UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

	FORM 20-F
Ma	ark One)
	REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 193 For the fiscal year ended December 31, 2021
	OR
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
	SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	Date of event requiring this shell company report
	For the transition period from to
	Commission file number 001-38644

Qutoutiao Inc.

(Exact name of Registrant as specified in its charter)

Cayman Islands

(Exact name of Registrant as specified in its charter)

Building No. 8, Shanghai Pudong Software Park 519 Yi De Road, Pudong New Area Shanghai 200124 People's Republic of China (Address of principal executive offices)

Mr. Xiaolu Zhu, Chief Financial Officer
Telephone: +86-21-5889-0398
Email: ir@qutoutiao.net
At the address of the Company set forth above
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

Title of each class
American Depositary Shares, every two
representing five Class A ordinary shares
Class A Ordinary Shares, par value US\$0.0001
per share*

Trading Symbol(s) QTT

N/A

Name of each exchange on which registered NASDAQ Global Select Market

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)

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.

43,920,018 Class A ordinary shares were outstanding as of December 31, 2021

32,937,193 Class B ordinary shares were outstanding as of December 31, 2021 Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. \square Yes \boxtimes 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. \square Yes \square 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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). 🗵 Yes 🗆 No Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated filer ⊠ Non-accelerated filer Emerging growth company |X|If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act ⊠ The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012. Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. \square Indicate by check mark which basis of accounting the registration has used to prepare the financial statements included in this filing: U.S. GAAP ⊠ Other International Financial Reporting Standards as issued by the International Accounting Standards Board If "Other" has been checked in response to the previous question, indicate by check mark which consolidated 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 Securities Exchange Act of 1934) □ 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 \Box Yes \Box No

Table of Contents

		Page
PART I.		4
ITEM 1.	IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS	4
ITEM 2.	OFFER STATISTICS AND EXPECTED TIMETABLE	4
ITEM 3.	KEY INFORMATION	4
ITEM 4.	<u>INFORMATION ON THE COMPANY</u>	62
ITEM 4A.	UNRESOLVED STAFF COMMENTS	96
ITEM 5.	OPERATING AND FINANCIAL REVIEW AND PROSPECTS	96
ITEM 6.	DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES	114
ITEM 7.	MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS	123
ITEM 8.	FINANCIAL INFORMATION	124
ITEM 9.	THE OFFER AND LISTING	125
ITEM 10.	ADDITIONAL INFORMATION	126
ITEM 11.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	133
ITEM 12.	DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES	133
PART II.		136
ITEM 13.	DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES	136
ITEM 14.	MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS	136
ITEM 15.	CONTROLS AND PROCEDURES	136
ITEM 16A.	AUDIT COMMITTEE FINANCIAL EXPERT	137
ITEM 16B.	CODE OF ETHICS	137
ITEM 16C.	PRINCIPAL ACCOUNTANT FEES AND SERVICES	137
ITEM 16D.	EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES	137
ITEM 16E.	PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS	138
ITEM 16F.	CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT	138
ITEM 16G.	CORPORATE GOVERNANCE	138
ITEM 16H.	MINE SAFETY DISCLOSURE	138
ITEM 16I.	DISCLOSURES REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS	138
PART III.		139
ITEM 17.	FINANCIAL STATEMENTS	139
ITEM 18.	FINANCIAL STATEMENTS	139
ITFM 19	EXHIBITS	139

i

CONVENTIONS THAT APPLY TO THIS ANNUAL REPORT ON FORM 20-F

Except where the context otherwise requires, references in this annual report to:

- "installed users" are to the aggregate number of unique mobile devices that have downloaded and launched the Group's relevant mobile application at least once;
- "ADSs" are to American depositary shares, with every four ADSs representing one Class A ordinary share, and "ADRs" are to American depositary receipts that evidence ADSs;
- "CAGR" are to compound annual growth rate;
- "China" and the "PRC" are to the People's Republic of China, excluding, for the purposes of this annual report only, Taiwan, the Hong Kong Special Administrative Region and the Macao Special Administrative Region;
- "DAUs" are to the number of unique mobile devices that accessed the Group's relevant mobile application on a given day. "Combined
 average DAUs" for a particular period is the average of the DAUs for all of the Group's mobile applications on each day during that
 period;
- "the Group" are to Qutoutiao Inc., the Group VIEs and their respective subsidiaries;
- "Group VIEs" are to the variable interest entities, or VIEs, that are controlled by us through contractual arrangements and are consolidated into the Group's consolidated financial statements in accordance with U.S. GAAP;
- "Key WFOEs" are to material wholly foreign-owned entities of Qutoutiao Inc., namely Shanghai Quyun Network Technology Co., Ltd. and Shanghai Zhicao Information Technology Co., Ltd.;
- "Key VIEs" are to material variable interest entities of Qutoutiao Inc., namely Shanghai Jifen Culture Communications Co., Ltd., Shanghai Big Rhinoceros Horn Information Technology Co., Ltd., Anhui Zhangduan Internet Technology Co., Ltd., Beijing Churun Technology Co., Ltd., Hubei Rapid Information Technology Co., Ltd., and Huaian Beixia Information Technology Co., Ltd.;
- "MAUs" are to the number of unique mobile devices that accessed the Group's relevant mobile application in a given month. "Combined average MAUs" for a particular period is the average of the MAUs for all of the Group's mobile applications in each month during that period;
- "oCPC" are to optimized cost-per-click as basis for charging the Group's advertising services;
- "oCPM" are to optimized cost-per-thousand-impressions as basis for charging the Group's advertising services;
- "Qutoutiao," "we," "us," "our company" and "our" are to Qutoutiao Inc., its subsidiaries, and, in the context of describing its operations and consolidated financial information, the Group VIEs.
- "R&D" are to research and development;
- "registered users" are to users that have registered accounts on the Group's relevant mobile application;
- "RMB" or "Renminbi" are to the legal currency of China;
- "lower-tier cities" are to cities in China that are not tier-1 and tier-2 cities;
- "tier-1 and tier-2 cities" refer to (i) tier-1 cities in China, which are Beijing, Shanghai, Guangzhou and Shenzhen and (ii) tier-2 cities in China, which are Hangzhou, Nanjing, Jinan, Chongqing, Qingdao, Dalian, Ningbo, Xiamen, Tianjin, Chengdu, Wuhan, Harbin, Shenyang, Xi'an, Changchun, Changsha, Fuzhou, Zhengzhou, Shijiazhuang, Suzhou, Foshan, Dongguan, Wuxi, Yantai, Taiyuan, Hefei, Kunming, Nanchang, Nanning, Tangshan, Wenzhou and Zibo; and
- "US\$," "U.S. dollars," or "dollars" are to the legal currency of the United States.

On December 10, 2021, we effected a change of the ratio of our ADSs to Class A ordinary shares from the then ADS ratio of four (4) ADSs to one (1) Class A ordinary share to a new ADS ratio of two (2) ADS representing five (5) Class A ordinary shares. Unless otherwise indicated, ADSs and per ADS amount in this annual report have been retroactively adjusted to reflect the change in ratio for all periods presented.

Unless specifically indicated otherwise or unless the context otherwise requires, all references to our ordinary shares exclude ordinary shares issuable upon the exercise of outstanding options with respect to our ordinary shares under our share incentive plan.

