revenues	241	266	5
General and administrative expenses	415	721	1,136
Research and development expenses	1,445	244	59
Total	**2,101**	**1,231**	**1,200**

The estimated aggregate amortization expense for each of the next five years as of December 31, 2019 is:

(In thousands)	**Intangible assets**
2020	1,186
2021	1,010
2022	976
2023	963
2024 and thereafter	5,291

The weighted average amortization periods of intangible assets as at December 31, 2018 and 2019 are as below:

(In year)	**December 31, 2018**	**December 31, 2019**
Land use right	30	30
Acquired computer software	5	5
Online game licenses	3	3
Audio-visual license	9	9
Total weighted average amortization periods	**12**	**12**

13. Contract liabilities and deferred income

(In thousands)	**December 31, 2018**	**December 31, 2019**
Contract liabilities (a)		
Membership subscription	27,517	29,769
Others	1,810	2,142
Other deferred income		
Government grants	2,316	1,300
Reimbursement from the depository	502	—
Total	32,145	33,211
Less: non-current portion (b)	(1,850)	(1,223)
Contract liabilities and deferred income, current portion	**30,295**	**31,988**

(a) Contract liabilities were related to unsatisfied performance obligations at the end of the year. Due to the generally short-term duration of the contracts, the majority of the performance obligations are satisfied in the following period. The amount of revenue recognized that was included in contract liabilities balance at the beginning of the year was USD 25.9 million and USD 27.0 million, for the years ended December 31, 2018 and 2019, respectively.

(b) As of December 31, 2019, the non-current portion consists of membership subscription of USD 781,000 (2018: USD 517,000), and government grants of USD 442,000 (2018: USD 1,333,000).

14. Accrued liabilities and other payables

(In thousands)	December 31, 2018	December 31, 2019
Payroll and welfare ((note	18,680	14,995
Tax levies	4,573	4,538
Legal and litigation related expenses (note 26)	3,846	2,765
Payables related to Kankan	3,795	3,733
Agency commissions and rebates—online advertising	2,885	2,521
Payables for advertisement	2,811	3,606
Professional fees	1,742	2,714
Payables for technological services	630	778
Payables for purchase of equipment	342	21
Customer's deposit	284	225
Payables for gaming distribution	283	288
Payables for proceeds from selling exercised stock options and restricted shares	170	94
Payables for construction in progress	11	1,382
Tax surcharges	—	1,076
Others	4,013	4,104
Total	**44,065**	**42,840**

15. Bank borrowings

The bank borrowing of USD 11,324,000 was borrowed by Shenzhen Xunlei for the construction of Xunlei Building. The borrowing term was 8 years and the annum interest rate was 5.635%. The borrowing was pledged by the land use right of Xunlei Building and the building under construction, and the net interest expense of USD 470,000 has been capitalized for the year ended December 31, 2019.

16. Common shares

The Company's Memorandum and Articles of Association authorizes the Company to issue 1,000,000,000 shares of USD 0.00025 par value per common share as of December 31, 2019. Each common share is entitled to one vote. The holders of common shares are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, which is subject to the approval by the holders of the common shares representing a majority of the aggregate voting power of all outstanding shares. As of December 31, 2018 and 2019, there were 336,522,780 and 339,165,241 common shares outstanding, respectively.

17. Repurchase of shares

The following table is a summary of the shares repurchased by the Company under the Second Repurchase Program. All shares were purchased through privately negotiated transactions as a mean of exercising share options from Xunlei's employees and publicly purchasing from the open market pursuant to the Repurchase Program. No shares were repurchased in 2018 and 2019:

Period	Total Number of ADSs Purchased as Part of the Publicly Announced Plan	Average Price Paid Per ADS
January 13	994	4.34
February 10	5,553	3.75
March 7 – March 31	86,523	3.86
Total for the year ended December 31, 2017	**93,070**	

During the year ended December 31, 2017, 93,070 ADSs repurchased at an aggregate consideration of USD 358,820. The remaining unused amount of approximately USD 5.3 million was no longer available for repurchase as of December 31, 2019 due to the expiration of the Second Repurchase Program.

18. Share-based compensation

2010 share incentive plan

In December 2010, the Group adopted a share incentive plan, which is referred to as the 2010 Share Incentive Plan ("the 2010 Plan"). The purpose of the plan is to attract and retain the best available personnel by linking the personal interests of the members of the board, employees, and consultants to the success of the Group's business and by providing such individuals with an incentive for outstanding performance to generate superior returns for our shareholders. Under the 2010 Plan, the maximum number of shares in respect of which share options, restricted shares, or restricted share units may be granted is 26,822,828 shares (excluding the share options previously granted to the directors who are the founders of the Company). The amount of shares available for such grants as of December 31, 2019 is 8,315,463.

The maximum term of any issued share option is seven or ten years from the grant date. Share options granted to employees and officers vest over a four-year schedule as stated below:

(1) One-fourth of the options shall be vested upon the first anniversary of the grant date;

(2) The remaining three quarters of the options shall be vested on monthly basis over the next thirty-six months. ($^{1}/_{48}$ of options shall be vested per month subsequently)

Share options granted to directors were subject to a vesting schedule of approximately 32 months.

All share-based payments to employees are measured based on their grant-date fair values. Compensation expense is recognized on a straight-line basis over the requisite service period.

In November 2014, the Company issued to the depositary bank of 10,000,000 common shares, which were reserved for the future exercise of share options or vesting of restricted shares.

The following table summarizes the share option activities for the years ended December 31, 2017, 2018 and 2019:

	Number of share options	Weighted average exercise price (USD)	Weighted-average grant-date fair value (USD)	Weighted average remaining contractual life (years)	Aggregate intrinsic value (In thousands)
Outstanding, January 1, 2017	1,493,470	2.65	—	3.39	6
Vested and expected to vest at January 1, 2017	1,440,923	2.67	0.85	3.24	6
Exercisable at January 1, 2017	1,217,050	2.70	0.84	3.20	6
Forfeited	(109,925)	2.89			
Expired	(989,730)	2.28			
Exercised	(4,000)	0.83			
Outstanding, December 31, 2017	389,815	3.90	—	1.64	—
Vested and expected to vest at December 31, 2017	389,693	3.90	0.95	1.64	—
Exercisable at December 31, 2017	389,190	3.90	0.95	1.64	—
Expired	(373,315)	3.89			
Outstanding, December 31, 2018	16,500	3.97	—	1.37	—
Vested and expected to vest at December 31, 2018	16,500	3.97	1.56	1.37	—
Exercisable at December 31, 2018	16,500	3.97	1.56	1.37	—
Expired	(6,500)	3.97			
Outstanding, December 31, 2019	10,000	3.97	—	1.16	—
Vested and expected to vest at December 31, 2019	10,000	3.97	1.01	1.16	—
Exercisable at December 31, 2019	10,000	3.97	1.01	1.16	—

(Amounts in US dollars unless otherwise stated)

18. Share-based compensation (Continued)

2010 share incentive plan (Continued)

The aggregate intrinsic value in the table above represents the difference between the estimated fair value of the Company's common shares as of December 31, 2018 and 2019 and the exercise price.

Total fair values of share options vested for the years ended December 31, 2017, 2018 and 2019 were USD 132,000, nil and nil, respectively.

As at December 31, 2018 and 2019, there were no unrecognised share-based compensation costs related to share options.

In addition, the vesting schedule of the restricted shares under 2010 Plan are determined by the directors of the Company. As at December 31, 2019, 10,770,520 restricted shares (2018: 9,970,520), excluding those converted from share options, were granted to employees and officers under 2010 Plan and the unvested restricted shares granted to employees and officers vest as follows:

(1) 1,331,500 of these restricted shares shall be vested within 2020.

(2) 1,321,500 of these restricted shares shall be vested within 2021.

(3) 1,311,500 of these restricted shares shall be vested within 2022.

(4) 1,070,000 of these restricted shares shall be vested within 2023.

(5) 150,000 of these restricted shares shall be vested after 2023.

A summary of the restricted shares activities under the 2010 Plan for the years ended December 31, 2017, 2018 and 2019 is presented below:

	Number of restricted shares	Weighted-Average Grant-Date Fair Value
Unvested at January 1, 2017	943,220	
Expected to vest at January 1, 2017	801,737	
Granted	2,050,000	0.69
Vested	(115,125)	
Forfeited	(1,605,945)	
Unvested at December 31, 2017	1,272,150	
Expected to vest at December 31, 2017	1,081,327	
Granted	6,750,520	2.32
Vested	(267,630)	
Forfeited	(1,103,000)	
Unvested at December 31, 2018	6,652,040	
Expected to vest at December 31, 2018	5,654,234	
Granted	800,000	0.81
Vested	(1,296,540)	
Forfeited	(971,000)	
Unvested at December 31, 2019	5,184,500	
Expected to vest at December 31, 2019	4,406,825	

Forfeitures are estimated at the time of grant and are revised in subsequent periods if actual forfeitures differ from those estimates. Based upon the Company's historical and expected forfeitures for stock options granted, the directors of the Company estimated that its future forfeiture rate would be 20% for employees and nil for directors and advisors.

(Amounts in US dollars unless otherwise stated)

18. Share-based compensation (Continued)

2010 share incentive plan (Continued)

All restricted shares granted to senior officers are measured based on their grant-date fair values. Compensation expense is recognized on a straight-line basis over the requisite service period. As of December 31, 2018 and 2019, total unrecognized compensation expense relating to the restricted shares was USD 12,347,000 and USD 8,981,000 respectively. The number of restricted shares issued to non-employees and vested as of December 31, 2018 and 2019 was both 60,000.

2013 share incentive plan

In November 2013, the Group adopted a share incentive plan, which is referred to as the 2013 Share Incentive Plan ("the 2013 Plan"). The purpose of the plan is to motivate, attract and retain the best available personnel by linking the personal interests of senior management to the success of the Group's business. Under the 2013 Plan, the maximum number of restricted shares that may be granted is 9,073,732 shares.

The vesting schedule of the restricted shares under the 2013 Plan are determined by the directors of the Company. As at December 31, 2019, 8,664,980 restricted shares (2018: 8,664,980) were granted to employees and officers under the 2013 Plan and there were no unvested restricted shares under the 2013 Plan.

A summary of the restricted shares activities under the 2013 Plan for the years ended December 31, 2017, 2018 and 2019 is presented below:

	Number of restricted shares
Unvested at January 1, 2017	1,714,535
Vested	(996,835)
Forfeited	(129,940)
Unvested at December 31, 2017	587,760
Expected to vest at December 31, 2017	499,596
Unvested at January 1, 2018	587,760
Vested	(525,140)
Forfeited	(28,445)
Unvested at December 31, 2018	34,175
Expected to vest at December 31, 2018	29,049
Unvested at January 1, 2019	34,175
Vested	(27,475)
Forfeited	(6,700)
Unvested at December 31, 2019	—
Expected to vest at December 31, 2019	—

Forfeitures are estimated at the time of grant and are revised in subsequent periods if actual forfeitures differ from those estimates.

All restricted shares granted to senior officers are measured based on their grant-date fair values. Compensation expense is recognized on a straight-line basis over the requisite service period. As of December 31, 2019, total unrecognized compensation expense relating to the restricted shares was nil. The number of restricted shares issued to non-employees and vested as of December 31, 2018 and 2019 was both 60,000.

(Amounts in US dollars unless otherwise stated)

18. Share-based compensation (Continued)

2014 share incentive plan

In April 2014, the Group adopted a share incentive plan, which is referred to as the 2014 Share Incentive Plan ("the 2014 Plan"). The purpose of the plan is to motivate, attract and retain the best available personnel by linking the personal interests of senior management to the success of the Group's business. Under the 2014 Plan, the maximum number of restricted shares that may be granted is 14,195,412 shares to certain officers, directors or employees of, or advisors or consultants to the Company and its subsidiaries and consolidated affiliated entities. The company issued 14,195,412 common shares to Leading Advice Holdings Limited, a company owned by the co-founder. The issuance of common shares was to facilitate the administration of the 2014 Plan. The 2014 Plan was administered by the Company's compensation committee.

The vesting schedule of the restricted shares under the 2014 Plan is determined by the directors of the Company. As at December 31, 2019, 14,536,000 restricted shares (2018: 14,536,000) were granted to employees and officers under the 2014 Plan and the unvested restricted shares granted to employees and officers vest as follows:

(1) 1,237,200 of these restricted shares shall be vested within 2020.

(2) 84,000 of these restricted shares shall be vested within 2021.

A summary of the restricted shares activities under the 2014 Plan for the years ended December 31, 2018 and 2019 is presented below:

	Number of restricted shares
Unvested at January 1, 2017	10,276,300
Vested	(2,447,950)
Forfeited	(2,022,000)
Unvested at December 31, 2017	5,806,350
Expected to vest at December 31, 2017	4,935,398
Unvested at January 1, 2018	5,806,350
Vested	(2,086,450)
Forfeited	(243,250)
Unvested at December 31, 2018	3,476,650
Expected to vest at December 31, 2018	2,955,153
Unvested at January 1, 2019	3,476,650
Vested	(1,318,450)
Forfeited	(837,000)
Unvested at December 31, 2019	1,321,200
Expected to vest at December 31, 2019	1,123,020

Forfeitures are estimated at the time of grant and are revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

All restricted shares granted are measured based on their grant-date fair values. Compensation expense is recognized on a straight-line basis over the requisite service period. As of December 31, 2019, the total unrecognized compensation expense relating to the restricted shares was USD 766,000 (2018:USD 4,066,000).

Total compensation costs recognized for the years ended December 31, 2017, 2018 and 2019 are as follows:

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Sales and marketing expenses	88	404	381
General and administrative expenses	5,800	2,245	2,453
Research and development expenses	2,442	2,645	2,594
Total	**8,330**	**5,294**	**5,428**

19. Non-controlling interests

Non-controlling interests are recognized to reflect the portion of the equity of majority-owned subsidiaries and VIE's which is not attributable, directly or indirectly, to the controlling shareholder. The non-controlling interests in the Company's consolidated financial statements consist primarily of the non-controlling interests in Xunlei Games, Thailand Onething and Henan Tourism.

20. Cost of revenues

Cost of revenues from continuing operations	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Bandwidth costs	68,441	48,118	57,093
Cost of inventories sold	21,485	31,634	7,181
Cost of live streaming	12,724	23,928	20,734
Depreciation of servers and other equipment	7,647	5,018	5,198
Payment handling charges	4,855	3,016	1,658
Other costs (note)	2,724	3,953	8,049
Total	**117,876**	**115,667**	**99,913**

Note: Other costs mainly include write-down of inventories, acceleration service cost and redemption costs of LinkToken.

21. Other income, net

Continuing Operations	**Years ended December 31,**		
(In thousands)	**2017**	**2018**	**2019**
Government subsidy income	2,788	2,096	2,061
Investment income from short-term investments	4,204	5,817	4,020
Net unrealized gains arising from long-term investments	491	—	10,907
Investment (loss)/income on disposal of long-term investments	(187)	—	579
Investment loss on impairment of long-term investments (note 9)	(596)	(7,794)	(19,831)
Exchange (loss)/gain, net	(57)	1,216	(402)
Settlement income	533	414	1,531
Gains from disposal of Linktoken program (note 8)	—	—	6,630
Others	704	1,061	366
	7,880	**2,810**	**5,861**

22. Taxation

(i) Cayman Islands

Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gains. Additionally, upon payment of dividends by the Company to its shareholders, no Cayman Islands withholding tax will be imposed.

(ii) PRC Enterprise Income Tax (“EIT”)

The PRC enterprise income tax is calculated based on the taxable income determined under the PRC laws and accounting standards.

Under the Enterprise Income Tax (“EIT”) Law, which became effective on January 1, 2008, foreign invested enterprises and domestic enterprises are subject to a unified EIT rate of 25%. In accordance with the implementation rules of the EIT Law, a qualified “High and New Technology Enterprise” (“HNTE”) is eligible for a preferential tax rate of 15%, a “Software Enterprise” (“SE”) is entitled exemption from income taxation for the first two years, counting from the year the enterprise makes profit, and reduction by half for the next three years, and a certificate of National Key Software Enterprise (“NKSE”) is entitled a preferential tax rate of 10%.