This annual report contains translations between Renminbi and U.S. dollars solely for the convenience of the reader. The translations from Renminbi to U.S. dollars and from U.S. dollars to Renminbi in this annual report were made at a rate of RMB6.3726 to US\$1.00, the exchange rate set forth in the H.10 statistical release of the Federal Reserve Board on December 30, 2021. We make no representation that the Renminbi or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or Renminbi, as the case may be, at any particular rate or at all.

Unless the context indicates otherwise, all share and per share data in this annual report have given effect to a share split in September 2017 in which each one of the previously issued ordinary shares was split into 10,000 ordinary shares.

This annual report on Form 20-F includes the Group's audited consolidated financial statements for the years ended December 31, 2019, 2020 and 2021, and as of December 31, 2020 and December 31, 2021.

Our ADSs are listed on the NASDAQ Global Select Market under the symbol "QTT."

FORWARD-LOOKING INFORMATION

This annual report on Form 20-F contains statements of a forward-looking nature. All statements other than statements of historical facts are forward-looking statements. These forward-looking statements are made under the "safe harbor" provision under Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and as defined in the Private Securities Litigation Reform Act of 1995. These statements involve known and unknown risks, uncertainties and other factors that may cause the Group's actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. In some cases, these forward-looking statements can be identified by words or phrases such as "may," "will," "expect," "anticipate," "aim," "estimate," "intend," "plan," "believe," "potential," "continue," "is/are likely to" or other similar expressions. These forward-looking statements relate to, among others:

- the Group's goal and strategies;
- the Group's ability to maintain and strengthen its position as a leader amongst mobile content platform companies in China's mobile content industry;
- the Group's expansion plans;
- the Group's ability to monetize through advertising and other products and services that it plans to introduce;
- the Group's future business development, financial condition and results of operations, including its expectations regarding the impact of the COVID-19 pandemic on the Group's business, financial condition and results of operations;
- PRC laws, regulations, and policies relating to the Internet and Internet content providers; and
- · general economic and business conditions.

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 the Group's financial condition, results of operations, business strategy and financial needs.

You should read these statements in conjunction with the risks disclosed in "Item 3. Key Information—D. Risk Factors" of this annual report and other risks outlined in our other filings with the Securities and Exchange Commission, or the SEC. Moreover, the Group operates in an emerging and evolving environment. New risks may emerge from time to time, and it is not possible for our management to predict all risks, nor can we assess the impact of such risks on the Group's business or the extent to which any risk, or combination of risks, may cause actual results to differ materially from those contained in any forward-looking statements. The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this annual report and the documents that we have referred to in this annual report, completely and with the understanding that the Group's actual future results may be materially different from what we expect.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

ITEM 3. KEY INFORMATION

Our Corporate Structure and Contractual Arrangements

Qutoutiao Inc. is not a Chinese operating company but a Cayman Islands holding company with operations primarily conducted (i) through contractual arrangements with certain variable interest entities, or the Group VIEs, in China and (ii) by our subsidiaries in China. Qutoutiao Inc. does not own equity interests in the Group VIEs, and does not conduct business operations directly. PRC laws and regulations impose certain restrictions or prohibitions on foreign ownership of companies that engage in certain value-added telecommunication services, internet audio-video program services and certain other businesses. Therefore, we operate such businesses in China through the Group VIEs and their subsidiaries, and rely on contractual arrangements among our PRC subsidiaries, the Group VIEs and their respective shareholders to control the business operations of the Group VIEs. Investors in our ADSs do not hold equity interests in the Group's operating entities in China, but instead hold equity interests in Qutoutiao Inc., a Cayman Islands holding company. See "Item 4. Information on the Company—D. Organizational Structure" for a diagram illustrating our corporate structure. As used in this annual report, "Qutoutiao," "we," "us," "our company" or "our" refers to Qutoutiao Inc., its subsidiaries, and, in the context of describing its operations and consolidated financial information, the Group VIEs; "the Group" refers to Qutoutiao Inc., the Group VIEs and their respective subsidiaries; and "the Group VIEs" refer to the variable interest entities that conduct our business operations in China.

The contractual arrangements among our PRC subsidiaries, the Group VIEs and their respective shareholders collectively enable us to:

- exercise effective control over the Group VIEs and their subsidiaries;
- receive substantially all the economic benefits of the Group VIEs; and
- have an exclusive option to purchase all or part of the equity interests and assets of the Group VIEs when and to the extent permitted by PRC law.

As a result of the contractual arrangements, Qutoutiao Inc. and certain of its subsidiaries are considered the primary beneficiaries of the Group VIEs for accounting purposes, and we have consolidated the financial results of the Group VIEs in the Group's consolidated financial statements. For more details of the contractual arrangements, see "Item 4. Information on the Company—D. Organizational Structure—Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders." Terms contained in each set of contractual arrangements with the Group VIEs are substantially similar.

We are subject to risks associated with our contractual arrangements with the Group VIEs and their shareholders. Our Cayman Islands holding company and its investors may never hold equity interests in the Group VIEs. The contractual arrangements may be less effective than equity ownership in providing us with control over the Group VIEs and we may incur substantial costs to enforce the terms of the arrangements. If the Group VIEs or their shareholders fail to perform their respective obligations under these contractual arrangements, our ability, as a Cayman Islands holding company, to enforce these contractual arrangements may be limited. The contractual arrangements have not been tested in a court of law in China. There are very few precedents and little formal guidance as to how contractual arrangements in the context of a variable interest entity should be interpreted or enforced under PRC law. In the event we are unable to enforce these contractual arrangements, or if we suffer significant delay or other obstacles in the process of enforcing these contractual arrangements, we may not be able to exert effective control over the Group VIEs, and our ability to conduct the Group's business and the Group's results of operations and financial condition may be materially and adversely affected. See "—D. Risk Factors—Risks Relating to Our Corporate Structure—We rely on contractual arrangements with the Group VIEs and their respective shareholders to operate the Group's business, which may be less effective than equity ownership in providing operational control and otherwise materially and adversely affect the Group's business, results of operations and financial condition."

There are also substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules with regard to our corporate structure and the contractual arrangements with the Group VIEs and their shareholders. If Chinese regulatory authorities disallow such structure and arrangements, it would have a material effect on our operations and cause the value of our ADSs to significantly decline or become worthless. See "—D. Risk Factors—Risks Relating to Our Corporate Structure—If the PRC government deems that the contractual arrangements in relation to the Group VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. In addition, our ADSs may significantly decline in value or become worthless if we are unable to assert our contractual control over the assets of the Group VIEs" and "—Substantial uncertainties exist with respect to whether the controlling of PRC onshore variable interest entities by foreign investors via contractual arrangements will be recognized as 'foreign investment' and how it may impact the viability of the Group's current corporate structure and operations."

The Group also faces various legal and operational risks and uncertainties associated with being based in or having its operations primarily in China and the country's complex and evolving laws and regulations. For example, the Group faces risks associated with regulatory approvals on offerings conducted overseas by and foreign investment in China-based issuers, the use of the Group VIEs, anti-monopoly regulatory actions, and oversight on cybersecurity and data privacy, which may impact the Group's ability to conduct certain businesses, accept foreign investments, or list on a U.S. or other foreign exchange outside of China. These risks could result in a material adverse change in the Group's operations and the value of our ADSs, significantly limit or completely hinder our ability to offer or continue to offer securities to investors, or cause the value of such securities to significantly decline or become worthless. See "—D. Risks Factors—Risks Relating to Doing Business in China."