22. Taxation (Continued)

(ii) PRC Enterprise Income Tax ("EIT") (Continued)

Shenzhen Xunlei has been recognised as NKSE and was eligible for a preferential tax rate of 10% for year ended December 31, 2017, Shenzhen Xunlei has also been recognized as HNTE and entitled to preferential tax rate of 15% for the years ended December 31, 2017, 2018 and 2019, a lower preferential tax rate of 10% was adopted for the year ended December 31, 2017. Onething and Wangwenhua have been recognized as HNTE and entitled to preferential tax rate of 15% for the years ended December 31, 2017, 2018 and 2019.

During the year ended December 2017, Xunlei Computer was eligible for a 50% deduction from a tax rate of 25% as it was recognized as SE and entitled to the preferential tax treatment since 2014. Xunlei Computer has been recognized as HNTE and entitled to preferential tax rate of 15% for the year ended December 31, 2018 and 2019.

According to a policy of the PRC State Tax Bureau, enterprises that engage in research and development activities are entitled to claim 175% of the research and development expenses incurred in a year as tax deductible expenses in determining their tax assessable profits for that year ("R&D Super Deduction").

The other PRC subsidiaries and Consolidated VIEs are subject to a 25% EIT rate.

In addition, according to the 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 are 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 generally applicable to any dividends to be distributed from Giganology Shenzhen and Xunlei Computer to the Company out of any profits of Giganology Shenzhen and Xunlei Computer derived after January 1, 2008. Up to December 31, 2019, both Giganology Shenzhen and Xunlei Computer did not declare any dividend to the parent company and have determined that they have no present plan to declare and pay any dividends. The Group currently plans to continue to reinvest its subsidiaries' undistributed earnings, if any, in its operations in China indefinitely. Accordingly, no withholding income tax was accrued or required to be accrued for the years ended December 31, 2017, 2018 and 2019.

Moreover, the current EIT Law treats enterprises established outside of China with "effective management and control" located in the PRC as PRC resident enterprises for tax purposes. The term "effective management and control" is generally defined as exercising overall management and control over the business, personnel, accounting, properties, etc. of an enterprise. The Company, if considered a PRC resident enterprise for tax purposes, would be subject to the PRC EIT at the rate of 25% on its worldwide income for the period after January 1, 2008. As of December 31, 2019, the Company has not accrued for PRC tax on such basis. The Company will continue to monitor its tax status.

The current and deferred portions of income tax expense included in the consolidated statements of operations are as follows:

Continuing operations	**Years ended December 31,**		
(In thousands)	**2017**	**2018**	**2019**
Current income tax (benefits)/expenses	(38)	(471)	315
Deferred income tax (benefits)/expenses	(2,214)	382	4,361
Income tax (benefits)/expenses	(2,252)	(89)	4,676

The aggregate amount and per share effect of the tax holidays and concession are as follows:

	Years ended December 31,		
	2017	**2018**	**2019**
Aggregate dollar effect **(In thousands)**	(4,102)	(3,776)	(3,856)
Per share effect—basic	(0.01)	(0.01)	(0.01)
Per share effect—diluted	(0.01)	(0.01)	(0.01)

22. Taxation (Continued)

(ii) PRC Enterprise Income Tax ("EIT") (Continued)

The reconciliation of total tax benefit computed by applying the respective statutory income tax rates to pre-tax loss is as follows:

Continuing operations	**Years ended December 31,**		
(In thousands)	**2017**	**2018**	**2019**
Income tax benefit at PRC statutory rate (based on statutory tax rate applicable to enterprises in China)	(11,617)	(10,384)	(11,886)
Effects of differences in tax rates in different jurisdictions applicable to entities of the Group outside of the PRC	1,341	485	788
Non-deductible expenses	32	245	228
Effect of Super Deduction	(546)	(881)	(1,920)
Effect of tax holidays and tax concessions	4,102	3,776	3,856
Change in valuation allowance of deferred tax assets	6,748	6,720	13,180
Effect on deferred tax assets due to change in tax rates	—	(167)	—
Outside basis difference arising from VIE and its subsidiaries in the PRC	(652)	—	—
Expiration of tax loss	—	562	400
Others	(1,660)	(445)	30
Income tax (benefits)/expenses	(2,252)	(89)	4,676

The tax effects of temporary differences that give rise to the deferred tax assets and liabilities balances at December 31, 2018 and 2019 are as follows:

(In thousands)	**December 31, 2018**	**December 31, 2019**
Deferred tax assets, non-current portion:		
Net operating losses carried forward (note a)	20,479	27,712
Impairment of long-term equity investment	1,760	4,061
Allowance for advance to suppliers	351	346
Impairment of property and equipment	32	14
Impairment of other receivables	2,126	1,553
Impairment of accounts receivable	1,094	1,140
Impairment of inventories	29	549
Valuation allowance	(20,181)	(34,257)
Deferred tax assets, non-current portion, net (note b)	5,690	1,118
Deferred tax liabilities, non-current portion:		
Deferred credit arising from asset acquisition	(1,366)	(1,179)

Notes:

(a) As of December 31, 2019, the Group had tax loss carryforwards of USD166,447,000 which can be carried forward to offset future taxable income and will expire during the period from 2020 to 2025.

22. Taxation (Continued)

(ii) PRC Enterprise Income Tax ("EIT") (Continued)

(b) As at December 31, 2018 and 2019, the deferred tax assets and liabilities balances are expected to be recoverable as follows:

Deferred tax assets

(In thousands)	**2018**	**2019**
Within one year	2,092	133
After one year	3,598	985
	5,690	1,118

Deferred tax liabilities

(In thousands)	**2018**	**2019**
Within one year	(167)	(165)
After one year	(1,199)	(1,014)
	(1,366)	(1,179)

Movement of valuation allowance is as follows:

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Beginning balance	(9,851)	(16,599)	(20,181)
Additions	(6,748)	(3,582)	(14,076)
Ending balance	(16,599)	(20,181)	(34,257)

In 2018, valuation allowance was provided for net operating loss carryforwards of Onething, Xunlei Games, Beijing Xunjing and Crystal Interactive because it was more likely than not that such deferred tax assets will not be realized based on the Group's estimate of their future taxable income, and the fact that the these entities were not included in the tax strategy plan.

In 2019, valuation allowance was provided for net operating loss carryforwards of all the group entities except for Giganology Shenzhen because it was more likely than not that such deferred tax assets will be realized based on the Group's estimate of future taxable income of those companies.

As of December 31, 2019, the tax returns of the Group's subsidiaries, VIE and its subsidiaries since their respective dates of incorporation are still open to examination.

23. Basic and diluted net income/ (loss) per share

Basic and diluted net income/ (loss) per share for the years ended December 31, 2017, 2018 and 2019 are calculated as follows:

(Amounts expressed in thousands of USD, except for number of shares and per share data)	**Years ended December 31,**		
	2017	**2018**	**2019**
Numerator:			
Net loss from continuing operations	(44,216)	(40,793)	(53,415)
Net income from discontinued operations	6,407	1,303	—
Net loss	(37,809)	(39,490)	(53,415)
Less: Net income/(loss) attributable to the non-controlling interest	13	(212)	(246)
Net loss attributable to Xunlei Limited's common shareholders	(37,822)	(39,278)	(53,169)
Numerator of basic net loss per share from continuing operations	(44,229)	(40,581)	(53,169)
Numerator of basic net income per share from discontinued operations	6,407	1,303	—
Numerator for diluted loss per share from continuing operations	(44,229)	(40,581)	(53,169)
Numerator for diluted income per share from discontinued operations	6,407	1,303	—
Denominator:			
Denominator for basic net loss per share-weighted average shares outstanding	331,731,963	334,965,987	337,845,675
Denominator for diluted net loss per share	331,731,963	334,965,987	337,845,675
Basic net loss per share from continuing operations	(0.13)	(0.12)	(0.16)
Basic net income per share from discontinued operations	0.02	0.00	0.00
Diluted net loss per share from continuing operations	(0.13)	(0.12)	(0.16)
Diluted net income per share from discontinued operations	0.02	0.00	0.00

All potentially dilutive securities were not included in the calculation of dilutive net income per share for the years ended December 31, 2017, 2018 and 2019 as their effects would be anti-dilutive.

24. Related party transactions

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

Related Party	Relationship with the Group
Chuan Wang	Chairman and director of the Company (note)
Shenglong Zou	Co-founder, director and shareholder of the Company
Shenzhen Crystal Technology Co., Ltd.	Company owned by a Co-founder and director of the Company
Vantage Point Global Limited	Shareholder of the Company
Aiden & Jasmine Limited	Shareholder of the Company
Millet Technology Co., Ltd. (“Xiaomi Technology”)	Company owned by a shareholder of the Company
Millet Communication Technology Co., Ltd. (“Millet Communication Technology”)	Company owned by a shareholder of the Company
Beijing Xiaomi Mobile Software Co., Ltd. (“Beijing Xiaomi Mobile Software”)	Company owned by a shareholder of the Company
Beijing Millet Payment Technologies Co., Ltd. (“Beijing Millet Payment Technologies”)	Company owned by a shareholder of the Company
Guangzhou Millet Information Service Co., Ltd. (“Guangzhou Millet”)	Company owned by a shareholder of the Company
Shenzhen Xunyi Network Technology Corp., Ltd. (“Shenzhen Xunyi”)	Company operated by few former core members of Xunlei’s web game business
Zhuhai Qianyou	Equity investment of the Group

Note: Chuan Wang has resigned from the board on April 2, 2020.

During the years ended December 31, 2017, 2018 and 2019, significant related party transactions were as follows:

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Game sharing costs paid and payable to Zhuhai Qianyou	84	9	—
Technology service revenue from Xiaomi Technology	1	—	—
Bandwidth revenue from Millet Communication Technology	1,701	—	—
Bandwidth revenue from Beijing Xiaomi Mobile Software (note a)	2,245	4,254	1,815
Bandwidth revenue from Xiaomi Technology (note a)	—	—	875
Forum service fees paid and payable to Xiaomi Technology (note b)	—	38	13
Advertisement revenue from Guangzhou Millet (note c)	125	—	19
Technology service revenue from Beijing Xiaomi Mobile Software (note d)	5,803	—	—
Technology service revenue from Guangzhou Millet (note d)	—	3,932	2,460
Advertisement revenue from Shenzhen Xunyi (note e)	—	493	—
Bandwidth revenue from Shenzhen Xunyi (note e)	—	160	—
Accrued to Aiden & Jasmine Limited (note f)…….	54	54	17
Accrued to Vantage Point Global Limited (note f)	146	146	46

Notes:

(a) From July 2017 to July 2019, Onething entered into a contract with Beijing Xiaomi Mobile Software for the provision of bandwidth to Beijing Xiaomi Mobile Software at a price benchmarking against market price, based on actual usage. From August 2019, Onething entered into the contract with Xiaomi Technology for the provision of bandwidth to Xiaomi Technology at a price benchmarking against market price, based on actual usage.

(b) Onething Cloud devices were available for sale on the online platform operated by Xiaomi Technology since August 2018. Xiaomi Technology was entitled to receive service fees based on a certain percentage of sales on the platform.

(c) From 2017, an advertising services contract was entered into with Guangzhou Millet at a price benchmarking against market price.

24. Related party transactions (Continued)

(d) The Group is entitled to receive a mutually agreed sharing of net advertising revenue covering a period from mid-June 2017 to mid-June 2019, as compensation for technology solution services provided to Guangzhou Millet Mobile Software. The contract was extended for two years from mid-June 2019 to mid-June 2021 based on the same term.

(e) From 2018, a sales contract was entered into with Shenzhen Xunyi for provision of bandwidth and advertising services at a price benchmarking against market price, based on actual usage.

(f) In 2014, the Group repurchased 3,860,733 common shares from Aiden & Jasmine Limited (Co founder's company) for USD10,879,000 and 10,334,679 common shares from Vantage Point Global Limited for USD29,121,000. According to the repurchase contract, the Company was entitled to an amount (the "Withheld Price") to withhold any taxes with respect to this repurchase as required under the applicable laws. If the Seller has not been specifically required by the applicable governmental or regulatory authority to pay any taxes as required under the applicable laws in connection with the repurchase, after the fifth anniversary of the Closing Date, the Company will pay to the Seller the Withheld Price with a simple interest thereon at the rate of five percent (5%) per annum (the "repayment price") from the Closing Date. Therefore, the Withheld Price for Aiden & Jasmine Limited and Vantage Point Global Limited was USD 1,360,000 (including interest of USD 272,000) and USD 3,640,000 (including interest of USD 728,000) respectively. The interest accrued in 2019 was USD 17,000 and USD 46,000 for Aiden & Jasmine Limited and Vantage Point Global Limited respectively.

As of December 31, 2018 and 2019, the amounts due to / from related parties were as follows:

(In thousands)	**December 31, 2018**	**December 31, 2019**
Amounts due to related parties		
Accounts payable to Zhuhai Qianyou	2	2
Advances from Guangzhou Millet	295	—
Other payable to Aiden & Jasmine Limited	1,343	1,360
Other payable to Vantage Point Global Limited	3,594	3,640

(In thousands)	**December 31, 2018**	**December 31, 2019**
Amounts due from related parties		
Accounts receivable from Beijing Xiaomi Mobile Software	783	—
Accounts receivable from Beijing Millet Payment Technologies	175	—
Accounts receivable from Xiaomi Technology	143	262
Accounts receivable from Guangzhou Millet	—	1,361
Other receivable from Xiaomi Technology	15	14
Other receivable from Shenzhen Crystal Technology Co., Ltd.	6	6
Other receivable from Shenglong Zou	9	9
Other receivable from Chuan Wang	6	6

25. Fair value measurements

ASC 820-10 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets
Level 2—Include other inputs that are directly or indirectly observable in the marketplace or based on quoted price in markets that are not active
Level 3—Unobservable inputs which are supported by little or no market activity and are significant to the overall fair value measurement

ASC 820-10 describes three main approaches to measuring the fair value of assets and liabilities: (1) market approach; (2) income approach and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

The following table sets forth the financial instruments, measured at fair value, by level within the fair value hierarchy as of December 31, 2018 and 2019.

	Fair value measurements as at December 31, 2018			
(In thousands)	**Total**	**Quoted prices in active market for identical assets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Short term investments:				
Investments in financial instruments	196,538	—	196,538	—
	196,538	—	196,538	—

	Fair value measurements as at December 31, 2019			
(In thousands)	**Total**	**Quoted prices in active market for identical assets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Short term investments:				
Investments in financial instruments	292	—	292	—
	292	—	292	—

26. Commitments and contingencies

Bandwidth purchase commitments

The Group purchase bandwidth in the PRC under non-cancellable contract expiring on different dates. Payments under purchase of bandwidth are expensed on a straight-line basis over the duration of the respective periods.

Total bandwidth costs for continuing operations were USD 68,441,000, USD 48,118,000 and USD 57,093,000 for the years ended December 31, 2017, 2018 and 2019, respectively.

26. Commitments and contingencies (Continued)

Future minimum payments under non-cancellable bandwidth contracts consist of the following as of December 31, 2019:

(In thousands)	
2020	7,918
2021	3,415
2022	700
	12,033

Capital commitments

As at December 31, 2019, the Group has unconditional purchase obligations for switchboards, servers, office software and construction in progress that had not been recognized in the amount of USD 22,510,000.

(In thousands)	
2020	21,453
2021	107
2022	950
	22,510

Litigation

The Group is involved in a number of cases pending in various courts. These cases are substantially related to alleged copyright infringement as well as routine and incidental matters to its business, among others. Adverse results in these lawsuits may include awards of damages and may also result in, or even compel, a change in the Group's business practices, which could impact the Group's future financial results. The Group had incurred USD 9,453,000, USD 4,667,000 and USD 1,955,000 legal and litigation related expenses for the years ended December 31, 2017, 2018 and 2019, respectively.

Up to April 28, 2020, which is the date when the consolidated financial statements were issued, the Group had 24 lawsuits pending against the Group with an aggregate amount of claimed damages of approximately RMB 82.0 million (USD 11.9 million) which occurred before December 31, 2019 (2018: RMB 81.2 million (USD 12.3 million)). Of the 24 pending lawsuits, 20 lawsuits were relating to the alleged copyright infringement in the PRC. The Group had accrued for USD 2,765,000 litigation related expenses in ''Accrued liabilities and other payables'' in the consolidated balance sheet as of December 31, 2019 (2018: USD 3,846,000), which is the most probable and reasonably estimable outcome.