Holding Foreign Companies Accountable Act

The Holding Foreign Companies Accountable Act, or the HFCAA, was enacted in December 2020 and may affect our ability to maintain our listing on NASDAQ. Pursuant to the HFCAA, if the SEC determines that we are an issuer, or a covered issuer, that has filed audit reports issued by a registered public accounting firm that has not been subject to inspection for the U.S. Public Company Accounting Oversight Board, or the PCAOB, for three consecutive years beginning in 2021, the SEC shall prohibit our ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. As stated in its report dated December 16, 2021, the PCAOB has determined that it is unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong, including our auditor as an independent registered public accounting firm. As a result, our ADSs may be prohibited from trading or delisted under the HFCAA. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment. See "—D. Risks Factors—Risks Relating to Doing Business in China—Our ADSs will be prohibited from trading in the United States under the Holding Foreign Companies Accountable Act, or the HFCAA, in 2024 if the PCAOB is unable to inspect or fully investigate auditors located in China, or 2023 if proposed changes to the law are enacted. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment."

Permissions and Approvals

As of the date of this annual report, the Group has obtained all material permissions and approvals that are, or may be, required for the Group's main operations in China, except as disclosed in "—D. Risk Factors—Risk Relating to Our Business and Industry—The Group's inability to fully comply with Audio-visual Program Provisions may expose it to administrative sanctions, which would materially and adversely affect the Group's business, results of operations and financial condition" and "—The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications." No material permission or approval for the Group has been denied by relevant authorities in China. See "Item 4. Information on the Company—C. Regulations—Permissions and Licenses Requirements" for more details.

In addition, we, our PRC subsidiaries and the Group VIEs may be required to obtain permissions from the China Securities Regulatory Commission, or the CSRC, and may be required to go through cybersecurity review by the Cyberspace Administration of China, or the CAC, in connection with any future offering and listing in an overseas market. As of the date of this annual report, we have not been subject to any cybersecurity review made by the CAC. See "—D. Risks Factors—Risks Relating to Doing Business in China—The approval of and the filing with the China Securities Regulatory Commission, or the CSRC, or other PRC government authorities may be required in connection with our future offshore offerings under PRC law, which may hinder our ability to continue to offer securities to investors offshore; in addition, the regulation of the CSRC or other PRC regulatory agencies establish complex procedures for acquisitions conducted by foreign investors that could make it more difficult for us to grow through acquisitions" and "—Risks Relating to Our Industry and Business—We may be subject to cybersecurity review by regulatory authorities of the PRC in the future."

Given the uncertainties of interpretation and implementation of relevant laws and regulations and the enforcement practice by relevant government authorities, we may be required to obtain additional licenses, permits, filings or approvals for the functions and services of our platform in the future, and may not be able to maintain or renew our current licenses, permits, filings or approvals. In addition, rules and regulations in China can change quickly with little advance notice. Uncertainties due to evolving laws and regulations could impede the ability of a China-based issuer, such as us, to obtain or maintain permits or licenses required to conduct business in China. In the absence of required permits or licenses, governmental authorities could impose material sanctions or penalties on us. See "—D. Risks Factors—Risks Relating to Doing Business in China—Changes in the political and economic policies of the PRC government may materially and adversely affect the Group's business, results of operations and financial condition and may result in the Group's inability to sustain our growth and expansion strategies. The PRC government may intervene or influence our operations at any time, which could result in a material change in the Group's operations and/or the value of our ADSs. Any actions by the Chinese government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers could significantly limit or completely hinder the Group's ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or become worthless" and "—There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. In addition, rules and regulations in China can change quickly with little advance notice."

Cash Transfers Through Our Organization

Qutoutiao Inc. is a holding company with no material operations of its own. We conduct our operations primarily (i) through contractual arrangements with the Group VIEs in China and (ii) by our subsidiaries in China. As a result, Qutoutiao Inc.'s ability to pay dividends depends upon dividends paid by our PRC subsidiaries and remittances from the Group VIEs. If our PRC subsidiaries or the Group VIEs incur debt on their own in the future, the instruments governing their debt may restrict their ability to pay dividends or make other distributions or remittances to us. In addition, current PRC regulations permit our PRC subsidiaries to pay dividends to their respective shareholders only out of their retained earnings, if any, determined in accordance with PRC accounting standards and regulations. Furthermore, each of our PRC subsidiaries and the Group VIEs is required to set aside at least 10% of its net income each year to fund certain statutory reserves until the cumulative amount of such reserves reaches 50% of its registered capital. These reserves, together with the registered capital, are not distributable as cash dividends. For more details, see "—D. Risks Factors—Risks Relating to Doing Business in China—We rely to a significant extent on dividends and other distributions on equity paid by our principal operating subsidiaries and the Group VIEs to fund offshore cash and financing requirements. Any limitation on the ability of our PRC operating subsidiaries or the Group VIEs to make payments to us could materially and adversely affect our ability to conduct the Group's business."

Set forth in the table below is a summary of cash transfers that have occurred between our subsidiaries and the Group VIEs for the years ended December 31, 2019, 2020 and 2021, respectively.

	Year e	nded December	31,
	2019	2020	2021
	(RM	IB in thousands	s)
Cash paid by the Group VIEs to our subsidiaries under service agreements	_	(297,510)	(756,962)
Cash received by the Group VIEs from our subsidiaries under service agreements	67,419	_	188,798
Cash received by the Group VIEs from our subsidiaries for intra-Group financing	2,859,506	462,233	137,515

For the years ended December 31, 2019, 2020 and 2021, no subsidiaries or Group VIEs paid dividends or made other distributions to the Cayman Islands holding company, and no dividends or distributions were paid or made to U.S. investors. For the years ended December 31, 2019, 2020 and 2021, no assets were transferred between our subsidiaries and the Group VIEs other than the cash transfers set forth in the table above. We do not have any present plan to pay any dividends on our shares in the foreseeable future. We intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividend Policy." However, if our PRC subsidiaries or Group VIEs declare and distribute profits to us, such payments will be subject to withholding tax, which will increase our tax liability and reduce the amount of cash available to us. For PRC and United States federal income tax considerations in connection with an investment in our ADSs, see "Item 10. Additional Information—E. Taxation." We plan to continue to determine the amount of service fee and payment method with the Group VIEs and their shareholders through bona fide negotiation, and settle fees under the contractual arrangements accordingly in the future.

In addition, our PRC subsidiaries, the Group VIEs and their subsidiaries generate their revenue primarily in Renminbi, which is not freely convertible into other currencies. As a result, any restriction on currency exchange may limit the ability of our PRC subsidiaries to pay dividends to us or our ability to pay dividends in foreign currencies to our investors. For more details, see "Item 3. Key Information—D. Risk Factors—Risks Relating to Doing Business in China—We are subject to restrictions on currency exchange."

Financial Information Related to the Group VIEs

We do not own any equity interest in the Group VIEs that are consolidated in the Group's financial statements. The Group consolidates the results of the Group VIEs and their subsidiaries under U.S. GAAP through our contractual arrangements with the Group VIEs and their respective shareholders. For more details of such contractual arrangements, see "Item 4. — Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders."