The Group estimated the litigation compensation based on judgments handed down by the court, out-of-court settlements of similar cases as well as advices from the Group's legal counsel. The Group is in the process of appealing certain judgments for which the losses had been accrued. Although the results of unsettled litigation and claims cannot be predicted with certainty, the Group does not expect that the outcome of the 24 lawsuits will result in the amounts accrued materially different from the range of reasonably possible losses. In the opinion of management, there was not at least a reasonable possibility the Company may have incurred a material loss, or a material loss in excess of a recorded accrual, with respect to loss contingencies for asserted legal and other claims. However, the outcome of litigation is inherently uncertain. If one or more of these legal matters were resolved against the Company in a reporting period for amounts in excess of management's expectations, the Company's consolidated financial statements for that reporting period could be materially adversely affected.

26. Commitments and contingencies (Continued)

Litigation (Continued)

In May 2014, the Group entered into a content protection agreement with the Motion Picture Association of America, Inc., or MPAA, and its members, which are six major U.S. entertainment content providers. In that agreement, the Group agreed to implement a comprehensive system of measures designed to prevent unauthorized downloading of and access to such content providers' works. Despite the fact that the Group put in place preventive measures, the Group may still be subject to copyright infringement suits. In January 2015, a number of MPAA member studios filed 28 copyright infringement lawsuits against the Group on 28 video products in the Shenzhen Nanshan District Court in China. The court combined these cases into two cases for trial and entered a judgment on both cases on August 21, 2017. The court held, among others, that the Group infringed the plaintiffs' copyright on 28 video products and were required by the court to compensate the plaintiff for a total of RMB 1.4 million (USD 0.2 million), the compensation costs was paid by the Group in 2018.

In addition, two putative shareholder class action lawsuits have been filed in the United States District Courts for the Southern District of New York against the Company and certain current and former officers and directors of the Company. Purporting to sue on behalf of all investors who purchased or acquired Xunlei stock from October 10, 2017 to January 11, 2018, plaintiffs allege that certain statements regarding OneCoin, later renamed as LinkToken, in the Company's press releases and on a quarterly investor call were false and misleading because, among other things, they failed to disclose that OneCoin was a disguised "initial coin offering" and "initial miner offering" and constituted "unlawful financial activity." Plaintiffs seek to recover under Sections 10(b) and 20(a) of the U.S. Securities Exchange Act of 1934 and Rule 10b-5 thereunder. On April 12, 2018, the court consolidated the actions under the caption *In re Xunlei Limited Securities Litigation* , No. 18-cv-467 (RJS) and appointed lead plaintiffs who filed a consolidated amended compliant on June 4, 2018. The Company filed a motion to dismiss the amended compliant on August 3, 2018, and the motion of dismiss was granted by United States District Court Southern District of New York on September 11, 2019 and no notice of appeal or motion for extension of time was filed by the plaintiffs within 60 days after entry of the court's motion, therefore the class action was dismissed in November 2019.

27. Certain risks and concentration

PRC regulations

Current PRC laws and regulations place certain restrictions on foreign ownership of companies that engage in internet businesses, including the provision of online video and online advertising services. Specifically, foreign ownership in an internet content provider or other value-added telecommunication service providers may not exceed 50%. The Group conducts its operations in China principally through contractual arrangements among Giganology Shenzhen, its wholly-owned PRC subsidiary, and Shenzhen Xunlei and its shareholders. Shenzhen Xunlei holds the licenses and permits necessary to conduct its resource discovery network, online advertising, online games and related businesses in China and hold various operating subsidiaries that conduct a majority of its operations in China. The Company conducts all of its operations in China through, Shenzhen Xunlei, a variable interest entity, which it consolidates as a result of a series contractual arrangements enacted. If the Company had direct ownership of Shenzhen Xunlei, it would be able to exercise its rights as a shareholder to effect changes in the board of directors of Shenzhen Xunlei, which in turn could effect changes at the management level, subject to any applicable fiduciary obligations. However, under the current contractual arrangements, it relies on Shenzhen Xunlei and its shareholders' performance of their contractual obligations to exercise effective control. In addition, its operating contract with Shenzhen Xunlei has a term of ten years, which is subject to Giganology Shenzhen's unilateral termination right. None of Shenzhen Xunlei or its shareholders may terminate the contracts prior to the expiration date.

27. Certain risks and concentration (Continued)

Further, the Group believes that the contractual arrangements among Giganology Shenzhen, Shenzhen Xunlei and its shareholders are in compliance with PRC law and are legally enforceable. However, the Chinese government may issue from time to time new laws or new interpretations on existing laws to regulate this industry. Regulatory risk also encompasses the interpretation by the tax authorities of current tax laws, and the Group's legal structure and scope of operations in the PRC, which could be subject to further restrictions resulting in limitations on the Company's ability to conduct business in the PRC. The PRC government may also require the Company to restructure the Group's operations entirely if it finds that its contractual arrangements do not comply with applicable laws and regulations. Furthermore, it could revoke the Group's business and operating licenses, require it to discontinue or restrict its operations, restrict its right to collect revenues, block its website, require it to restructure its operations, impose additional conditions or requirements with which the Group may not be able to comply, or take other regulatory or enforcement actions against the Group that could be harmful to its business. The imposition of any of these penalties may result in a material and adverse effect on the Group's ability to conduct the Group's business. In addition, if the imposition of any of these penalties causes the Group to lose the rights to direct the activities of the VIE and its subsidiaries or the right to receive their economic benefits, the Group would no longer be able to consolidate the VIE. The Group does not believe that any penalties imposed or actions taken by the PRC Government would result in the liquidation of the Company, Giganology Shenzhen or Shenzhen Xunlei.

The aggregate loss and distributable reserve of VIE and VIE's subsidiaries amounted to approximately USD 67,747,000 and USD 119,097,000 respectively as of December 31, 2018 and 2019, which has been included in the consolidated financial statements.

As stated above, Shenzhen Xunlei holds assets that are important to the operation of the Group's business, including patents for proprietary technology, related domain names and trademarks. If Shenzhen Xunlei or its subsidiaries falls into bankruptcy and all or part of its assets become subject to liens or rights of third-party creditors, the Group may be unable to conduct its business activities in China, which could have a material adverse effect on the Group's future financial position, results of operations or cash flows. However, the Group believes this is a normal business risk many companies face. The Group will continue to closely monitor the financial conditions of Shenzhen Xunlei and its subsidiaries.

Shenzhen Xunlei and its subsidiaries' assets comprise both recognized and unrecognized revenue-producing assets. The recognized revenue-producing assets include intangible assets, purchased property and equipment. The balances of these assets held by the VIE and its subsidiaries are included in "property and equipment, net" and "intangible assets, net" in the consolidated balance sheet and specifically in the VIE table on the following page. The unrecognized revenue-producing assets mainly consist of license, patents, trademarks, and domain names which are not recorded in the financial statement as they did not meet the recognition criteria set in ASC 350-30-25. The licenses stated above primarily consist of licenses that grant the VIE and its subsidiaries the right to produce and broadcast internet, radio, and television programs. One of them is the ICP licenses as described in note 1.

As of December 31, 2019, Shenzhen Xunlei and its subsidiaries held patents granted in the PRC and in the United States. Presently, patent applications are being examined by the State Intellectual Property Office of the PRC.

As of December 31, 2019, Shenzhen Xunlei and its subsidiaries have applied to register trademarks, of which the Company has received registered trademarks in different applicable trademark categories including registered with World Intellectual Property Organization.

27. Certain risks and concentration (Continued)

PRC regulations (Continued)

The following consolidated financial information of the Group's VIE and its subsidiaries from continuing operations was included in the accompanying consolidated financial statements, before elimination of balances with the Company and its subsidiaries, as of and for the years ended:

	As of December 31,	
(In thousands)	**2018**	**2019**
Current assets:		
Cash and cash equivalents	47,695	34,847
Short-term investments	10,272	292
Accounts receivable, net	20,168	30,686
Due from related parties	1,123	1,644
Inventories	12,332	5,330
Prepayments and other current assets	14,518	20,747
Total current assets	**106,108**	**93,546**
Non-current assets:		
Equity method investments	18,325	5,337
Deferred tax assets	5,033	985
Property and equipment, net	14,604	19,956
Construction in progress	6,775	18,461
Intangible assets, net	9,991	9,426
Goodwill	20,717	20,382
Other long-term prepayments	593	313
Right-of-use assets	—	8,619
Retricted cash	—	2,983
Total non-current assets	**76,038**	**86,462**
Total assets	**182,146**	**180,008**
Current liabilities:		
Accounts payable (note a)	48,276	45,162
Due to a related party	298	2
Contract liabilities and deferred income, current portion	29,794	31,988
Income tax payable	2,437	2,436
Accrued liabilities and other payables (note b)	158,288	191,406
Held-for-sale liabilities	3,309	—
Lease liabilities, current portion	—	4,621
Total current liabilities	**242,402**	**275,615**
Non-current liabilities:		
Contract liabilities and deferred income, non-current portion	1,850	1,223
Deferred tax liabilities	1,366	1,179
Lease liabilities, non-current portion	—	4,073
Bank borrowings	—	11,324
Total non-current liabilities	**3,216**	**17,799**
Total liabilities	**245,618**	**293,414**

Note a: The balance included inter-companies balances with the Company and its subsidiaries of USD 25,703,000 and USD 19,875,000 as of December 31, 2018 and 2019, respectively.

Note b: The balance included inter-companies balances with the Company and its subsidiaries of USD 118,259,000 and USD 152,904,000 as of December 31, 2018 and 2019, respectively.

27. Certain risks and concentration (Continued)

PRC regulations (Continued)

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Net revenue from continuing operations	200,591	231,616	177,520
Net loss attributable to Xunlei Limited	(49,339)	(40,728)	(56,328)

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Net cash (used in)/ provided by operating activities	(6,992)	7,548	(16,047)
Net cash provided by/(used in) investing activities	13,463	(7,925)	(5,001)
Net cash provided by financing activities	1,180	2,096	11,707
	7,651	1,719	(9,341)

Foreign exchange risk

The Group's financing activities are denominated mainly in USD. The RMB is not freely convertible into foreign currencies. Remittances of foreign currencies into the PRC and exchange of foreign currencies into the RMB 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. The revenues and expenses of the Company's subsidiaries, consolidated VIE and its subsidiaries are generally denominated in RMB and their assets and liabilities are denominated in RMB.

Concentration of customer risk

The top 10 customers accounted for 27%, 23% and 31% of the net revenues for the years ended December 31, 2017, 2018 and 2019, respectively.

Credit risk

As of December 31, 2018 and 2019, substantially all of the Group's cash and cash equivalents were held at reputable financial institutions in the jurisdictions where the Group and its subsidiaries are located. The Group believes that it is not exposed to unusual risks as these financial institutions have high credit quality. The Group has not experienced any losses on its deposits of cash and cash equivalents.

Prior to entering into sales agreements, the Group performs credit assessments of its customers to assess their credit history. Further, the Group has not experienced any significant bad debts with respect to its accounts receivable for the years ended December 31, 2017 and 2019, the addition of allowance for doubtful accounts for the year ended December 31, 2018 was mainly arisen from the cloud computing service to a customer.

27. Certain risks and concentration (Continued)

PRC regulations (Continued)

Restricted net assets

Relevant PRC laws and regulations permit payments of dividends by the Company's subsidiaries, VIE and VIE's subsidiaries in China only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. In addition, the Company's subsidiaries, VIE and VIE's subsidiaries in China are required to make certain appropriation of net after-tax profits or increase in net assets to the statutory surplus fund (see note 2(bb)) prior to payment of any dividends. As a result of these and other restrictions under PRC laws and regulations, the Company's subsidiaries, VIE and VIE's subsidiaries in China are restricted in their ability to transfer their net assets to the Company in terms of cash dividends, loans or advances, which restricted portion amounted to USD 144,433,000 and USD 245,918,000 as of December 31, 2018 and 2019, respectively. Even though the Company currently does not require any such dividends, loans or advances from the PRC subsidiaries, VIE and VIE's subsidiaries for working capital and other funding purposes, the Company may in the future require additional cash resources from the Company's subsidiaries, VIE and a VIE's subsidiaries in China due to changes in business conditions, to fund future acquisitions and development, or merely to declare and pay dividends to make distributions to shareholders.

28. Subsequent events

(i) Outbreak of coronavirus ("COVID-19")

With the outbreak of COVID-19 starting from January 2020, the Group has performed an assessment and concluded that there was no significant impacts on the financial results of the Group subsequent to the year ended December 31, 2019 and up to the date of this report. The Group will keep continuous attention to the evolvement of the COVID-19 and react actively to its impacts on the operation and financial position of the Group.

(ii) Changes of shareholders

On April 15, 2020, certain of the Company's shareholders, including each of Xiaomi Ventures Limited, King Venture Holdings Limited, Morningside China TMT Special Opportunity Fund, L.P. and Morningside China TMT Fund III Co-Investment, L.P. ("Xunlei Shareholders"), and Itui International Inc. and its affiliated entities completed a transaction to exchange the common shares of Xunlei that owned by Xunlei Shareholders for new shares of Itui International Inc.

29. Additional information: condensed financial statements of the Company

Regulation S-X requires condensed financial information as to financial position, statements of cash flows and results of operations of a parent company as of the same dates and for the same periods for which audited consolidated financial statements have been presented when the restricted net assets of consolidated and unconsolidated subsidiaries together exceed 25 percent of consolidated net assets as of the end of the most recently completed fiscal year.

The Company records its investment in its subsidiaries, VIE and VIE's subsidiaries under the equity method of accounting.

Such investments are presented on the separate condensed balance sheets of the Company as "Long-term investments".

The subsidiaries did not pay any dividends to the Company for the periods presented. Certain information and footnote disclosures generally included in financial statements prepared in accordance with U.S. GAAP have been condensed and omitted. The footnote disclosures represent supplemental information relating to the operations of the Company, as such, these statements should be read in conjunction with the notes to the consolidated financial statements of the Group.

29. Additional information: condensed financial statements of the Company (Continued)

The Company did not have significant other commitments, long-term obligations, or guarantees as of December 31, 2019.

Condensed balance sheets

(In thousands)	December 31, 2018	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	47,781	7,683
Short-term investments	181,894	102,555
Due from subsidiaries and consolidated VIEs	151,491	277,241
Prepayments and other current assets	170	274
Total current assets	381,336	387,753
Non-current assets:		
Investments in subsidiaries and consolidated VIEs	(26,130)	(79,165)
Total assets	**355,206**	**308,588**
Liabilities		
Current liabilities:		
Accounts payable	55	55
Due to subsidiaries and consolidated VIEs	7,169	9,737
Contract liabilities and deferred income, current portion	503	1
Accrued liabilities and other payables	2,185	1,918
Total current liabilities	9,912	11,711
Total liabilities	**9,912**	**11,711**
Commitments and contingencies		
Shareholders' equity		
Common shares	84	85
Treasury shares 32,354,429 shares as at December 31, 2018 and 29,711,964 shares as at December 31, 2019	8	7
Other shareholders' equity	345,203	296,785
Total Xunlei Limited's shareholders' equity	345,295	296,877
Total liabilities and shareholders' equity	**355,207**	**308,588**

Condensed statements of operations

	Years ended December 31,		
(In thousands)	2017	2018	2019
Operating expenses			
Sales and marketing expenses	—	—	(1)
General and administrative expenses	(1,153)	(1,483)	(1,247)
Total operating expenses	(1,153)	(1,483)	(1,248)
Operating loss	(1,153)	(1,483)	(1,248)
Interest income	1,262	879	1,496
Interest expense	(239)	(239)	(75)
Other income, net	3,308	4,646	4,712
(Loss)/income from subsidiaries and consolidated VIE			
- Continuing operations	(47,407)	(43,221)	(57,787)
- Discontinued operations	6,407	139	—
Loss before income tax	(37,822)	(39,279)	(52,902)
Income tax	—	—	(267)
Net loss	(37,822)	(39,279)	(53,169)
Net loss attributable to Xunlei Limited's common shareholders	(37,822)	(39,279)	(53,169)

29. Additional information: condensed financial statements of the Company (Continued)

Condensed statements of cash flows

	Years ended December 31,		
(In thousands)	**2017**	**2018**	**2019**
Cash flows from operating activities			
Net cash used in operating activities	(25,333)	(88,309)	(171,796)
Cash flows from investing activities			
Net cash generated from investing activities	32,670	37,788	52,359
Cash flows from financing activities			
Net cash used in financing activities	(301)	—	—
Net (decrease) / increase in cash and cash equivalents	7,036	(50,521)	(119,437)
Cash and cash equivalents at beginning of year	273,160	280,196	229,675
Effect of exchange rates on cash and cash equivalents	—	—	—
Cash and cash equivalents at end of year	280,196	229,675	110,238

Exhibit 2.4

DESCRIPTION OF SECURITIES

As of December 31, 2019, Xunlei Limited ("Xunlei," "we," "our," "our company," or "us") had 339,165,241 common shares outstanding (excluding (i) 20,192,820 common shares that are (a) issued to our depositary bank for the purpose of bulk issuance and (b) repurchased by the company, and (ii) 9,519,144 common shares issued to Leading Advice Holdings Limited, our employee share incentive platform). Each common share of the Company has a par value of US$0.00025. Our common shares may be held in either certified or uncertified form.

American Depositary Shares ("ADSs"), each representing five common shares of Xunlei are listed and traded on the NASDAQ Global Select Market under the symbol "XNET" and, in connection therewith, our common shares are registered under Section 12(b) of the Securities Exchange Act of 1934, as amended.

This exhibit contains a description of the rights of (i) the holders of our common shares, and (ii) the holders of ADSs. Common shares underlying the ADSs are held by the Bank of New York Mellon, as depositary, and holders of ADSs will not be treated as holders of common shares.

MEMORANDUM AND ARTICLES OF ASSOCIATION

On June 11, 2014, we adopted our eighth amended and restated memorandum of association and seventh amended and restated articles of association, or memorandum and articles of association, which will become effective upon the completion of this offering. The following are summaries of material provisions of our memorandum and articles of association and the Companies Law insofar as they relate to the material terms of our common shares. This summary is not complete, and you should read the form of our memorandum and articles of association, which have been filed as exhibits to the registration statement of which this prospectus is a part.

Exempted company

We are an exempted company with limited liability under the Companies Law. The Companies Law distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except for the exemptions and privileges listed below:

- an exempted company does not have to file an annual return of its shareholders with the Registrar of Companies;
- an exempted company is not required to open its register of members for inspection;
- an exempted company does not have to hold an annual general meeting;
- an exempted company may in certain circumstances issue no par value, negotiable or bearer shares;
- an exempted company may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 20 years in the first instance);

- an exempted company may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- an exempted company may register as a limited duration company; and
- an exempted company may register as a segregated portfolio company.

Common shares

General. All of our issued and outstanding common shares are fully paid. Certificates representing the common shares are issued in registered form. Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their shares. We will issue non-negotiable shares and may not issue bearer or negotiable shares.

Register of members. Under Cayman Islands law, we must keep a register of members and there shall be entered therein:

(a) the names and addresses of the members, together with a statement of the shares held by each member, and such statement shall confirm (i) the amount paid or agreed to be considered as paid, on the shares of each member, (ii) the number and category of shares held by each member, and (iii) whether each relevant category of shares held by a member carries voting rights under the articles of association of the company, and if so, whether such voting rights are conditional;

(b) the date on which the name of any person was entered on the register as a member; and

(c) the date on which any person ceased to be a member.

Under Cayman Islands law, the register of members of our company is prima facie evidence of the matters set out therein (i.e. the register of members will raise a presumption of fact on the matters referred to above unless rebutted) and a member registered in the register of members shall be deemed as a matter of Cayman Islands law to have legal title to the shares as set against its name in the register of members. Once the register of members of our company has been updated, the shareholders recorded in the register of members shall be deemed to have legal title to the shares set against their name. There is no requirement under Cayman Islands laws for the register of members to be filed with the Registrar of Companies in the Cayman Islands.

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 Cayman Islands Grand Court 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.

Dividends. The holders of our common shares are entitled to such dividends as may be declared by our board of directors. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting rights. Each common share is entitled to one vote on all matters upon which the common shares are entitled to vote. Voting at any meeting of shareholders is by show of hands unless a poll is demanded. A poll may be demanded by the chairman of such meeting or any one or more shareholders present in person or by proxy entitled to vote and who together hold not less than 10 percent of our paid up voting share capital.

A quorum required for a meeting of shareholders consists of at least one shareholder present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative, who hold in aggregate not less than fifty percent of the total voting power of the company. Shareholders' meetings may be held annually and may be convened by our board of directors on its own initiative or upon a request to the directors by shareholders holding in aggregate at least one-third of the total voting power of the company. Advance notice of at least seven calendar days is required for the convening of shareholders' meetings.

An ordinary resolution to be passed by the shareholders requires the affirmative vote of a simple majority of the votes attaching to the common shares cast in a general meeting, while a special resolution requires the affirmative vote of at least two-thirds of the votes attaching to the common shares cast in a general meeting. Both ordinary resolutions and special resolutions may also be passed by a unanimous written resolution signed by all the shareholders of our company, as permitted by the Companies Law and our memorandum and articles of association. A special resolution is required for important matters such as a change of name or making changes to our memorandum and articles of association. Holders of the common shares may effect certain changes by ordinary resolution, including increasing the amount of our authorized share capital, consolidating all or any of our share capital and dividing all or any of our share capital into shares of larger amount than our existing shares, and cancelling any authorized but unissued shares.

Transfer of shares. Subject to the restrictions set out in our memorandum and articles of association, our shareholders may transfer all or any of their common shares by an instrument of transfer in writing and executed by or on behalf of the transferor (and if our directors so require, signed by the transferee). Our directors may also accept mechanically executed instruments of transfer.

Our board may decline to register any transfer of any common share which is not fully paid up or on which we have a lien. Our board may also decline to register any transfer of any share unless (a) the instrument of transfer is lodged with us, accompanied by the certificate for the common shares to which it relates and such other evidence as our board may reasonably require to show the right of the transferor to make the transfer; (b) the shares transferred are free of any lien in favor of us; and (c) a fee of such maximum sum as the NASDAQ Global Select Market may determine to be payable, or such lesser sum as our board may from time to time require, is paid to us in respect thereof.

If our board of directors refuses to register a transfer it shall, within two 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 be suspended on 14 days' notice being given by advertisement in such one or more newspapers or by electronic means and the register closed at such times and for such periods as our board may from time to time determine.

Liquidation. On a return of capital on winding up, assets available for distribution shall be distributed among the holders of common shares on a pro rata basis. If our assets available for distribution are insufficient to pay all of the paid up capital, the assets will be distributed so that the losses are borne by our shareholders proportionately. We are an exempted company with "limited liability" incorporated under the Companies Law, and under the Companies Law, the liability of our members is limited to the amount, if any, unpaid on the shares respectively held by them. Our memorandum of association contains a declaration that the liability of our members is so limited.

Calls on shares and forfeiture of shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 calendar days prior to the specified time and place of payment. Shares that have been called upon and remain unpaid on the specified time are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders thereof, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors. Our company may also repurchase any of our shares (including redeemable shares) provided that our shareholders shall have approved the manner of purchase by ordinary resolution unless (i) if the number of shares being purchased is less than 3% of the issued shares of our company, then we may purchase our own shares in such manner our board of directors may, by a simple majority of the entire board of directors (which must include one non-independent director), approve and on such terms as our board of directors may agree with the relevant shareholder, and (ii) if the number of shares being purchased is more than 3% but less than 5% of the issued shares of our company, then we may purchase our own shares in such manner our board of directors may, by a majority of two-thirds of our entire board of directors (which must include one non-independent director), approve and on such terms as our board of directors may agree with the relevant shareholder. Under the Companies Law, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if the company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Law no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding, or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of rights of shares. If at any time, our share capital is divided into different classes or series of shares, all or any of the rights attached to any class or series of shares may be varied or abrogated either with the written consent of the holders of a majority of the issued shares of that class or series or with the sanction of an ordinary resolution passed at a general meeting of the holders of the shares of that class or series.

General Meetings of Shareholders and Shareholder Proposals. As a Cayman Islands exempted company, we are not obliged by the Companies Law to call shareholders' annual general meetings. Our memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors.

Shareholders' annual general meetings and any other general meetings of our shareholders may be convened by a simple majority of our board of directors (which must include one non-independent director) or our chairman. Advance notice of at least seven calendar days is required for the convening of our annual general shareholders' meeting and any other general meeting of our shareholders.

Cayman Islands law provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our memorandum and articles of association allow our shareholders holding not less than one-third of the aggregate voting power of our company to requisition an extraordinary general meeting of our shareholders, in which case our directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting; however, our memorandum and articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

No business can be transacted at any general meeting unless a quorum of shareholders is present at the time when the meeting proceeds to business. One or more shareholders holding not less than an aggregate of fifty percent of the total voting power of our company in issue present in person or by proxy and entitled to vote shall be a quorum for all purposes.

Election and Removal of Directors. Our memorandum and articles of association provide that, unless otherwise determined by us in general meeting, our board will consist of not less than five directors (two of which must be non-independent directors). Directors may be elected by an ordinary resolution of our shareholders, or by the affirmative vote of a simple majority of our directors (which must include one non-independent director) present and voting at a meeting of our board of directors, and shall hold office until the expiration of his term and until his successor has been elected and qualified. There are no provisions relating to retirement of directors upon reaching any age limit.

A director may be removed from office by ordinary resolution at any time before the expiration of his term. A director shall be automatically and immediately removed from office if (i) he is notified of, and fails to attend, an aggregate of three duly called and constituted board meetings within any 365-day period or (ii) if a simple majority of all directors determine at a duly called and constituted board meeting that such director has been guilty of actual fraud or willful neglect in performing his duties as a director. In addition, the office of a director will be vacated if such director (a) dies, becomes bankrupt or makes any arrangement or composition with his creditors, (b) is found to be or becomes of unsound mind, (c) resigns his office by notice in writing to us, or (d) or is removed as a director pursuant to our memorandum and articles of association.

If (i) a director was or is affiliated with or was appointed to our board by a holder or a group of affiliated holders of common shares converted from our preferred shares prior to the completion of our initial public offering, and (ii) such holder or holders cease to own in aggregate 5% or more of our total issued common shares, our board may request the director to resign from the board and the director should resign from the board when a suitable director replacement candidate is identified by our board after a reasonable period of time.

Proceedings of Board of Directors. Our memorandum and articles of association provide that our business is to be managed and conducted by our board of directors. The quorum necessary for the board meeting may be fixed by the board and, unless so fixed at another number, will be a simple majority of the directors then in office (which should include a non-independent director).

Our directors may appoint any person, whether or not a director of our company, to hold such office in our company as our directors may think necessary for the administration of our company, including a chief executive officer and chief financial officer, for such term as the directors think fit. Notwithstanding the foregoing, our chief executive officer may appoint any person, whether or not a director of our company, to hold such offices (other than chief executive officer or chief financial officer) as he may think necessary, including the office of one or more vice presidents, chief operating officer, chief technology officer, for such term and with such powers and duties as the chief executive officer may think fit. Our directors may also appoint one or more of our directors to the office of managing director, but any such appointment shall terminate if any managing director ceases from any cause to be a director, or if our shareholders by ordinary resolution resolve that his tenure of office be terminated.

Our memorandum and articles of association provide that all the powers of our company to borrow money and to mortgage or charge its undertaking, property and uncalled capital or any part thereof, to issue debentures, debenture stock and other securities whenever money is borrowed or as security for any debt, liability or obligation of our company or of any third party may only be carried out jointly by our chief executive officer and chief financial officer.

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 (save for our memorandum and articles of association). However, we intend to provide our shareholders with annual audited financial statements.

DIFFERENCES IN CORPORATE LAW

The Companies Law of the Cayman Islands is modeled after that of the English Companies legislation but does not follow recent English statutory enactments. In addition, the Companies Law differs from laws applicable to United States corporations and their shareholders. Set forth below is a summary of the significant differences between the provisions of the Companies Law applicable to us and the laws applicable to companies incorporated in the United States and their shareholders.

Mergers and similar arrangements. The Companies Law permits mergers and consolidations between Cayman Islands companies and between Cayman Islands companies and non-Cayman Islands companies. For these purposes, (a) "merger" means the merging of two or more constituent companies and the vesting of their undertaking, property and liabilities in one of such companies as the surviving company; and (b) a "consolidation" means the combination of two or more constituent companies into a consolidated company and the vesting of the undertaking, property and liabilities of such companies to the consolidated company. In order to effect such a merger or consolidation, the directors of each constituent company must approve a written plan of merger or consolidation, which must then be authorized by (a) a special resolution of the shareholders of each constituent company, and (b) such other authorization, if any, as may be specified in such constituent company's articles of association. The written plan of merger or consolidation must be filed with the Registrar of Companies together with a declaration as to the solvency of the consolidated or surviving company, a list of the assets and liabilities of each constituent company and an undertaking that a copy of the certificate of merger or consolidation will be given to the members and creditors of each constituent company and that notification of the merger or consolidation will be published in the Cayman Islands Gazette. Dissenting shareholders have the right to be paid the fair value of their shares (which, if not agreed between the parties, will be determined by the Cayman Islands court) if they follow the required procedures, subject to certain exceptions. Court approval is not required for a merger or consolidation which is effected in compliance with these statutory procedures.

In addition, there are statutory provisions that facilitate the reconstruction and amalgamation of companies, provided that the arrangement is approved by a majority in number of each class of shareholders and creditors with whom the arrangement is to be made, and who must in addition represent three-fourths in value of each such class of shareholders or creditors, as the case may be, that are present and voting either in person or by proxy at a meeting, or meetings, convened for that purpose. The convening of the meetings and subsequently the arrangement must be sanctioned by the Grand Court of the Cayman Islands. While a dissenting shareholder has the right to express to the court the view that the transaction ought not to be approved, the court can be expected to approve the arrangement if it determines that:

- the statutory provisions as to majority vote have been met;
- the shareholders have been fairly represented at the meeting in question;
- the arrangement is such that a businessman would reasonably approve; and
- the arrangement is not one that would more properly be sanctioned under some other provision of the Companies Law.

When a take-over offer is made and accepted by holders of 90.0% of the shares affected within four months, the offeror may, within a two month period commencing on the expiration of such four month period, require the holders of the remaining shares to transfer such shares on the terms of the offer. An objection can be made to the Grand Court of the Cayman Islands but this is unlikely to succeed unless there is evidence of fraud, bad faith or collusion.

If the arrangement and reconstruction is thus approved, the dissenting shareholder would have no rights comparable to appraisal rights, which would otherwise ordinarily be available to dissenting shareholders of United States corporations, providing rights to receive payment in cash for the judicially determined value of the shares.

Shareholders' Suits. In principle, we will normally be the proper plaintiff and a derivative action may not be brought by a minority shareholder. However, based on English authorities, which would in all likelihood be of persuasive authority in the Cayman Islands, the Cayman Islands courts ordinarily would 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 representative action against, or derivative actions in the name of, our company to challenge:

- an act which is illegal or ultra vires and is therefore incapable of ratification by the shareholders;
- an act which requires a resolution with a qualified (or special) majority (i.e. more than a simple majority) which has not been obtained; and
- an act which constitutes a fraud on the minority where the wrongdoers are themselves in control of the company.

Indemnification. Cayman Islands law does not limit the extent to which a company's memorandum and articles of association may provide for indemnification of officers and directors, except to the extent any such provision may be held by the Cayman Islands courts to be contrary to public policy, such as to provide indemnification against civil fraud or the consequences of committing a crime.

Under our memorandum and articles of association, we shall indemnify each of our directors and officers of our company against all actions, proceedings, costs, charges, expenses, losses, damages or liabilities incurred or sustained by him, otherwise than by reason of his own dishonesty, actual fraud or willful default, in connection with the execution or discharge of his duties, powers, authorities or discretions as a director or officer of our company.

We intend to enter into indemnification agreements with our directors and executive officers to indemnify them to the fullest extent permitted by applicable law and our articles of association, from and against all costs, charges, expenses, liabilities and losses incurred in connection with any litigation, suit or proceeding to which such director is or is threatened to be made a party, witness or other participant.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us under the foregoing provisions, we have been advised that in the opinion of the Securities and Exchange Commission, or the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

General meetings and shareholder proposals. Cayman Islands law provides shareholders with only limited rights to requisition a general meeting, and does not provide shareholders with any right to put any proposal before a general meeting. However, these rights may be provided in a company's articles of association. Our memorandum and articles of association allow our shareholders holding not less than one-third of our voting share capital to requisition a general meeting of the shareholders, in which case the directors are obliged to call such meeting and to put the resolutions so requisitioned to a vote at such meeting; however, our articles of association do not provide our shareholders with any right to put any proposals before annual general meetings or extraordinary general meetings not called by such shareholders.