Condensed Consolidated Schedule of Results of Operation

The following table presents the Group's condensed consolidated schedules of results of operations for our holding company, Qutoutiao Inc., our wholly foreign-owned entities that are the primary beneficiaries of the Group VIEs under U.S. GAAP, or the Primary Beneficiaries of the Group VIEs, our other subsidiaries that are not the Primary Beneficiaries of the Group VIEs, or Other Subsidiaries, and the Group VIEs and their subsidiaries that the Group consolidates for the periods presented:

	For the Year Ended December 31, 2019						
	Qutoutiao Inc.	Other subsidiaries	Primary Beneficiaries of the Group VIEs (RMB in th	Group VIEs and their subsidiaries ousands)	Eliminating adjustments	Consolidated totals	
Revenues:			•	ŕ			
Third-party revenues		1	10,126	5,559,954		5,570,081	
Intra-Group revenues (2)			35,648	67,419	(103,067)		
Total revenues	_	1	45,774	5,627,373	(103,067)	5,570,081	
Cost of revenues:							
Third-party cost of revenues		(561)	(124,439)	(1,515,632)		(1,640,632)	
Intra-Group cost of revenues (2)			(67,419)	(35,648)	103,067		
Total cost of revenues	_	(561)	(191,858)	(1,551,280)	103,067	(1,640,632)	
Gross profit	_	(560)	(146,084)	4,076,093		3,929,449	
Operating expenses:							
Third-party operating expenses (1)	(287,027)	(15,412)	(91,299)	(6,561,213)	271,978	(6,682,973)	
Total operating expenses	(287,027)	(15,412)	(91,299)	(6,561,213)	271,978	(6,682,973)	
Other operating income/(expense)		_	19,211	11,081	_	30,292	
Loss from Operations	(287,027)	(15,972)	(218,172)	(2,474,039)	271,978	(2,723,232)	
Non-operating income/(expense)	17,393	3,796	7,831	9,787	_	38,807	
Loss before income tax expense	(269,634)	(12,176)	(210,341)	(2,464,252)	271,978	(2,684,425)	
Income tax benefits/expense	_	_	(32)	(4,811)	_	(4,843)	
Loss from subsidiaries and VIEs (1)	(2,419,047)	(2,679,436)	(2,469,063)		7,567,546		
Net Loss	(2,688,681)	(2,691,612)	(2,679,436)	(2,469,063)	7,839,524	(2,689,268)	
Less: Net loss attributable to the noncontrolling interest shareholders	_	587	_	_	_	587	
Net loss attributable to Qutoutiao Inc.	(2,688,681)	(2,691,025)	(2,679,436)	(2,469,063)	7,839,524	(2,688,681)	
Accretion to convertible redeemable preferred shares redemption							
value	(20,548)	_	_	_	_	(20,548)	
Net loss attributable to Qutoutiao Inc.'s ordinary							
shareholders	(2,709,229)	(2,691,025)	(2,679,436)	(2,469,063)	7,839,524	(2,709,229)	

	-	For	the Year Ended		20	
	Qutoutiao Inc.	Other subsidiaries	Primary Beneficiaries of the Group VIEs (RMB in the	Group VIEs and their subsidiaries ousands)	Eliminating adjustments	Consolidated totals
Revenues:			•	ŕ		
Third-party revenues	_	_	1,513	5,283,682	_	5,285,195
Intra-Group revenues (2)			560,789		(560,789)	
Total revenues	_	_	562,302	5,283,682	(560,789)	5,285,195
Cost of revenues:						
Third-party cost of revenues		(189)	(198,011)	(1,476,216)		(1,674,416)
Intra-Group cost of revenues (2)				(15,462)	15,462	
Total cost of revenues	_	(189)	(198,011)	(1,491,678)	15,462	(1,674,416)
Gross profit		(189)	364,291	3,792,004	(545,327)	3,610,779
Operating expenses:						
Third-party operating expenses (1)	(471,730)	(9,706)	(346,422)	(4,357,603)	463,214	(4,722,247)
Intra-Group operating expenses (2)				(545,327)	545,327	
Total operating expenses	(471,730)	(9,706)	(346,422)	(4,902,930)	1,008,541	(4,722,247)
Other operating income/(expense)			56,300	22,999		79,299
Loss from Operations	(471,730)	(9,895)	74,169	(1,087,927)	463,214	1,032,169
Non-operating income/(expense)	(34,003)	(31,889)	168	(8,281)	_	74,005
Loss before income tax expense	(505,733)	(41,784)	74,337	(1,096,208)	463,214	1,106,174
Income tax benefits/expense	_	_	1,008		_	1,008
Loss from subsidiaries and VIEs (1)	(598,706)	1,020,863	(1,096,208)		2,715,777	
Net Loss	(1,104,439)	1,062,647	1,020,863	(1,096,208)	3,178,991	1,105,116
Less: Net loss attributable to the noncontrolling interest						
shareholders	_	727	_	_	_	727
Net loss attributable to Qutoutiao Inc.	(1,104,439)	(1,061,920)	1,020,863	(1,096,208)	3,178,991	(1,104,439)
Accretion to convertible redeemable preferred shares redemption						
value	(48,277)	_	_	_	_	(48,277)
Gain on repurchase of Shares B Convertible Preferred	14,842					14,842
Net loss attributable to Qutoutiao Inc.'s ordinary						
shareholders	(1,137,874)	(1,061,920)	1,020,863	(1,096,208)	3,178,991	(1,137,874)

	For the Year Ended December 31, 2021						
	Qutoutiao Inc.	Other subsidiaries	Primary Beneficiaries of the Group VIEs (RMB in th	Group VIEs and their subsidiaries nousands)	Eliminating adjustments	Consolidated totals	
Revenues:			•	ŕ			
Third-party revenues	_	225	2,990	4,336,388		4,339,603	
Intra-Group revenues (2)			970,661	188,298	(1,158,959)		
Total revenues	_	225	973,651	4,524,686	(1,158,959)	4,339,603	
Cost of revenues:							
Third-party cost of revenues	_	(325)	(303,600)	(867,701)		(1,171,626)	
Intra-Group cost of revenues (2)				(18,959)	18,959		
Total cost of revenues	_	(325)	(303,600)	(886,660)	18,959	(1,171,626)	
Gross profit		(100)	670,051	3,638,026	(1,140,000)	3,167,977	
Operating expenses:							
Third-party operating expenses	(208,594)	(12,210)	(379,130)	(4,067,548)	200,184	(4,467,298)	
Intra-Group operating expenses (2)			(188,298)	(951,702)	1,140,000		
Total operating expenses	(208,594)	(12,210)	(567,428)	(5,019,250)	1,340,184	(4,467,298)	
Other operating income/(expense)			87,439	18,659		106,098	
Loss from Operations	(208,594)	(12,310)	190,062	(1,362,565)	200,184	(1,193,223)	
Non-operating income/(expense)	(58,313)	(16,944)	12,267	22,282		(40,708)	
Loss before income tax expense	(266,907)	(29,254)	202,329	(1,340,283)	200,184	(1,233,931)	
Income tax benefits/expense	_	(1)	(2,918)	(131)	_	(3,050)	
Loss from subsidiaries and VIEs (1)	(972,710)	(1,144,198)	(1,343,609)	_	3,460,517	_	
Equity in loss of affiliate companies				(3,195)		(3,195)	
Net Loss	(1,239,617)	(1,173,453)	(1,144,198)	(1,343,609)	3,660,701	(1,240,176)	
Less: Net loss attributable to the noncontrolling interest shareholders	_	559	_	_	_	559	
Net loss attributable to Qutoutiao Inc.	(1,239,617)	(1,172,894)	(1,144,198)	(1,343,609)	3,660,701	(1,239,617)	
Accretion to convertible redeemable preferred shares redemption value	(108,896)					(108,896)	
Net loss attributable to Qutoutiao Inc.'s ordinary							
shareholders	(1,348,513)	(1,172,894)	(1,144,198)	(1,343,609)	3,660,701	(1,348,513)	

Note:

- (1) Represents the elimination of investments among Qutoutiao Inc., the Primary Beneficiaries of the Group VIEs, the Other Subsidiaries, and the Group VIEs and their subsidiaries that the Group consolidates. The deficit of investment in subsidiaries and the Group VIEs of Qutoutiao Inc. as of December 31, 2020 have been revised from amounts previously disclosed in the audit report. Share-based compensation expenses are recorded in Qutoutiao Inc., which issued these equity awards, and are also pushed down to the VIEs and subsidiaries. The expenses pushed down to the VIEs and subsidiaries are eliminated upon consolidation to avoid duplication.
- (2) Represents the elimination of the intercompany service charge at the consolidation level.