As a Cayman Islands exempted company, we are not obliged by the Companies Law to call shareholders' annual general meetings. Our memorandum and articles of association provide that we may (but are not obliged to) in each year hold a general meeting as our annual general meeting in which case we shall specify the meeting as such in the notices calling it, and the annual general meeting shall be held at such time and place as may be determined by our directors. We, however, will hold an annual shareholders' meeting during each fiscal year, as required by the rules of the NASDAQ Global Select Market.

DESCRIPTION OF AMERICAN DEPOSITARY SHARES

American depositary shares

The Bank of New York Mellon, as depositary, will register and deliver American depositary shares, also referred to as ADSs. Each ADS represents five common shares (or a right to receive five common shares) deposited with the principal Hong Kong office of The Hong Kong and Shanghai Banking Corporation Limited, as custodian for the depositary. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The depositary's corporate trust office at which the ADSs will be administered is located at 101 Barclay Street, New York, New York 10286. The Bank of New York Mellon's principal executive office is located at One Wall Street, New York, New York 10286.

You may hold ADSs either (A) directly (i) by having an American depositary receipt, also referred to as an ADR, which is a certificate evidencing a specific number of ADSs, registered in your name, or (ii) by having ADSs registered in your name in the direct registration system, or (B) indirectly by holding a security entitlement in ADSs through your broker or other financial institution. If you hold ADSs directly, you are a registered ADS holder, also referred to as an ADS holder. This description assumes you are an ADS holder. If you hold the ADSs indirectly, you must rely on the procedures of your broker or other financial institution to assert the rights of ADS holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

The direct registration system, also referred to as DRS, is a system administered by The Depository Trust Company, also referred to DTC, under which the depositary may register the ownership of uncertificated ADSs, which ownership is confirmed by periodic statements sent by the depositary to the registered holders of uncertificated ADSs.

As an ADS holder, we will not treat you as one of our shareholders and you will not have shareholder rights. Cayman Islands law governs shareholder rights. The depositary will be the holder of the shares underlying your ADSs. As a registered holder of ADSs, you will have ADS holder rights. A deposit agreement among us, the depositary, ADS holders and all other persons indirectly or beneficially holding ADSs sets out ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs.

The following is a summary of the material provisions of the deposit agreement. For more complete information, you should read the entire deposit agreement and the form of ADR.

Dividends and other distributions

How will you receive dividends and other distributions on the shares?

The depositary has agreed to pay to ADS holders the cash dividends or other distributions it or the custodian receives on shares or other deposited securities, after deducting its fees and expenses. You will receive these distributions in proportion to the number of Shares your ADSs represent.

Cash. The depositary will convert any cash dividend or other cash distribution we pay on the shares into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If that is not possible or if any government approval is needed and cannot be obtained, the deposit agreement allows the depositary to distribute the foreign currency only to those ADS holders to whom it is possible to do so. It will hold the foreign currency it cannot convert for the account of the ADS holders who have not been paid. It will not invest the foreign currency and it will not be liable for any interest.

Before making a distribution, any withholding taxes, or other governmental charges that must be paid will be deducted. It will distribute only whole U.S. dollars and cents and will round fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when the depositary cannot convert the foreign currency, you may lose some or all of the value of the distribution.*

Shares. The depositary may, and shall if we so request in writing, distribute additional ADSs representing any shares we distribute as a dividend or free distribution. The depositary will only distribute whole ADSs. It will sell shares which would require it to deliver a fractional ADS and distribute the net proceeds in the same way as it does with cash. If the depositary does not distribute additional ADSs, the outstanding ADSs will also represent the new shares. The depositary may sell a portion of the distributed shares sufficient to pay its fees and expenses in connection with that distribution.

Rights to purchase additional shares. If we offer holders of our securities any rights to subscribe for additional shares or any other rights, the depositary may make these rights available to ADS holders. If the depositary decides it is not legal and practical to make the rights available but that it is practical to sell the rights, the depositary will use reasonable efforts to sell the rights and distribute the proceeds in the same way as it does with cash. The depositary will allow rights that are not distributed or sold to lapse. *In that case, you will receive no value for them.*

If the depositary makes rights available to ADS holders, it will exercise the rights and purchase the shares on your behalf. The depositary will then deposit the shares and deliver ADSs to the persons entitled to them. It will only exercise rights if you pay it the exercise price and any other charges the rights require you to pay.

U.S. securities laws may restrict transfers and cancellation of the ADSs represented by shares purchased upon exercise of rights. For example, you may not be able to trade these ADSs freely in the United States. In this case, the depositary may deliver restricted depositary shares that have the same terms as the ADSs described in this section except for changes needed to put the necessary restrictions in place.

Other distributions. The depositary will send to ADS holders anything else we distribute on deposited securities by any means it thinks is legal, fair and practical. If it cannot make the distribution in that way, the depositary has a choice. It may decide to sell what we distributed and distribute the net proceeds, in the same way as it does with cash. Or, it may decide to hold what we distributed, in which case ADSs will also represent the newly distributed property. However, the depositary is not required to distribute any securities (other than ADSs) to ADS holders unless it receives reasonably satisfactory evidence from us that it is legal to make that distribution. The depositary may sell a portion of the distributed securities or property sufficient to pay its fees and expenses in connection with that distribution.

The depositary is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADS holders. We have no obligation to register ADSs, shares, rights or other securities under the Securities Act. We also have no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADS holders. *This means that you may not receive the distributions we make on our shares or any value for them if it is illegal or impractical for us to make them available to you .*

Deposit, withdrawal and cancellation

How are ADSs issued?

The depositary will deliver ADSs if you or your broker deposit shares or evidence of rights to receive shares with the custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will register the appropriate number of ADSs in the names you request and will deliver the ADSs to or upon the order of the person or persons that made the deposit.

Except for common shares deposited by us in connection with this offering, no shares will be accepted for deposit during a period of 180 days after the date of this prospectus. The 180-day lock-up period is subject to adjustment under certain circumstances as described in the section entitled “Shares Eligible for Future Sale—Lock-up Agreements.”

How can ADS holders withdraw the deposited securities?

You may surrender your ADSs at the depositary’s corporate trust office. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, the depositary will deliver the shares and any other deposited securities underlying the ADSs to the ADS holder or a person the ADS holder designates at the office of the custodian. Or, at your request, risk and expense, the depositary will deliver the deposited securities at its corporate trust office, if feasible.

How do ADS holders interchange between certificated ADSs and uncertificated ADSs?

You may surrender your ADR to the depositary for the purpose of exchanging your ADR for uncertificated ADSs. The depositary will cancel that ADR and will send to the ADS holder a statement confirming that the ADS holder is the registered holder of uncertificated ADSs. Alternatively, upon receipt by the depositary of a proper instruction from a registered holder of uncertificated ADSs requesting the exchange of uncertificated ADSs for certificated ADSs, the depositary will execute and deliver to the ADS holder an ADR evidencing those ADSs.

Voting rights

How do you vote?

ADS holders may instruct the depositary how to vote the number of deposited shares their ADSs represent. The depositary will notify ADS holders of shareholders' meetings and arrange to deliver our voting materials to them if we ask it to. Those materials will describe the matters to be voted on and explain how ADS holders may instruct the depositary how to vote. For instructions to be valid, they much reach the depositary by a date set by the depositary. Pursuant to the deposit agreement, there are no circumstances where we would not instruct the depositary to notify ADSs holders of shareholders' meetings or where the depositary may itself determine not to notify ADS holders of such meetings.

Otherwise, you will not be able to exercise your right to vote unless you withdraw the shares. However, you may not know about the meeting enough in advance to withdraw the shares.

The depositary will try, as far as practical, subject to the laws of the Cayman Islands and of our articles of association or similar documents, to vote or to have its agents vote the shares or other deposited securities as instructed by ADS holders. The depositary will only vote or attempt to vote as instructed. If we ask for your instructions but the depositary does not receive your instructions by the date the depositary sets, the depositary may give a discretionary proxy to a person designated by us to vote the amount of deposited shares your ADSs represent, unless we notify the depositary that (i) substantial opposition exists or (ii) the matter to be voted on would have a material adverse effect on the rights of holders of our common shares.

We cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. *This means that you may not be able to exercise your right to vote and there may be nothing you can do if your shares are not voted as you requested.*

We have agreed to give the Depositary notice of any such meeting and details concerning the matters to be voted upon as far in advance of the meeting date as practicable. Under our post-offering memorandum and articles of association, the minimum notice period required to convene a general meeting is seven calendar days.

Reclassifications, recapitalizations and mergers

If we:	**Then:**
· Change the nominal or par value of our shares · Reclassify, split up or consolidate any of the deposited securities	The cash, shares or other securities received by the depositary will become deposited securities. Each ADS will automatically represent its equal share of the new deposited securities.
· Distribute securities on the shares that are not distributed to you · Recapitalize, reorganize, merge, liquidate, sell all or substantially all of our assets, or take any similar action	The depositary may distribute new ADSs representing the new deposited securities or ask you to surrender your outstanding ADRs in exchange for new ADRs identifying the new deposited securities.

Amendment and termination

How may the deposit agreement be amended?

We may agree with the depositary to amend the deposit agreement and the ADRs without your consent for any reason. If an amendment adds or increases fees or charges, except for taxes and other governmental charges or expenses of the depositary for registration fees, facsimile costs, delivery charges or similar items, or prejudices a substantial right of ADS holders, it will not become effective for outstanding ADSs until 30 days after the depositary notifies ADS holders of the amendment. *At the time an amendment becomes effective, you are considered, by continuing to hold your ADSs, to agree to the amendment and to be bound by the ADRs and the deposit agreement as amended* .

How may the deposit agreement be terminated?

The depositary will terminate the deposit agreement at our direction by mailing notice of termination to the ADS holders then outstanding at least 30 days prior to the date fixed in such notice for such termination. The depositary may also terminate the deposit agreement by mailing notice of termination to us and the ADS holders if 60 days have passed since the depositary told us it wants to resign but a successor depositary has not been appointed and accepted its appointment.

After termination, the depositary and its agents will do the following under the deposit agreement but nothing else: collect distributions on the deposited securities, sell rights and other property, and deliver shares, other deposited securities and distributions upon cancellation of ADSs. Four months after termination, the depositary may sell any remaining deposited securities by public or private sale. After that, the depositary will hold the money it received on the sale, as well as any other cash it is holding under the deposit agreement for the *pro rata* benefit of the ADS holders that have not surrendered their ADSs. It will not invest the money and has no liability for interest. The depositary's only obligations will be to account for the money and other cash. After termination our only obligations will be to indemnify the depositary and to pay fees and expenses of the depositary that we agreed to pay.

Limitations on obligations and liability

Limits on our obligations and the obligations of the depositary; limits on liability to holders of ADSs

The deposit agreement expressly limits our obligations and the obligations of the depositary. It also limits our liability and the liability of the depositary. We and the depositary:

- are only obligated to take the actions specifically set forth in the deposit agreement without negligence or bad faith;

- are not liable if we are or it is prevented or delayed by law or circumstances beyond our control from performing our or its obligations under the deposit agreement;

- are not liable if we or it exercises discretion permitted under the deposit agreement;

- are not liable for the inability of any holder of ADSs to benefit from any distribution on deposited securities that is not made available to holders of ADSs under the terms of the deposit agreement, or for any special, consequential or punitive damages for any breach of the terms of the deposit agreement;

- have no obligation to become involved in a lawsuit or other proceeding related to the ADSs or the deposit agreement on your behalf or on behalf of any other person;

- are not liable for the acts or omissions of any securities depository, clearing agency or settlement system; and

- may rely upon any documents we believe or it believes in good faith to be genuine and to have been signed or presented by the proper person.

In the deposit agreement, we and the depositary agree to indemnify each other under certain circumstances.

Requirements for depositary actions

Before the depositary will deliver or register a transfer of an ADS, make a distribution on an ADS, or permit withdrawal of shares, the depositary may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities;

- satisfactory proof of the identity and genuineness of any signature or other information it deems necessary; and

- compliance with regulations it may establish, from time to time, consistent with the deposit agreement, including presentation of transfer documents.

The depositary may refuse to deliver ADSs or register transfers of ADSs when the transfer books of the depositary or our transfer books are closed or at any time if the depositary or we think it advisable to do so.

Your right to receive the shares underlying your ADSs

ADS holders have the right to cancel their ADSs and withdraw the underlying shares at any time except:

- When temporary delays arise because: (i) the depositary has closed its transfer books or we have closed our transfer books; (ii) the transfer of shares is blocked to permit voting at a shareholders' meeting; or (iii) we are paying a dividend on our shares.

- When you owe money to pay fees, taxes and similar charges.

- When it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of shares or other deposited securities.

This right of withdrawal may not be limited by any other provision of the deposit agreement.

Pre-release of ADSs

The deposit agreement permits the depositary to deliver ADSs before deposit of the underlying shares, unless requested in writing by us to cease doing so. This is called a pre-release of the ADSs. The depositary may also deliver shares upon cancellation of pre-released ADSs (even if the ADSs are canceled before the pre-release transaction has been closed out). A pre-release is closed out as soon as the underlying shares are delivered to the depositary. The depositary may receive ADSs instead of shares to close out a pre-release. The depositary may pre-release ADSs only under the following conditions: (1) before or at the time of the pre-release, the person to whom the pre-release is being made represents to the depositary in writing that it or its customer owns the shares or ADSs to be deposited; (2) the pre-release is fully collateralized with cash or other collateral that the depositary considers appropriate; and (3) the depositary must be able to close out the pre-release on not more than five business days' notice. In addition, the depositary normally will limit the number of ADSs that may be outstanding at any time as a result of pre-release to no more than 30% of the amount of shares on deposit, although the depositary may disregard the limit from time to time if it thinks it is appropriate to do so. The depositary has full discretion on how and to what extent it may disregard the limit for the amount of ADSs that may be outstanding at any time as a result of pre-release.

Direct registration system

In the deposit agreement, all parties to the deposit agreement acknowledge that the DRS and Profile Modification System, or Profile, will apply to uncertificated ADSs upon acceptance thereof to DRS by DTC. DRS is the system administered by DTC under which the depositary may register the ownership of uncertificated ADSs, which ownership will be confirmed by periodic statements sent by the depositary to the registered holders of uncertificated ADSs. Profile is a required feature of DRS that allows a DTC participant, claiming to act on behalf of a registered holder of ADSs, to direct the depositary to register a transfer of those ADSs to DTC or its nominee and to deliver those ADSs to the DTC account of that DTC participant without receipt by the depositary of prior authorization from the ADS holder to register that transfer.

In connection with and in accordance with the arrangements and procedures relating to DRS/Profile, the parties to the deposit agreement understand that the depositary will not determine whether the DTC participant that is claiming to be acting on behalf of an ADS holder in requesting registration of transfer and delivery described in the paragraph above has the actual authority to act on behalf of the ADS holder (notwithstanding any requirements under the Uniform Commercial Code). In the deposit agreement, the parties agree that the depositary's reliance on and compliance with instructions received by the depositary through the DRS/Profile System and in accordance with the deposit agreement will not constitute negligence or bad faith on the part of the depositary.

Shareholder communications; inspection of register of holders of ADSs

The depositary will make available for your inspection at its office all communications that it receives from us as a holder of deposited securities that we make generally available to holders of deposited securities. The depositary will send you copies of those communications if we ask it to. You have a right to inspect the register of holders of ADSs, but not for the purpose of contacting those holders about a matter unrelated to our business or the ADSs.

Exhibit 4.39

Credit Agreement

Credit Provider : China Merchants Bank Shenzhen Branch (hereinafter "Party A")

Credit Applicant : Shenzhen Xunlei Networking Technologies Co., Ltd. (hereinafter "Party B")

Upon Party B's application, Party A hereby agrees to provide a credit line for Party B. Now therefore, in accordance with applicable laws and regulations, Party A and Party B (hereinafter "the Parties"), through adequate negotiation, hereby make and enter into this *Credit Agreement* (hereinafter "this Agreement"), subject to the following terms and conditions.

1. Credit Line

1.1 Under this agreement, Party A will extend a credit line of Eighty Five Million Yuan (including other currencies of equivalent value converted at the exchange rate published by Party A at the time when a specific transaction actually occurs, same below) (including revolving credit line and/or one-time credit line) (hereinafter "the Credit Line").

Any outstanding specific Credit Services or unpaid credit balance from Party A (or any subordinate body of Party A) and Party B's previously signed Credit Agreement numbered ***, will be automatically incorporated into this Agreement and take up corresponding amounts of the Credit Line hereunder.

1.2 The credit extending period is twelve months from May 20th, 2019 to May 19th, 2020 ("the Credit Extending Period"). If Party B needs to use the credit line for a specific Credit Service, Party B shall apply for credit utilization within the Credit Extending Period; unless otherwise provided herein, Party A will not accept any credit utilization application submitted beyond the expiration date of the Credit Extending Period.

1.3 Credit products and services offered under the Credit Line include without limit one or more credit products or services of: loan/order loan, trade financing, bills discount, commercial bills acceptance, commercial acceptance bills guarantee, international/domestic guarantee, customs payment guarantee, legal-person account overdraft, derivative transaction, gold lease, etc.(hereinafter "Credit Services").

"Trade financing" includes without limit such service types as international/domestic letter of credit, import bill advance, delivery guarantee, advance against import documentary collection, packing finance, export bill advance, export negotiation, advance against export documentary collection, import/export remittance financing, credit insurance financing, factoring, commercial paper guarantee, etc.

1.4 Revolving credit line refers to the maximum balance sum of principals of one or more foregoing Credit Services offered by Party A to Party B during the Credit Extending Period, which can be used by Party B on a continuous and revolving basis.

One-time credit line refers to a credit line under which the cumulative amount of all foregoing Credit Products offered by Party A to Party B must not exceed the amount of the one-time credit line approved by Party A. One-time credit line may not be used by Party B revoltingly; amounts of the multiple Credit Services applied for by Party B will take up corresponding amounts of the one-time credit line cumulatively, until the credit line is exhausted.

2. Credit Line Usage Arrangement

2.1 Any specific Credit Services applied for by Party A and approved by Party B during the credit extending period, will be automatically incorporated into this Agreement and take up corresponding amounts of the Credit Line hereunder.

2.2 If Party A provides factoring service with Party B as the payer (debtor), the third-party accounts receivable debt against Party B acquired by Party A under these services will take up amounts of the Credit Line; if Party B applies for factoring service from Party A as the payee (creditor), the acquisition/offtake payments provided by Party A to Party B by using Party A's own funds or other funds of lawful sources for the purchase of receivables held by Party B will take up amounts of the Credit Line.

2.3 If Party A entrusts other branches of China Merchants Bank to issue back-to-back letter of credit to the beneficiary according to its internal procedures after issuing the letter of credit, such letters of credit and documentary credits and delivery guarantees arising thereunder will take up amounts of the Credit Line.

Under the import letter of credit service, if any subsequent import bill advance is made under the same letter of credit, the letter of credit and import bill advance will take up the same amount of the Credit Line at different stage. That is to say, when an import bill advance is made, amount recovered after payment by the letter of credit will be reused to make import bill advance, and will be deemed to take up the same amount as the original import letter of credit.

3. Credit Line Approval and Utilization

3.1 The types of Credit Line hereunder (revolving credit line or one-time credit line) and applicable types of Credit Services, credit amounts extended for different types of Credit Services, whether different types of Credit Services can be swapped, and specific conditions for utilizing the Credit Line are subject to approval of Party A. If Party A makes any adjustment to its original approval according to Party B's application during the Credit Extending Period, any subsequent approvals issued by Party A will constitute supplements and modifications to the original approval, and so on.

3.2 Party B must apply for utilization of the Credit Line one by one by submitting the required documentation for examination and approval by Party A on a case-by-case basis. Party A shall have the right to decide whether to approve each application based on its internal management requirements, Party B's operation status and other relevant conditions, and may reject Party B's application at its sole discretion without assuming any legal liability to Party B. Where there is any inconsistency between this provision with any other provisions hereof, this provision shall prevail.

In any follow-up service of specific Credit Services previously approved by Party A, separate service agreements (whether single-transaction agreements/applications or framework agreement) signed between Party A and Party B for specific services hereunder will constitute integral parts of this Agreement. Amounts, interest rates, duration, purposes, fees and other transaction elements of each loan or other credits will be subject to separate service agreements, the transaction vouchers confirmed by Party A (including by not limited to loan statements etc.) and the transaction records in Party A's system.

3.3 Duration of each loan or other credits within the scope of the Credit Line shall be determined according to Party B's business need and Party A's business management rules; the expiration date of each specific service may be later than that of the Credit Extending Period (unless required otherwise by Party A).

3.4 During the Credit Extending Period, Party A shall have the right to evaluate Party B's business and financial status on an annual basis, and adjust the usable credit line of Party B based on such assessment.

4. Party B's Rights and Obligations

4.1 Party B shall have the following rights to:

4.1.1 Require Party A to provide loans or other credits within the scope of the Credit Line in accordance with the terms and conditions hereof;

4.1.2 Make use of the Credit Line in accordance with the terms and conditions hereof;

4.1.3 Require Party A to maintain confidentiality for information provided by Party B regarding Party B's production, operation, properties, accounts and other aspects, unless it is required otherwise by laws and regulations or the supervisory authority;

4.1.4 Transfer its debts to a third party with Party A's consent.

4.2 Party B shall be obligated to:

4.2.1 Provide authentic documents required by Party A (including but not limited to, on the frequency required by Party A, provide authentic financial books/statements and annual financial reports, important decisions and changes in production, operation and management, money withdrawal/utilization information, information related to collateral, etc.), and information regarding all banks of deposit, account numbers and deposit & loan balances, and cooperate with Party A's investigation, review and inspection;

4.2.2 Accept Party A's inspection on its use of credit funds and related production, operation and financial activities;

4.2.3 Make use of the loans and/or other credits in accordance with provisions of this Agreement and separate contracts and/or the committed purposes;

4.2.4 Repay on time principals, interests and fees of loans, advances and other credits in accordance with provisions of this Agreement and separate contracts;

4.2.5 Obtain Party A's written consent before transferring debts hereunder to any third party in whole or in part;

4.2.6 Inform Party A promptly and actively coordinate with Party A in arranging for measures to secure repayment of principals, interests and fees of all loans, advances and other credits hereunder under any condition as follows:

4.2.6.1 Material financial loss, loss of assets or other financial crisis has occurred;

4.2.6.2 It provides loans or guarantee security for any third party or provide mortgage/pledge security with its own assets (rights);

4.2.6.3 Suspension of business, revocation or deregistration of business license, filing or being filed for bankruptcy or dissolution, or changes in important business information, such as: business name, business registration address, operating location, or changes in beneficiary information etc.;

4.2.6.4 Its controlling shareholder, other affiliated company or ultimate controlling party encounters major crisis in their operation or finance, causing adverse impact to its normal operation; or the legal representative of its controlling shareholder, other affiliated company, ultimate controlling party/main responsible party, or board member or significant managerial staff incurs change in personnel, is penalized/limited personal freedom by authorized government entities for illegal activities or discipline violations, or is missing for over 7 days and may affect normal operations;

4.2.6.5 It enters into related-party transaction reaching 10% or more of its net assets value with its controlling shareholder or other affiliated company (Party B's notification shall include, at least, the relationship of each related-party, the nature and type of the transaction, the transaction amount or the corresponding proportion, transfer pricing policy (including whether there is an actual monetary amount or only a symbolic transfer) etc.);

4.2.6.6 Any litigation, arbitration or criminal/administrative penalty has been brought by or against it, causing material negative effect on its operation or financial status;

4.2.6.7 Its legal representative/main responsible party, board member or significant managerial staff incur change in personnel, is penalized/limited personal freedom by authorized government entity for legal or disciplinary violations, or is missing for over 7 days and may affect normal operations;

4.2.6.8 It, or its ultimate controlling party has involvement in any private high-interest loan activity; or incur a bad record in another financial institution for loan rollover, late payment, interest arrears etc.; or its affiliated party experience an internal cash flow breakdown or a dead crisis; or its project is suspended, postponed or a major investment error occurs;

4.2.6.9 Other material circumstances that may affect its solvency.

4.2.7 Party B shall not be slack in managing or claiming its mature debts or dispose its existing major properties without compensation or by other improper means.

4.2.8 Party B must obtain Party A's prior written consent before engaging in consolidation (merger), separation, restructuring, equity joint venture (cooperative joint venture), transfer of property rights or equity, reforming its shareholding system, overseas investment, increasing debt financing, etc.

4.2.9 In the case of dynamic pledge of accounts receivable, Party B shall guarantee that the credit balance at any time point during the Credit Extending Period is lower than 80 % of the balance of the pledged accounts receivable, otherwise it must provide new accounts receivable acceptable to Party A for pledge or provide a bond (account number is determined by the bond deposit date generated or recorded by Party A's system, same for hereunder), until the balance of the pledged accounts receivable × 80 % + valid bond > credit balance.

4.2.10 In the case of bond pledge, if fluctuation in exchange rate results in the balance of the bond account being lower than 95 % of the amount of the corresponding credit service, Party B shall have the obligation to provide additional amount of bond or other guarantee as required by Party A.

4.2.11 Party B shall guarantee that payments for goods under import shall be collected into the account designated by Party A; under export negotiation, shall transfer bills and/or documents under the letter of credit to Party A.

4.2.12 Party B shall ensure that settlement, payment and other income and expenditure activities are mainly carried out in its bank settlement account opened at Party A. During the Credit Extending Period, Party B's share of settlement transactions in its designated account shall not be less than Party A's financing share in all of the Party B's bank financing.

5. Party A's Rights and Obligations

5.1 Party A shall have the following rights to:

5.1.1 Require Party B to fully repay on time principals and interests of all loans, advances and credit debts under this Agreement and separate contracts;

5.1.2 Require Party B to provide documents and information related to its utilization of the Credit Line;

5.1.3 Ask for information about Party B's production, operation and financial activities;

5.1.4 Supervise that Party B is utilizing loans and/or other credits for the purposes agreed under this Agreement and separate contracts; when it is required by its business, unilaterally suspend or restrict the corporate E-banking function of Party B's account (including but not limited closing the E-bank, presetting list of payees/single payment limit/phase payment limit, etc.), restrict sale of settlement vouchers, or restrict telephone banking, mobile banking and other non-counter payment and exchange functions of Party B's account;

5.1.5 Authorize other branches of China Merchants Bank in the place where the beneficiary is located to issue letter of credit to the beneficiary according to its internal procedures.

5.1.6 Deduct funds from any account of Party B at any outlet of China Merchants Bank for repaying Party B's debts under this Agreement and separate contracts (if credit debts are not denominated in RMB, to purchase exchange from Party B's CNY account according to the exchange rate published by Party A at the time of deduction to repay principals, interests and fees of the credit debts);

5.1.7 Transfer its claims against Party B, and inform Party B about the transfer and collect from Party B by appropriate means at its sole discretion, including but not limited to fax, mailing, personal service, announcement on the public media, etc.;

5.1.8 Monitor and entrust other China Merchants Bank outlets to monitor Party B's accounts, and control disbursement of loan funds according to the loan purposes and payment scope agreed by the Parties;

5.1.9 If Party A finds that Party B is in a situation described under Article 4.2.6 of this agreement, Party A has the right to require party B to implement guarantee measures stipulated by Party A for the principle and interest balance of the credit line and all related fees under this agreement; Party A also has the right to take one or more of the remedies for breach of contract stipulated in the "Breach Events and Treatment" section of this agreement;

5.1.10 Other rights provided hereunder.

5.2 Party A shall be obligated to:

5.2.1 Extend loans or other credits to Party B within the scope of the Credit Line according to the conditions provided under this Agreement and separate contracts;

5.2.2 Maintain confidentiality for the status of Party B's assets, finance, production and operation, unless otherwise provided by laws and regulations or otherwise required by the supervisory body.

6. Party B hereby makes the following guarantees:

6.1 Party B is an entity with legal-person qualification lawfully established and existing under the laws of the People's Republic of China, its procedures for registration and annual reports publication are true, lawful and valid, and it has full capacity for civil conduct to sign and perform this Agreement;

6.2 Party B has obtained full authorization from its board of directors or any other authorities to sign and perform this Agreement;

6.3 Documents, data, certificates and other information provided by Party B regarding Party B, the Guarantor, mortgagors/pledgors and mortgaged/pledged assets are authentic, accurate, complete and valid, and do not contain material error or omission of any material fact that is inconsistent with the facts;

6.4 Party B shall strictly observe provisions of all separate transaction agreements and all letters and documents it issue to Party A;

6.5 No litigation, arbitration or criminal/administrative penalty that may have material adverse consequences on Party B or its main property has taken place at the time of signing this Agreement and no such litigation, arbitration or criminal/administrative penalty will take place during the execution of this Agreement. In case any such condition occurs, Party B shall immediately notify Party A;

6.6 Party B shall strictly abide by national laws and regulations in its business activities, carry out various businesses in strict accordance with the business scope stipulated in its business license or approved according to the law, and go through the formalities of annual registration inspection and business term renewal/extension on time;

6.7 Party B shall maintain or improve the current operation and management level, ensure the maintenance and appreciation of its existing assets, do not give up any mature debt claims, and do not dispose existing main properties without compensation or by other inappropriate ways;

6.8 Without permission of Party A, Party B shall not repay other long-term debts in advance;

6.9 At the time of signing and performing this Agreement, Party B has not had any other major events affecting the performance of its obligations hereunder.

7. Other Fees and Expenses

Where this Agreement involves matters that require notarization (except for mandatory notarization) or third-party services, related fees and expenses arising therefrom shall be borne by the entrusting party. If the entrusting is made by both parties collectively, they shall each bear 50% of the fees and expenses.

In the event that Party B fails to repay the debts owed to Party A under this Agreement as scheduled, all costs incurred by Party A in realizing its debt claim, such as attorney's fees, legal fees, travel expenses, announcement fees, service fees, etc., shall be borne by Party B in full, and Party B hereby authorizes Party A to directly deduct such costs from Party B's bank account at Party A. Where there is any deficiency, Party B shall indemnify Party A in full upon receipt of the notice from Party A without requiring any proof from Party A.

8. Breach Events and Treatment

8.1 Party B shall be deemed to have breached this Agreement when it:

8.1.1 Fails to perform or breaches any of the obligations set forth herein;

8.1.2 Makes any representation or warranty hereunder that is inauthentic or incomplete, or violates requirements of that provision and fails to rectify as required by Party A;

8.1.3 Makes any material breach event related to any lawful and valid contract signed by Party B with any other creditor and such breach is not satisfactorily resolved within three months following the date of breach.

The aforementioned material breach event refers to such breach of Party B that results in its creditor’s entitlement to claim from Party B an indemnity of CNY One Hundred Million **or more.**

8.1.4 If Party B is listed on the National Equities Exchange and Quotations (“NEEQ”) or has plans to apply to be listed; and it failed or is hindered to be listing on the NEEQ, or its listing application is suspended; or it has been issued with warning letters, ordered to make corrections, restricted in the trading of its securities account, or imposed with other self-disciplinary measures by NEEQ, for more than 3 times; or it is being subject to disciplinary actions, or its listing is terminated, or other similar circumstances;

8.1.5 When Party B is a supplier for the government procurement unit; and the government procurement unit makes three consecutive or cumulative late payments or displays other signs not conductive to Party A's credit line repayment risk; or Party B's supplier status is cancelled (blacklisted by the government procurement unit), or is unable to make timely supply delivery, has unstable product quality, experiences operation difficulty, shows significant deterioration of financial situation (negative debt-to-asset ratio), suspends production etc.

8.1.6 Party B's financial indicators fails to continue to meet the target requirements specified under this agreement/the specific business agreement; or fails to continue to meet the prerequisites (if any) for Party A to provide Party B with any credit line/financing under the cost agreement/the specific business agreement.

8.1.7 Other circumstances Party A considers to be harmful to Party A's legitimate rights and interests.

8.2 In the event the Guarantor has any of the following conditions, and Party A considers it may harm the Guarantor's guarantee capability, thus requires the Guarantor to eliminate adverse effect of such circumstance or requires Party B to increase security or change security condition, but the Guarantor and Party B fails to cooperate with such requirement, it will be deemed a breach event has occurred:

8.2.1 A condition similar to one of the conditions described under Article 4.2.6 hereof has occurred, or a condition described under Article 4.2.8 has occurred without Party A's consent;

8.2.2 The Guarantor conceals its actual capability for undertaking the guarantee responsibility or has not obtained authorization from relevant authority when issuing the irrevocable letter of guarantee;

8.2.3 The Guarantor fails to go through formalities on time for annual registration inspection, renewal/extension of its business term, or other similar circumstances;

8.2.4 The Guarantor is being slack in managing and claiming for its mature debts or disposes its existing main properties without compensation or by other improper means.