Condensed Consolidated Schedule of Balance Sheets

The following table presents the Group's condensed consolidated schedule of financial position for Qutoutiao Inc., the Primary Beneficiaries of the Group VIEs, our Other Subsidiaries, and the Group VIEs and their subsidiaries that the Group consolidates as of the dates presented:

	As of December 31, 2020 Primary Group VIEs Beneficiaries and						
	Qutoutiao Inc.	Other subsidiaries	of the Group VIEs	their <u>subsidiaries</u> thousands)	Eliminating adjustments	Consolidated totals	
ASSETS			(KWD III	tiiousaiius)			
Current assets:							
Cash and cash equivalents	1,933	360,232	120,226	12,084	_	494,475	
Restricted cash	_	_	36,000	64,316	_	100,316	
Short-term investments	_	36,186	256,497	98,350	_	391,033	
Accounts receivable, net	_	_	_	737,789	_	737,789	
Amount due from related parties	_	_	15,129	368,465	_	383,594	
Prepaid and other current assets	3,619	737	29,866	330,887	_	365,109	
Intra-Group receivables due from the Company's							
subsidiaries (1)	3,612,625	428,696	5,160,614	1,173,053	(10,374,988)	_	
Total current assets	3,618,177	825,851	5,618,332	2,784,944	(10,374,988)	2,472,316	
Noncurrent assets:							
Account receivables, non-current	_	_	_	54,639	_	54,639	
Property and equipment, net	_	_	252	16,961	_	17,213	
Right-of-use assets, net	_	_	2,210	48,109	_	50,319	
Intangible assets	_	_	75,302	7,821	_	83,123	
Goodwill	_	_	7,268	_	_	7,268	
Long-term Investments	27,589	47,300	_	8,000	_	82,889	
Other non-current assets	4,266	_		143,825	_	148,091	
Investment in subsidiaries and VIEs (2)		87,915			(87,915)		
Total noncurrent assets	31,855	135,215	85,032	279,355	(87,915)	443,542	
Total assets	3,650,032	961,066	5,703,364	3,064,299	(10,462,903)	2,915,858	
LIABILITIES							
Current liabilities:							
Short-term borrowings	_	_	20,000	50,000	_	70,000	
Loan from a related party	_	13,050	_	_	_	13,050	
Accounts payable	_	_	49,123	399,858	_	448,981	
Amount due to related parties	_	_	5,132	4,295	_	9,427	
Registered users' loyalty payable	_	6,447		66,180	_	72,627	
Advance from advertising customers and deferred revenue	_	_	_	140,776	_	140,776	
Salary and welfare payable	_	221	34,176	115,307	_	149,704	
Tax payable	_	_	(1,653)	98,797	_	97,144	
Lease liabilities, current	_	_	730	20,030	_	20,760	
Accrued liabilities related to users' loyalty program	_	_	_	100,088	_	100,088	
Accrued liabilities and other current liabilities	2,512	3,158	150,307	607,456	_	763,433	
Convertible Loan—current	_	_	_	_	_	_	
Intra-Group payables due to the Company's subsidiaries (1)	153,504	3,444,919	1,349,764	5,426,801	(10,374,988)		
Total current liabilities	156,016	3,467,795	1,607,579	7,029,588	(10,374,988)	1,885,990	
Lease liabilities, non-current			222	23,534		23,756	
Convertible Loan	1,174,868	_	_	_	_	1,174,868	
Other non current liabilities	4,256	_	_	_	_	4,256	
Deferred tax liabilities	_	_	18,825	_	_	18,825	
Deficit of investment in subsidiaries and VIEs (2)	3,595,666	_	3,988,823	_	(7,584,489)	_	
Total long-term liabilities	4,774,790		4,007,870	23,534	(7,584,489)	1,221,705	
Total liabilities	4,930,806	3,467,795	5,615,449	7,053,122	(17,959,477)	3,107,695	
Commitments and contingencies	,,		, -, -, -			, , ,,,,,,,	
Mezzanine equity							
Redeemable non-controlling interests		1,093,526				1,093,526	
SHAREHOLDERS' deficit		1,000,020				1,000,020	
Total Qutoutiao Inc. shareholders' deficit	(1,280,774)	(3,595,666)	87,915	(3,988,823)	7,496,574	(1,280,774)	
Noncontrolling interest	(1,200,774)	(4,589)	07,913 —	(5,500,025)	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(4,589)	
Total shareholders' deficit (2)	(1,280,774)	(3,600,255)	87,915	(3,988,823)	7,496,574	(1,285,363)	
Total liabilities and shareholders' deficit							
Total Havillues and Shareholders, deficit	3,650,032	961,066	5,703,364	3,064,299	(10,462,903)	2,915,858	