8.3 In the event the Mortgagor (or Pledgor) has any of the following conditions, and Party A considers it may results in failure of creation of mortgage/pledge or deficiency in the value of the mortgaged/pledged asset, thus requires the Mortgagor/Pledgor to eliminate adverse effect of such condition or requires Party B to increase security or change security condition, but the Mortgagor/Pledgor and Party B fails to cooperate with such requirement, it will be deemed a breach event has occurred:

8.3.1 The mortgagor/pledgor has no ownership or disposal right to the mortgaged/pledged asset or the ownership is disputable;

8.3.2 The mortgaged/pledged asset is leased, attached, seized or supervised or being subject to any statutory prior senior right (including but not limited to senior right of construction payment), and/or such conditions are concealed;

8.3.3 The mortgagor transfers, leases, re-mortgages or disposes by any improper means the mortgaged asset without Party A's written consent; or even though such disposal is done with Party A's written consent, the proceeds obtained from disposal of the mortgaged asset is not used to repay Party B's debts to Party A as required by Party A;

8.3.4 The mortgagor fails to properly keep, maintain and repair the mortgaged asset, obviously derogating their value; or the act of the mortgagor directly endangers the mortgaged asset, causing their value to decrease; or the mortgagor fails to obtain insurance for the mortgaged asset as required by Party A during the mortgage term;

8.3.5 The mortgaged asset is or is likely to be included in the government's scope of demolition and expropriation, but the mortgagor fails to inform Party A promptly and perform relevant obligations under the mortgage contract;

8.3.6 In case the mortgagor uses its housing property which it has mortgaged with China Merchants Bank to provide residual mortgage security for the transaction hereunder, the mortgagor pays off his/her personal mortgage loan without Party A's consent before Party B's has paid off its credit debt hereunder.

8.3.7 The pledgor pledged financial products purchased with funds from illegal/non-compliant sources

8.3.8 The mortgaged/pledged asset may impact the value of other mortgaged/pledged asset or impact Party A's rights over mortgaged/pledged assets etc.

8.4 Where accounts receivable are pledged to secure the debt hereunder, if the accounts receivable debtor's business has deteriorated significantly, or the accounts receivable debtor transfers its properties or illegally withdraws capital for the purpose of debt evasion, or colludes with the accounts receivable pledgor to change the payments collection channel to divert payment of accounts receivable from entering the designated collection account, or loses it goodwill, or loses or is likely to lose its capability to perform the pledge agreement, or has any other major event that impairs its solvency, Party A shall have the right to require Party B to provide corresponding security or provide new valid accounts receivable for pledge, failing which, it will be deemed a breach event has arisen.

8.5 Once any of the above breach events has arisen, Party A shall have the right to take the following measures separately or simultaneously:

8.5.1 Reduce the Credit Line hereunder, or stop utilization of the remaining amount of the Credit Line;

8.5.2 Recover in advance principals, interests and related fees of all loans extended within the scope of the Credit Line;

8.5.3 As for bills accepted or letters of credit, letters of guarantee, delivery guarantees and other credit papers issued (including entrusted reissue) by Party A within the Credit Extending Period, regardless if any advance has been made, Party A shall have the right to require Party B to increase the amount of bond, or transfer deposits from its other accounts at Party A into the bond account or deposit the corresponding amounts with a third party, to secure for repayment of future advances made by Party A hereunder;

8.5.4 As for outstanding accounts receivable claim of Party B acquired in factoring service, Party A shall have the right to require Party B to immediately perform the repurchase obligation and adopt other recovery measures in accordance with relevant separate service agreement; as for accounts receivable claim against Party B acquired in factoring service, Party A shall have the right to claim against Party B immediately.

8.5.5 As appropriate, Party A may also directly require Party B to provide other assets acceptable to Party A as new security, failing which, Party B shall be liable to pay a liquidated damages equivalent to 30% of the Credit Line hereunder.

8.5.6 Directly freeze/deduct deposit in/from any settlement account and/or other account opened by Party B at China Merchants Bank; stop the opening of any new settlement accounts for Party B, stop issuance of any new credit cards for Party B's legal representative;

8.5.7 Report Party B's credit violation information to credit bureaus and banking associations, and have the right to share such information among banking institutions and even release such information to the public;

8.5.8 Dispose of the pledged asset in accordance to the provisions of the guarantee text and/or pursue any loss from the guarantor

8.5.9 Take recourse in accordance with provisions hereof;

8.6 Funds recovered by Party A will be used to repay credit debts in a last-to-first order according to their respective maturity date. And each credit will be repaid in the following order: fees, liquidated damages, compound interests, penalty interests, interests, and lastly principals of the credit, until all principals, interests and related fees have been fully repaid.

Party A shall have the right to unilaterally adjust the above repayment order, unless otherwise required by laws and regulations.

9. Guarantee Clause

9.1 For all debts owed under by Party A to Party B under this agreement, pledged property guarantee or joint guarantee shall be provided by Party B or a Party A approved third party, Party B or the third party guarantor must provide or sign a guarantee text in accordance to Party A's requirements.

9.2 Party A has the right to deny Party B's credit line request if the guarantor have not signed the required guarantee text or have not completed required guarantee procedures (including any debtor dispute on accounts receivable prior to the receivables being pledged) in accordance to the provisions of this article.

9.3 In the case the mortgagor provides real estate mortgage guarantees for all debts owed by Party B to Party A, if party A becomes aware that the collateral property has already or may be included in the government's demolition and collection plan, it shall immediately inform Party A and urge the mortgager to use compensation provided by the demolishing party as replacement collateral to continue the guarantee as stated under the mortgage agreement and complete the corresponding guarantee procedures in a timely manner, or provide another guarantee to Party A in accordance to Party A's requirements

In an event that the guarantee must be redesigned or another guarantee must be provided due to the abovementioned circumstance, the mortgagor shall be responsible for all relevant fees, Party B shall also have joint and several liability to such fees. Party A has the right to deduct said fees from Party B's accounts directly.

10. Others

10.1 During the term of validity of this Agreement, any tolerance or grace period given by Party A for any breach or delay of Party B or any delay of Party A in exercising any interest or right hereunder will not prejudice, affect or restrict any rights and interests Party A is entitled to as the creditor under the law and this Agreement, and shall not be deemed as Party A's permission or approval for any breach or waiver of its right to adopt action against any existing or future breach.

10.2 In case this Agreement or any part thereof becomes void or invalid in law due to any reason whatsoever, Party B shall still be liable for all debts owed to Party A hereunder. In such case, Party A shall have the right to terminate performance of this Agreement and immediately claim repayment of all debts owed by Party B hereunder.

If any change in applicable laws or regulations results in increase in Party A's cost for performing its obligations hereunder, Party B shall compensate for Party A's cost increase as required by Party A.

10.3 The Parties' notifications, requirements and other correspondences related to this Agreement shall be delivered in writing (including but not limited to mail, fax, email, Party A's E-bank, mobile phone short message, WeChat, etc.).

10.3.1 Notification, if delivered by personal service (including but not limited to service by lawyer/notary public or express delivery) will be deemed served upon being signed receipt by the addressee (in case of rejection by the addressee, the notification will be deemed served upon the rejection date/return date or seven days following posting, whichever is earlier), if delivered by postal mail, will be deemed served seven days following posting, if delivered by fax, email, Party A's E-bank notification, mobile phone SMS, WeChat or other acceptable electronic means, will be deemed served upon the date of successfully sent as shown by the sender's corresponding system.

Notification of debt transfer or debt collection to Party B announced by Party A on any public media will be deemed served upon the date of announcement.

Either party who changes its postal address, email, fax, mobile phone or WeChat shall inform the other party about such change within five business days of such change, otherwise the other party shall have the right to serve notification to the original address or contact details. Notification failed due to change in address will be deemed served upon the date of return or seven days following posting, whichever is earlier. The changing party shall bear the loss of such notification failure on its own without prejudice to the legal effectiveness of the service.

10.3.2 The above postal address, email, fax, mobile phone and WeChat will also serve as the address for service of notarial and judicial documents to addressee (including but not limited to complaints/arbitration applications, evidences, summons, notices of response, notices of proof, notices of court session, notices of hearing, judgments/awards, orders, conciliation statements, notices of performance within a specified time and other legal documents for the hearing and execution stages); service of documents by the court of litigation and the notary public in writing as provided hereunder to the above address for service will be deemed duly served (refer to the previous article above for the specific service standard).

10.4 The Parties agree that, to make an application for the trade financing service, Party B will only need to affix the reserved seal to application form in accordance with the *Letter of Authorization for Reserved Seal* that it has provided to Party A; both parties hereby acknowledge the validity of such seal.

10.5 When applying for credit service through Party A's online banking system, **the digital signature generated by Party B's digital certificate will be Party B's valid signature for the purpose of such application;** Party A shall have the right to produce relevant transaction vouchers according to the application information sent out from the online banking system, and Party B hereby acknowledges authenticity, accuracy and legitimacy of such information and acknowledges being bound by it.

10.6 Written supplementary agreements made and entered by and between the Parties through negotiation regarding matters not covered hereunder and modifications hereto and all separate contracts entered into hereunder by the Parties shall form appendixes to and constitute integral parts of this Agreement.

10.7 For convenience of business handling, all operations of Party A related to transactions hereunder (including but not limited to applications acceptance, documents review, loans releasing, transaction confirmation, deduction, inquiry, receipt printing, collection, payment deduction and collection and notification) may be processed by any outlet within Party A's jurisdiction which may generate, issue and produce relevant letters and instruments; operations and instruments handled by other outlets within Party A's jurisdiction will be regarded as being done by Party A and be binding on Party B.

10.8 All appendixes hereto shall constitute integral parts of this Agreement and will automatically apply to corresponding specific transaction conducted between the Parties.

10.9 As required by Party A, Party B (check the box □ "√" when applicable)

□ shall obtain insurance for its core assets and designate Party A as the primary beneficiary;

□ shall not sell or create mortgage on the _ /_ assets designated by Party A before paying off all credit debts;

□ shall restrict distribution of dividends to its shareholders as follows as required by Party A before paying off its credit debts:

/

10.10 Party B shall guarantee that during the Credit Extending Period, Party B's financial indicator will not fall below the following requirements:

/

10.11 Party B shall acknowledge the signed Organization Credit Business Agreement (including adjustments and additions made to it by the signing parties) numbered _ /_ between merchant bank _ /_ and Party B's parent company/head office/holding company _ /_ (insert company name), agree to be bound by the contents of this agreement, and agree to responsible for all listed duties of the Organization's subsidiary as a subsidiary of the signing organization. Any violations will be treated in the same manner as if Party B committed such violation, Party A has the right enforce all economic remedies listed in this agreement.

10.12 Other Agreement Terms:

10.12.1 Both parties herby specifically agree to and confirm that in the event that any situation stipulated in Article 4.2.6 of this agreement or any of following situations Party A believes may endanger the security of its debts occur, Party A has the right to require Party B to implement guarantee measures for the safe repayment of all outstanding principle and interest balance of any loans, advances and other credit obligations and all related fees under this agreement in accordance with Party A's requirements, or take one or more relief measures listed in Article 8.5 of this agreement:

Party B's shareholder/ultimate controlling party abused the independent status of the company's legal representative or the limited liability of a shareholder, committed tax evasion, stopped production, closed the business or revoked the company's business license, filed or been filed for bankruptcy or dissolution, penalized by relevant authorized parties, committed criminal offense, implicated in major legal dispute, experienced major difficulty in production or major deterioration of financial situation.

In the event that the provisions in this article are inconsistent with provisions of other articles of this agreement, the provisions of this article shall prevail.

10.12.2 _ /_

11. Applicable Law and Dispute Resolution

11.1 Conclusion, interpretation and dispute resolution of this Agreement shall be governed by the laws of the People's Republic of China (excluding the laws of Hong Kong SAR, Macao SAR and the Taiwan region); and the Parties' rights and interests shall be protected by the laws of the People's Republic of China.

11.2 All disputes between the Parties arising out of or in connection with this Agreement and the performance hereof shall be resolved by the Parties through negotiation, failing which, either party may (choose one out of the following two options, check the box □ with "√"when applicable):

☑ 11.2.1 Bring an action with a competent people's court at Party A's place;

□ 11.2.2 Bring an action with a competent people's court at the agreement signing location, the agreement signing location is _ /_;

□ 11.2.3 Apply for arbitration with _ /_ (insert name of the arbitration body) ; the place of arbitration shall be_ /_.

11.3 After this Agreement and all separate contracts concluded thereunder have been notarized with mandatory enforcement force, to claim for repayment of debts owed by Party B under this Agreement and all separate contracts, Party A may directly submit an application to a competent people's court for enforcement.

12. Effectiveness

This Agreement will enter into force upon being signed and affixed with signature seal by legal representatives/principal responsible persons of both parties or their authorized agents and affixed with common seals/seal of contracts of both parties, and will expire automatically upon the expiration date of the Credit Extending Period or the date when all debts and other related fees owed by Party B to Party A hereunder have been fully repaid (whichever comes later).

13. Supplementary Provisions

This Agreement is executed in triplicate with Party A, Party B and the Guarantor each keeping one copy and all copies have the same legal effect.

Appendix:

1: Special Provisions Regarding Cross-border Coordinated Trade Financing

2: Special Provisions Regarding Buyer/Import Factoring

3: Special Provisions Regarding Order Loan

4: Special Provisions Regarding Commercial Acceptance Bills Guarantee

5: Special Provisions Regarding Derivative Transactions

6: Special Provisions Regarding Gold Lease

Appendix 1:

Special Provisions Regarding Cross-border Coordinated Trade Financing

1. Cross-border coordinated trade financing refers to the cross-border trade financing Party B applies for from Party A based on the authentic cross-border trade background between itself and its overseas counterpart, which will be provided collectively by Party A and an overseas body of China Merchants Bank (hereinafter “the Coordinated Platform”).

2. Specific types of cross-border coordinated trade financing include without limit: back-to-back letter of credit, entrusted reissue, entrusted overseas financing, commercial paper guarantee, overseas crediting for letters of guarantee and cross-border trade financing express service. The meaning and business rules of each type of service will be agreed under separate service agreement.

3. Under back-to-back letter of credit, the master letter of credit opened by Party A upon Party B’s application will directly take up amount of the Credit Line hereunder, and documentary credits or advances made by Party A (whether during or after the Credit Extending Period) under such master letter of credit for performing its obligations as the issuing bank and corresponding interests and fees thereof will constitute Party B’s financing indebtedness to Party A and will be included into the scope of credit guarantee.

Under entrusted issuing of letters of credit/entrusted overseas financing, the letters of credit applied for /trade financing provided by overseas companies which Party A, upon Party B’s application, entrusts the Coordinated Platform to accept, will take up amount of the Credit Line hereunder. Import collection documentary credits extended by Party A or advances made by Party A for outward payment under import collection to Party B’s benefit (whether during or after the Credit Extending Period) and related interests and fees thereof will directly constitute Party B’s financing indebtedness to Party A and included in the scope of credit guarantee.

Under commercial paper guarantee, upon Party B's application, Party A will directly take up amount of the Credit Line hereunder to provide guarantee for the commercial bills accepted by Party B. If Party B fails to make full payment for the bills on time, Party A shall have the right to made advances for the guaranteed bills, and such advances (whether made during or after the Credit Extending Period) and related interests and fees thereof will be included in the scope of credit guarantee.

Under overseas crediting for letters of guarantee service, letters of guarantee/standby letters of credit issued by Party A upon Party B's application will directly take up amount of the Credit Line hereunder. After the overseas company has transferred collection rights (non-claim rights) under the letters of guarantee to the Coordinated Platform, advances made by Party A (whether during or after the Credit Extending Period) upon claim from the Coordinated Platform made based on the letters of guarantee/standby letters of credit and related interests and fees thereof will directly constitute Party B's financing indebtedness to Party A and will be included into the scope of the credit guarantee.