			As of Docom	nber 31, 2021		
	Qutoutiao Inc.	Other subsidiaries	Primary Beneficiaries of the Group VIEs	Group VIEs and their subsidiaries thousands)	Eliminating adjustments	Consolidated totals
ASSETS			(RMB III	tnousanus)		
Current assets:						
Cash and cash equivalents	19,633	99,871	101,064	19,783	_	240,351
Restricted cash			62,322	13,160	_	75,482
Short-term investments	_	150,117	159,300	33,600	_	343,017
Accounts receivable, net	_	122		770,797	_	770,919
Amount due from related parties	_		_	259,863	_	259,863
Prepaid and other current assets	4,605	313	53,642	114,317	_	172,877
Intra-Group receivables due from the Company's subsidiaries (1)	3,521,857	670,178	5,996,426	937,831	(11,126,292)	
Total current assets	3,546,095	920,601	6,372,754	2,149,351	(11,126,292)	1,862,509
Noncurrent assets:	5,5 10,055	320,001	0,572,751	2,1 15,551	(11,120,232)	1,002,000
Account receivables, non-current						
Property and equipment, net			33	12,828		12,861
Right-of-use assets, net	_	<u> </u>	222	26,120	_	26,342
Intangible assets	<u> </u>		65,688	99,582		165,270
Goodwill	_	<u> </u>	7,268	33,302	_	7,268
Long-term Investments			7,200 —	1,416	_	1,416
Other non-current assets	2,645	<u> </u>	<u>—</u>	2,164		4,809
			72 211			
Total noncurrent assets	2,645		73,211	142,110	(44.406.000)	217,966
Total assets	3,548,740	920,601	6,445,965	2,291,461	(11,126,292)	2,080,475
LIABILITIES						
Current liabilities:						
Short-term borrowings	_	_	20,000	_	_	20,000
Accounts payable	_	_	58,586	255,182	_	313,768
Amount due to related parties	_	_	5,433	1,495	_	6,928
Registered users' loyalty payable	_	6,299	_	55,392	_	61,691
Advance from advertising customers and deferred revenue	_	_	3	122,594	_	122,597
Salary and welfare payable	_	74	23,676	42,237	_	65,987
Tax payable	_	_	28,591	15,288	_	43,879
Lease liabilities, current	_	_	222	11,675	_	11,897
Accrued liabilities related to users' loyalty program	_	_	_	99,360	_	99,360
Accrued liabilities and other current liabilities	3,312	687	31,547	1,299,057		1,334,603
Convertible Loan—current	1,182,963	_	_	_	_	1,182,963
Intra-Group payables due to the Company's subsidiaries (1)	281,201	3,552,395	1,787,252	5,505,444	(11,126,292)	
Total current liabilities	1,467,476	3,559,455	1,955,310	7,407,724	(11,126,292)	3,263,673
Lease liabilities, non-current	_	_	_	15,985	_	15,985
Other non current liabilities	1,733	_	_	_	_	1,733
Deferred tax liabilities	<u> </u>	_	16,422	_	_	16,422
Deficit of investment in subsidiaries and VIEs (2)	4,469,087	658,015	5,132,248	_	(10,259,350)	_
Total long-term liabilities	4,470,820	658,015	5,148,670	15,985	(10,259,350)	34,140
Total liabilities	5,938,296	4,217,470	7,103,980	7,423,709	(21,385,642)	3,297,813
	3,330,230	4,217,470	7,105,500	7,423,703	(21,303,042)	5,257,015
Commitments and contingencies						
Mezzanine equity Redomphle per controlling interests		1 170 010				1 170 010
Redeemable non-controlling interests		1,172,218				1,172,218
SHAREHOLDERS' deficit Total Outquire Tree chareholders' deficit	(2.200 FEC)	(4.460.007)	(CEO 015)	(E 122 240)	10.250.250	(2.200 FEC)
Total Qutoutiao Inc. shareholders' deficit	(2,389,556)	(4,469,087)	(658,015)	(5,132,248)	10,259,350	(2,389,556)
Noncontrolling interest	(2.202.775)		(050.015)	/F 402 2 (C)	10.050.050	(0.000.777)
Total shareholders' deficit (2)	(2,389,556)	(4,469,087)	(658,015)	(5,132,248)	10,259,350	(2,389,556)
Total liabilities and shareholders' deficit	3,548,740	920,601	6,445,965	2,291,461	(11,126,292)	2,080,475

Note:

⁽¹⁾ Represents the elimination of intercompany balances among Qutoutiao Inc., the Primary Beneficiaries of the Group VIEs, the Other Subsidiaries, and the Group VIEs and their subsidiaries that we consolidate. The intra-Group receivables and payables of Qutoutiao Inc. as of December 31, 2020 have been revised from amounts previously disclosed in the audit report included in this annual report.

(2) Represents the elimination of investments among Qutoutiao Inc., the Primary Beneficiaries of the Group VIEs, the Other Subsidiaries, and the Group VIEs and their subsidiaries that the Group consolidates. The deficit of investment in subsidiaries and the Group VIEs of Qutoutiao Inc. as of December 31, 2020 have been revised from amounts previously disclosed in the audit report. Share-based compensation expenses are recorded in Qutoutiao Inc., which issued these equity awards, and are also pushed down to the VIEs and subsidiaries. The expenses pushed down to the VIEs and subsidiaries are eliminated upon consolidation to avoid duplication.

Condensed Consolidated Schedule of Cash Flows

The following table presents our condensed consolidated schedules of cash flows for Qutoutiao Inc., the Primary Beneficiaries of the Group VIEs, our Other Subsidiaries, and the Group VIEs and their subsidiaries that the Group consolidates for the periods presented:

Cash Income Income Cash Income Incom				For	r the Year Ended	December 31, 201	19	
Section Sect					Beneficiaries of the	and their		Consolidated totals
Net cash provided by/(used in) transactions with intra- Group entities 3,183 1,4695 458,381 2,850,164 3,672,955 Net cash provided by/(used in) operating activities 3,9183 1,4695 39,962 (7,827,45) 3,674,955 Cash flows from investing activities 3,9183 1,4695 39,962 (7,827,45) 3,672,925 Cash used in capital contribution to intra-Group entities 6,26,853 463,917 1,728,360 60,546 3,680,940 1,224,152 Cash used in roviding borrowings to intra-Group entities 6,280,753 2,380,170 2,895,560 3,800,202,760				34334444763			uujusuuents	totals
Net cash provided by/(used in) transactions with external parties Section Sectio								
Net cash provided by/(used in) transactions with intra- Group entities	Net cash provided by/(used in) transactions with external							
Net cash provided by/(used in) transactions with external parties Say 1,83 Say 1,8	1		39,183	(14,695)	458,381	(2,850,164)	_	(2,367,295)
Net cash provided by/(used in) operating activities: Net cash provided by/(used in) transactions with external parties (526,853 (463,917) (172,836) (60,546) (60,546) (1,224,152)								
Net cash provided by/(used in) transactions with external parties Section Cash used in rapital contribution to intra-Group entities Cash used in rapital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities Cash used in provided by/(used in) investing activities Cash lows from financing activities Cash lows from financing activities Cash lows from financing activities Cash provided by/(used in) transactions with external parties Cash provided by (used in) transactions with external parties Cash provided by borrowings from intra-Group entities Cash provided by borrowings from intra-Group entities Cash provided by/(used in) financing activities Cash provided by/(used in) financing activities Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with intra-Group entities Cash provided by/(used in) transactions with external parties Cash used in capital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities Cash used in provided by/(used in) transactions with external parties Cash used in capital contribution to intra-Group entities Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external part	Group entities				(67,419)	67,419		
Net cash provided by/(used in) transactions with external parties	Net cash provided by/(used in) operating activities		39,183	(14,695)	390,962	(2,782,745)	_	(2,367,295
Papties	Cash flows from investing activities:							
Cash used in capital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities Cash used in provided by/(used in) investing activities Cash flows from financing activities Cash flows from financing activities Cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities Cash provided by/(used in) financing activities Cash flows from operating activities Cash flows from investing activities Cash flows from financing activities Cash flows from financ	Net cash provided by/(used in) transactions with external							
Cash used in providing borrowings to intra-Group entities C300,753 C3,50,017 C3,55,066 C3,023,027 C3,032,027	parties	(5	526,853)	(463,917)	(172,836)	(60,546)	_	(1,224,152)
Net cash provided by/(used in) investing activities 1,397,382 370,619 — — — — 1,768,001	Cash used in capital contribution to intra-Group entities		_	(348,818)	_	_	348,818	_
Net cash provided by/(used in) transactions with external parties 1,397,382 370,619 — — 1,768,001 1,	Cash used in providing borrowings to intra-Group entities	(2,8	300,753)	(2,360,017)	(2,859,506)	_	8,020,276	
Net cash provided by/(used in) transactions with external parties 1,397,382 370,619	Net cash provided by/(used in) investing activities	(3,3	327,606)	(3,172,752)	(3,032,342)	(60,546)	8,369,094	(1,224,152
Net cash provided by/(used in) transactions with external parties 1,397,382 370,619	Cash flows from financing activities:							
Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities A 2,800,753 2,360,017 2,859,506 (8,020,276) 3,768,000 2,859,506 (8,020,276) 3,768,000								
Entities	parties	1,3	397,382	370,619	_	_	_	1,768,001
Entities	Cash provided by capital contribution from intra-Group							
Net cash provided by/(used in) financing activities 1,397,382 3,71,372 2,708,835 2,859,506 (8,369,094) 1,768,001	· · · · · · · · · · · · · · · · · · ·			_	348,818	_	(348,818)	_
Primary Prim	Cash provided by borrowings from intra-Group entities		_	2,800,753	2,360,017	2,859,506	(8,020,276)	_
Primary Prim	Net cash provided by/(used in) financing activities	1,3	397,382	3,171,372	2,708,835	2,859,506	(8,369,094)	1,768,001
Primary Prim								
Lead of the control of the c					For the Year End		2020	
Light of the Light of					Primary			
Inc. subsidiaries Group VIEs subsidiaries Musiciaries Musici					Beneficiaries	and		
Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities — — — — — — — — — — — — — — — — — — —								Consolidated
Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities ———————————————————————————————————				subsidiarie			aujustinents	totais
Net cash provided by/(used in) transactions with intra-Group entities — — — — — — — — — — — — — — — — — — —	Cash flows from operating activities:							
entities — — — — — — — — — — — — — — — — — — —			(35	(4) 956	(770,879)	(93,497)		(863,774
Net cash provided by/(used in) operating activities: Net cash provided by/(used in) transactions with external parties Cash used in capital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities Cash used in provided by/(used in) investing activities Net cash provided by/(used in) investing activities (604,494) — (462,233) — 1,066,727 — Net cash provided by/(used in) investing activities Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Cash provided by (used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities — 604,494 — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Net cash provided by/(used in) transactions with intra-Grou	p						
Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties Cash used in capital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities (604,494) — (462,233) — 1,066,727 — Net cash provided by/(used in) investing activities (10,008) (682,718) (434,970) (80,506) 1,990,747 782,545 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	entities			<u> </u>	297,510	(297,510)		
Net cash provided by/(used in) transactions with external parties Cash used in capital contribution to intra-Group entities Cash used in providing borrowings to intra-Group entities (604,494) — (462,233) — 1,066,727 — Net cash provided by/(used in) investing activities (10,008) (682,718) (434,970) (80,506) 1,990,747 782,545 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Net cash provided by/(used in) operating activities		(35	956	(473,369)	(391,007)		(863,774)
Cash used in capital contribution to intra-Group entities — (924,020) — — 924,020 — Cash used in providing borrowings to intra-Group entities — (604,494) — (462,233) — 1,066,727 — Net cash provided by/(used in) investing activities — (10,008) (682,718) (434,970) (80,506) 1,990,747 782,545 — Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties — (135,744) 373,490 20,000 50,000 — 307,746 — Cash provided by capital contribution from intra-Group entities — — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Cash flows from investing activities:							
Cash used in providing borrowings to intra-Group entities (604,494) — (462,233) — 1,066,727 — Net cash provided by/(used in) investing activities (10,008) (682,718) (434,970) (80,506) 1,990,747 782,545 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (135,744) 373,490 20,000 50,000 — 307,746 Cash provided by capital contribution from intra-Group entities — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Net cash provided by/(used in) transactions with external pa	arties	594,48	6 241,302	27,263	(80,506)	_	782,545
Net cash provided by/(used in) investing activities (10,008) (682,718) (434,970) (80,506) 1,990,747 782,545 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (135,744) 373,490 20,000 50,000 — 307,746 Cash provided by capital contribution from intra-Group entities — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Cash used in capital contribution to intra-Group entities		_	(924,020)) —	_	924,020	_
Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (135,744) 373,490 20,000 50,000 — 307,746 Cash provided by capital contribution from intra-Group entities — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Cash used in providing borrowings to intra-Group entities		(604,49	4) —	(462,233)	_	1,066,727	_
Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (135,744) 373,490 20,000 50,000 — 307,746 Cash provided by capital contribution from intra-Group entities — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —	Net cash provided by/(used in) investing activities		(10,00	(682,718	(434,970)	(80,506)	1,990,747	782,545
Net cash provided by/(used in) transactions with external parties (135,744) 373,490 20,000 50,000 — 307,746 Cash provided by capital contribution from intra-Group entities — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —			, ,					
Cash provided by capital contribution from intra-Group entities — — 924,020 — (924,020) — Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —		arties	(135,74	4) 373,490	20,000	50,000	_	307,746
Cash provided by borrowings from intra-Group entities — 604,494 — 462,233 (1,066,727) —						_	(924,020)	_
			_	604,494		462,233	(1,066,727)	_
			(135,74	4) 977,984	944,020	512,233	(1,990,747)	307,746

	For the Year Ended December 31, 2021					
	Qutoutiao Inc.	Other subsidiaries	Primary Beneficiaries of the Group VIEs (RMB in	Group VIEs and their subsidiaries thousands)	Eliminating adjustments	Consolidated totals
Cash flows from operating activities:			`	ĺ		
Net cash provided by/(used in) transactions with external parties	(14,807)	67,637	(709,141)	377,189	_	(279,122)
Net cash provided by/(used in) transactions with intra-Group entities	_	_	568,164	(568,164)	_	_
Net cash provided by/(used in) operating activities	(14,807)	67,637	(140,977)	(190,975)		(279,122)
Cash flows from investing activities:						
Net cash provided by/(used in) transactions with external parties	_	(84,723)	97,197	63,047	_	75,521
Cash used in capital contribution to intra-Group entities	_	(198,086)	_	_	198,086	_
Cash used in providing borrowings to intra-Group entities	_	_	(137,515)	_	137,515	_
Cash provided by repayment of borrowings from intra-Group						
entities	32,506	_	_	_	(32,506)	_
Net cash provided by/(used in) investing activities	32,506	(282,809)	(40,318)	63,047	303,095	75,521
Cash flows from financing activities:						
Net cash provided by/(used in) transactions with external parties	_	(13,050)	_	(53,044)	_	(66,094)
Cash provided by capital contribution from intra-Group entities	_		198,086		(198,086)	
Cash provided by borrowings from intra-Group entities	_	_	_	137,515	(137,515)	_
Cash used in repayment of borrowings to intra-Group entities	_	(32,506)	_	_	32,506	_
Net cash provided by/(used in) financing activities		(45,556)	198,086	84,471	(303,095)	(66,094)

A. [Reserved]

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

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

Summary of Risk Factors

An investment in our ADSs is subject to a number of risks, including risks relating to our industry and business, risks relating to the Group's corporate structure, risks relating to doing business in China and risks relating to the ADSs. The following summarizes some, but not all, of these risks. Please carefully consider all of the information discussed in "Item 3. Key Information—D. Risk Factors" in this annual report for a more thorough description of these and other risks.

Risks Relating to Our Industry and Business

- The Group has a limited operating history, which makes it difficult to evaluate its business.
- If the Group fails to acquire new users or retain existing users, or if user engagement on the Group's platform declines, its business, results of operations and financial condition may be materially and adversely affected.
- There is substantial doubt as to our ability to continue as a going concern.
- We require a significant amount of cash to fund our operations as well as to meet our Convertible Loan obligations. If we cannot obtain additional financing and liquidity, our business, financial condition and results of operation will be materially and adversely affected.
- The Group has incurred net losses in the past and may continue to incur losses in the future.
- The Group's inability to fully comply with Audio-visual Program Provisions may expose it to administrative sanctions, which would
 materially and adversely affect the Group's business, results of operations and financial condition.
- If the Group does not continue to increase the strength of its brand, the Group may not be able to maintain current or attract new users and customers for its products and services.
- Any catastrophe, including natural catastrophes and outbreaks of health pandemics and other extraordinary events, could disrupt the
 Group's business operation. For example, the COVID-19 pandemic may have a material adverse effect on the Group's business, results of
 operations and financial condition, as well as the trading price of the ADSs.
- If the Group is unable to compete effectively in the industry it operates, the Group's business, results of operations and financial condition may be materially and adversely affected.
- The Group generates a substantial majority of its revenues from advertising and marketing. A decline in the Group's advertising and marketing revenues could harm its business.
- The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications.
- Privacy concerns relating to the Group's products and services and the use of user information could damage its reputation, deter current and potential users and customers from using the Group's mobile applications and negatively impact its business.
- We may be subject to cybersecurity review by regulatory authorities of the PRC in the future.