Under cross-border trade financing express service, after Party A has approved Party B's trade financing application, the trade financing directly provided to Party B by the Coordinated Platform will take up amount of the Credit Line hereunder. In case Party B fails to pay off trade financing of the Coordinated Platform on time, Party A shall have the right to make the repayment in the form of documentary credits or advances, such documentary credits or advances (whether made during or after the Credit Extending Period) and related interests and fees thereof will constitute Party B's financing indebtedness to Party A and will be included into the scope of credit guarantee.

Appendix 2:

Special Provisions Regarding Buyer/Import Factoring

1. Definitions

1.1 Buyer/import factoring service refers to comprehensive factoring services covering payment approval and accounts receivable collection & management provided by Party A as the buyer/import factor for the seller/export factor after the latter has acquired accounts receivable against Party B as the accounts receivable debtor under the relevant commercial contract.

Under the buyer/import factoring service, in case Party B constitutes buyer credit risk, Party A shall assume payment approval liability for the buyer/export factor; in case any dispute arises during performance of the commercial contract, Party A shall have the right to transfer the acquired accounts receivable back to the seller/export factor.

1.2 The seller/export factor is the party who has concluded the factoring service agreement with the supplier/service provider (accounts receivable creditor) under the commercial contract and acquired accounts receivable held by the accounts receivable creditor. Party A can serve as both the buyer/import factor and the seller/export factor concurrently.

1.3 A dispute arises when Buyer raises objection, counter claim, offset or similar action against the accounts receivable acquired by Party A due to any dispute between the accounts receivable creditor and Party B concerning goods, services, invoices or other causes related to the commercial contract, or when any third party makes claim, applies for attachment, freezing or seizure or takes other similar actions against the accounts receivable under this Agreement; it will be deemed a dispute has arisen so long as the accounts receivable acquired by Party A can not be fulfilled whether in whole or in part due to any reason other than credit risk of the buyer.

1.4 Commercial contracts refer to transaction contracts concluded between Party B and the accounts receivable creditor for the trading of goods and/or services.

1.5 Under payment approval/payment guarantee, after Party B has constituted buyer credit risk, Party A shall pay corresponding amount of accounts receivable to the seller/export factor within a certain time limit following maturity of the accounts receivable.

2. Upon Party B's application, Party A agrees to provide buyer/import factoring service for Party B within the scope of the Credit Line; any accounts receivable transferred from the seller/export factor to Party A will deduct/take up the credit line under the credit agreement in accordance to its amount.

Amounts paid by Party A as the buyer/import factor for performing its payment approval liability and all related fees will be deemed as credits extended to Party B under the Credit Agreement, and be included as a part of Party B's credit guarantee coverage. Party A has the right to adopt any and all remedies under the Credit Agreement to pursue payment of any approved payment/guaranteed payment amount from Party B. So long as it has acquired accounts receivable within the Credit Extending Period, even though the payment approval obligation is performed by it following expiration of the said period, Party A shall still have the right to claim from Party B in accordance with the Credit Agreement and relevant commercial contract.

3. Buyer/import factoring fee

Buyer/import factoring fee refers to a business management fee collected by Party A for the provision of buyer/import factoring service to Party B, which will be charged from Party B upon transfer settlement at a certain percentage of the amount of the accounts receivable; the specific rate standard will be reasonably determined by Party A in accordance with its business rules.

4. Party B hereby gives up the right to raise objection against any dispute arising out of the performance of the commercial contract. Therefore, regardless if there is any other agreement, once Party B fails to make payment according to provisions of the commercial contract, it will be deemed that Party B has constituted buyer credit risk, and Party A will proceed to approve the payment, to which Party B has no objection.

Appendix 3:

Special Provisions Regarding Order Loan

1. Order loan refers to a loan that Party A extends to Party B based on the commercial contract (or project contract) concluded between Party B and a downstream client, to be used by Party B for performing routine production and operation activities under the commercial contract (or project contract) and will be repaid by sales income (or project income) under the relevant contract as the first source of repayment.

2. Party B shall open a sales income account with Party A for commercial contracts (or project contracts). Sales income under all commercial contracts (project contracts) which have applied for order loan must be remitted directly to this special account, and may not be used or changed without Party A's approval. Party B must notify the payor that this special account is the only account to receive sales income. Party A shall have the right to deduct money from the special account to pay for principals, interests, penalty interests and other related fees of the order loan financing.

3. Under any of the following situations, Party A may immediately suspend the use of Party B's credit line under the Credit Agreement and adopt corresponding breach remedies in accordance with the Credit Agreement:

3.1 Party B's downstream client has been delinquent in payment for three times consecutively, and Party A reasonably believes that its financial condition has deteriorated to a degree not conducive to protecting Party A's debt claim;

3.2 Party B’s supplier qualification has been canceled by its downstream client, or Party B fails to deliver goods to its downstream client on time, or quality of the goods supplied by Party B to its downstream client is unstable, or Party B fails to proceed with its works on schedule without approval of its downstream client, or Party B’s professional qualification is lowered to a degree not conforming to its downstream client’s requirements, or Party A reasonably believes that Party B has encountered operational difficulty or its financial condition has deteriorated, or total amount of payments from Party B’s downstream client has been lower than the total monthly payable amount due from Party B under relevant financing contract for three months consecutively, or the downstream client fails to make installment payment in accordance with relevant project contract for two times consecutively.

Appendix 4:

Special Provisions Regarding Commercial Acceptance Bills Guarantee

1. Commercial acceptance bills guarantee refers to the service by which Party A provides discount for the commercial acceptance bills accepted by Party B or allows the bill holder to apply for discount from any branch of China Merchants Bank (hereinafter "Other Discount Acceptance Bank"). The bill holder (hereinafter "Discount Applicant") may apply for discount from Party A or Other Discount Acceptance Banks by presenting the commercial acceptance bill. Such discount service will take up a corresponding amount of the Credit Line hereunder.

As the provision of acceptor discount service for commercial acceptance bills by Party A to Party B is the precondition for Other Discount Acceptance Banks to accept discount applications from the bill holder, Other Discount Acceptance Banks, after processing the discount, shall have the right to transfer the discounted bills to Party A and Party A shall be obliged to accept such transfer. Party B hereby commits to unconditionally pay the commercial acceptance bills acquired by Other Discount Acceptance Banks when they fall due. Both parties have no objection to this provision.

2. Commercial acceptance bills referred to hereunder include both paper commercial acceptance bills and electronic commercial acceptance bills (hereinafter "Electronic Commercial Bills") and both commercial acceptance bills with interest obligation on the discount applicant and commercial acceptance bills with interest obligation on the buyer.

Discount service for commercial acceptance bills with interest obligation on the buyer refers to such bills discount service by which Party B shall be obliged to pay the discount interest when Party A is processing discount for the commercial acceptance bills issued and accepted by Party B.

3. During the Credit Extending Period, Party B must open a commercial acceptance bill bond account with Party A (the account number will be the one generated or recorded by Party A's system when the bond is deposited), and before the acceptance of each bill, deposit a certain amount of money into the bond account as per the percentage required by Party A to serve as the payment bond for the commercial accepted bills which are accepted by Party B and for which Party A has committed to discount.

Party B shall deposit full amount of payable bill into the bond account it opens with Party A before maturity of each commercial acceptance bill, to pay for the bill when it falls due.

4. During the Credit Extending Period, the discount applicant may present the commercial acceptance bills accepted by Party B directly to Party A for discount, or to another Discount Acceptance Bank for discount. Party A or the Other Discount Acceptance Bank shall have the right to examine the qualification of the discount applicant and requires Party B to verify and confirm, and decide at its sole discretion whether to provide discount or not.

After Other Discount Acceptance Bank has provided discount, it shall have the right to transfer the discounted commercial acceptance bills to Party A in accordance with applicable rules of China Merchants Bank. When Party A, after processing the discount or acquiring commercial acceptance bills from Other Discount Acceptance Bank, presents the bill to Party B for payment, Party B shall unconditionally make full payment for the payable bill on time.

5. The opening and discounting of each electronic commercial bill shall be subject to the transaction information saved in the Electronic Commercial Draft System of the People's Bank of China or the customer statement or other transaction record produced or printed based on such transaction information. Party A's transaction records will constitute integral parts hereof and have equal legal effect as this Agreement. Party B hereof acknowledges the accuracy, authenticity and legitimacy of such records.

6. Any disputes arising out of or in connection with the underlying contract of the commercial acceptance bills for which Party A guarantees to discount within the scope of the Credit Line shall be resolved by Party B and relevant party involved through negotiation; before the maturity of each bill, Party B shall still have the obligation to deposit sufficient amount of bond and bill amount on time in accordance with the aforementioned provisions.

7. After providing discount for the commercial bills accepted by Party B or acquiring commercial bills accepted by Party B from Other Discount Acceptance Bank, if Party B fails to deposit sufficient amount for the commercial acceptance bills before they fall due, Party A shall have the right to deduct corresponding payment from any deposit account of Party B with China Merchants Bank. For any advance made by Party A due to insufficiency in Party B's deposit and insufficiency of balances in Party B's accounts to make deduction, Party A shall have the right to collect a penalty interest from Party B at _ 5 _/10,000 of the advanced amount per day in accordance with applicable provisions of the *Payment Settlement Measures* .

Appendix 5:

Special Provisions Regarding Derivative Transactions

1. Derivative transactions processed by Party A upon Party B's application may take up the Credit Line by a certain percentage of the nominal principal of transaction/transaction amount, or in the case of floating loss on a derivative transaction, Party A may, in accordance with specific agreement between the Parties, take up additional credit line of Party B (upon the occurrence of each transaction, Party A will determine the credit line amount to be taken up based on the type, duration and risk of such transaction and the risk coefficient of the transaction corresponding to the deducted credit line); the actual credit line amount taken up will be subject to the contents recorded on the credit line occupation notice and/or transaction confirmation letter/verification letter and other related transaction documents issued by Party A.

2. All derivative transactions that still have balances or incur losses during the Credit Extending Period, whether the transactions arise during or after the Credit Extending Period, will take up the Credit Line in accordance with the preceding provision.

Appendix 6:

Special Provisions Regarding Gold Lease

1. “Gold Lease” service refers to the service by which Party A leases physical gold to Party B and Party B shall return to Party A equivalent quantity of gold of same nature and attribute upon expiration of the lease term and shall pay rents in Chinese yuan to Party A on schedule.

2. Party A may provide gold lease service for Party B upon Party B’s application within the Credit Extending Period and the scope of the Credit Line; physical gold leased by Party A will take up amount of the Credit Line by a corresponding value agreed under the gold leasing agreement signed by the Parties and will constitute Party B’s debts to Party A.

Special notes:

All terms and conditions of this Agreement (including all appendixes hereof) have been fully negotiated by all parties hereto. Party A has reminded Party B to pay special attention to the terms and conditions regarding exemption or limitation of the Party A’s liabilities, some rights unilaterally owned by the Party A, and increase or limit of Party B’s liabilities or rights, and to comprehend such terms and conditions fully and accurately. Party A has made corresponding explanations for the aforementioned terms and conditions upon the request of Party B. All signatory parties’ understandings of the terms and conditions of this Agreement are fully consistent.

(The reminder of this page is intentionally left blank **)**

(This page is the signatory page of the Credit Agreement No***)

Party A: China Merchants Bank Shenzhen Branch (Bank Seal)
Principal Responsible Person or Authorized Agent (Signature/Name Seal):
/s/ Special Seal for Contract of China Merchants Bank Shenzhen Branch
/s/ Yue Ying

Party B: Shenzhen Xunlei Networking Technologies Co., Ltd. (Seal)
Legal Representative/Principal Responsible Person or Authorized Agent: (Signature/Name Seal):
/s/ Wu Kening
/s/ Shenzhen Xunlei Networking Technologies Co., Ltd.

Signing date: June 20, 2019

Exhibit 8.1

List of Principal Subsidiaries

Name	Place of Incorporation
Subsidiaries	
Giganology (Shenzhen) Co., Ltd.	PRC
Xunlei Network Technologies Limited	British Virgin Islands
Xunlei Network Technologies Limited	Hong Kong
Xunlei Computer (Shenzhen) Co., Ltd.	PRC
HK Onething Technologies Limited	Hong Kong
Onething Co., Ltd.	Thailand
Variable Interest Entity	
Shenzhen Xunlei Networking Technologies, Co., Ltd.	PRC
Subsidiaries of Variable Interest Entity	
Shenzhen Onething Technologies Co., Ltd.	PRC
Xunlei Games Development (Shenzhen) Co., Ltd.	PRC
Shenzhen Xunlei Wangwenhua Co., Ltd.	PRC
Shenzhen Zhuolian Software Co., Ltd.	PRC
Beijing Onething Technologies Co., Ltd.	PRC
Shenzhen Crystal Interactive Technologies Co., Ltd.	PRC
Henan Tourism Information Co., Ltd.	PRC
Beijing Xunjing Technology Co., Ltd.	PRC
Xi'an Onething Blockchain Technology Co., Ltd.	PRC

Exhibit 12.1

Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jinbo Li, certify that:

1. I have reviewed this annual report on Form 20-F of Xunlei Limited;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 28, 2020

By: /s/ Jinbo Li
Name: Jinbo Li
Title: Chief Executive Officer

Exhibit 12.2

Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Naijiang (Eric) Zhou, certify that:

1. I have reviewed this annual report on Form 20-F of Xunlei Limited;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 28, 2020

By: /s/ Naijiang (Eric) Zhou
Name: Naijiang (Eric) Zhou
Title: Chief Financial Officer

Exhibit 13.1

Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Xunlei Limited (the "Company") on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jinbo Li, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2020

By: /s/ Jinbo Li
Name: Jinbo Li
Title: Chief Executive Officer

Exhibit 13.2

Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Xunlei Limited (the "Company") on Form 20-F for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Naijiang (Eric) Zhou, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2020

By: /s/ Naijiang (Eric) Zhou
Name: Naijiang (Eric) Zhou
Title: Chief Financial Officer

Exhibit 15.1

Our ref: VSL/660874-000001/16436097v1
Tel no.: +852 3690 7513
Email: vivian.lee@maples.com

Xunlei Limited
7/F Block 11, Shenzhen Software Park
Ke Ji Zhong 2 nd Road, Nanshan District
Shenzhen, 518057
The People's Republic of China

April 28, 2020

Dear Sirs

Xunlei Limited

We have acted as legal advisers as to the laws of the Cayman Islands to Xunlei Limited, an exempted company incorporated with limited liability in the Cayman Islands (the " **Company** "), in connection with the filing by the Company with the United States Securities and Exchange Commission (the " **SEC** ") of an annual report on Form 20-F for the year ended 31 December 2019 (" **Form 20-F** ").

We hereby consent to the reference of our name under the heading "Item 10. Additional Information – E. Taxation – Cayman Islands Taxation" in the Form 20-F.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully

/s/Maples and Calder (Hong Kong) LLP
Maples and Calder (Hong Kong) LLP

Exhibit 15.2

金杜律师事务所
KING&WOOD MALLESONS

广东省深圳市南山区科苑南路2666号
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CONSENT LETTER

To Xunlei Limited

21-23/F, Block B, Building No. 12
No.18 Shenzhen Bay ECO-Technology Park
Keji South Road, Yuehai Street,
Nanshan District, Shenzhen, 518057
The People's Republic of China

April 28, 2020

Dear Sir/Madam:

We hereby consent to the reference of our name under the headings "Item 3. Key Information— D. Risk Factors—Risks Related to Our Corporate Structure" and "Item 4. Information on the Company— C. Organizational Structure" in Xunlei Limited's Annual Report on Form 20-F for the year ended December 31, 2019 (the "Annual Report"), which will be filed with the Securities and Exchange Commission (the "SEC") in the month of April 2019, and further consent to the incorporation by reference of the summaries of our opinions under these headings into Xunlei Limited's registration statement on Form S-8 (File No. 333—200633) that was filed on November 28, 2014. We also consent to the filing of this consent letter with the SEC as an exhibit to the Annual Report on Form 20-F for the year ended December 31, 2019.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully

/s/Zhou Rui

/s/Seal of King & Wood Mallesons

Zhou Rui | Partner
King & Wood Mallesons

Exhibit 15.3

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-200633) of Xunlei Limited of our report dated April 28, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers Zhong Tian LLP
PricewaterhouseCoopers Zhong Tian LLP
Shenzhen, the People's Republic of China
April 28, 2020