Risks Relating to Our Corporate Structure

- We rely on contractual arrangements with the Group VIEs and their respective shareholders to operate the Group's business, which may be less effective than equity ownership in providing operational control and otherwise materially and adversely affect the Group's business.
- The shareholders of the Group VIEs may have potential conflicts of interest with us, which may materially and adversely affect the Group's business, results of operations and financial condition.
- If the PRC government deems that the contractual arrangements in relation to the Group VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. In addition, our ADSs may significantly decline in value or become worthless if we are unable to assert our contractual control over the assets of the Group VIEs.
- Substantial uncertainties exist with respect to whether the controlling of PRC onshore variable interest entities by foreign investors via contractual arrangements will be recognized as "foreign investment" and how it may impact the viability of the Group's current corporate structure and operations.

Risks Relating to Doing Business in China

- Changes in the political and economic policies of the PRC government may materially and adversely affect the Group's business, results of operations and financial condition and may result in the Group's inability to sustain our growth and expansion strategies. The PRC government may intervene or influence our operations at any time, which could result in a material change in the Group's operations and/or the value of our ADSs. Any actions by the Chinese government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers could significantly limit or completely hinder the Group's ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or become worthless.
- There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. In addition, rules and regulations in China can change quickly with little advance notice.

- The approval of and the filing with the China Securities Regulatory Commission, or the CSRC, or other PRC government authorities may be required in connection with our future offshore offerings under PRC law, which may hinder our ability to continue to offer securities to investors offshore; in addition, the regulation of the CSRC or other PRC regulatory agencies establish complex procedures for acquisitions conducted by foreign investors that could make it more difficult for us to grow through acquisitions.
- PRC regulations relating to investments in offshore companies 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 or limit our PRC subsidiaries' ability to increase their registered capital or distribute profits.
- We rely to a significant extent on dividends and other distributions on equity paid by our principal operating subsidiaries and the Group VIEs to fund offshore cash and financing requirements. Any limitation on the ability of our PRC operating subsidiaries or the Group VIEs to make payments to us could materially and adversely affect our ability to conduct the Group's business.
- We are subject to restrictions on currency exchange.
- The audit report included in this annual report is prepared by an auditor who is not inspected by the U.S. Public Company Accounting Oversight Board and, as such, our investors are deprived of the benefits of such inspection.
- Our ADSs will be prohibited from trading in the United States under the Holding Foreign Companies Accountable Act, or the HFCAA, in 2024 if the PCAOB is unable to inspect or fully investigate auditors located in China, or 2023 if proposed changes to the law are enacted. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Risks Relating to the ADSs

- The trading price of the ADSs may be volatile, which could result in substantial losses to you.
- Because we do not expect to pay cash dividends in the foreseeable future, you may not receive any return on your investment unless you sell your Class A ordinary shares or ADSs for a price greater than that which you paid for them.
- Your right to participate in any future rights offerings may be limited, which may cause dilution to your holdings.
- The dual-class structure of our ordinary shares may adversely affect the trading market for the ADSs.
- You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law.
- We are an emerging growth company and may take advantage of certain reduced reporting requirements.

Risks Relating to Our Industry and Business

The Group has a limited operating history, which makes it difficult to evaluate its business.

The Group launched *Qutoutiao* in June 2016 and *Midu Novels* in May 2018, and further introduced *Midu Lite* in May 2019. The Group has experienced rapid growth in terms of installed users, MAUs, DAUs and revenues from 2016 to 2020, but also certain degrees of decline in terms of these operating metrics and revenues in 2021 and 2022. As our operating history has suggested, the Group's historical development trend may not be indicative of its future performance, and we cannot assure you that the level of growth we had prior to 2020 will be sustainable or achievable at all in the future. The Group's growth prospects should be considered in light of the risks and uncertainties that companies with a limited operating history in our industry may encounter, including, among others, risks and uncertainties regarding our ability to:

- retain existing users on, and attract new users to, the Group's platform;
- present real-time customized feeds to users based on their profiles, behaviors and social relationships;
- maintain the effectiveness of the Group's user loyalty programs;
- maintain stable relationships with the Group's content providers;
- develop and implement successful monetization measures;
- convince advertising customers of the benefits of the Group's advertising and marketing services compared to alternative forms of marketing;
- increase brand awareness through marketing and promotional activities;
- upgrade existing technology and infrastructure and develop new technologies to support increasing user traffic, improve user experience, expand functionality and ensure system stability;
- successfully compete with other companies that are currently in, or may in the future enter, our industry;
- attract, retain and motivate talented employees;
- adapt to the evolving regulatory environment; and
- defend the Group against litigation, regulatory, intellectual property, privacy or other claims.

All of these endeavors involve risks and will require significant capital expenditures and allocation of valuable management and employee resources. We cannot assure you that we will be able to effectively manage the Group's growth or implement our business strategies effectively. If the market for the Group's platform does not develop as we expect or if we fail to address the needs of this dynamic market, the Group's business, results of operations and financial condition will be materially and adversely affected.

If the Group fails to acquire new users or retain existing users, or if user engagement on the Group's platform declines, its business, results of operations and financial condition may be materially and adversely affected.

The size of the Group's user base and the level of user engagement are critical to its success. The Group's mobile applications had approximately 97.6 million combined average MAUs, approximately 25.0 million combined average DAUs and average daily time spent per DAU of approximately 43.2 minutes in the three months ended December 31, 2021. The Group's business has been and will continue to be significantly affected by its ability in growing the number of active users and increasing their overall level of engagement on the Group's platform. The size of the Group's user base and the level of user engagement faced downward pressures in 2021 due to the change of the operating strategies we adopted as we faced uncertainties in the advertising market and the tightening regulatory environment in internet and technology sector in China. We could also see user base decreases during 2022 and certain future periods of time if we further adjust or change our strategy. To the extent the Group's user growth rate slows or its user base decreases, the Group's success will become increasingly dependent on our ability to increase user engagement with the Group's platform. The Group has implemented user account systems and loyalty programs to, among other things, help it cost-effectively acquire new users and develop an engaged and loyal user base. However, although such user account systems and loyalty programs have contributed significantly to the growth in the Group's installed users and high user engagement in the past, there can be no assurance that such systems and programs will continue to function effectively. Additionally, the Group's acquisition cost per user may increase as it implements new marketing initiatives, such as placing advertisements in app stores. The Group's user engagement efforts, including by increasing the number of content providers, expanding the breadth and quality of content, including video and user generated content, on its platform, diversifying into new content formats and strengthening its content recommendation capabilities, may also not achieve expected results. Users may no longer perceive content and other products and services on the Group's platform to be entertaining and relevant, and it may not be able to attract users or increase their usage frequency of its platform. If we fail to execute any such new initiatives successfully or in a cost-effective manner, the Group's business, results of operations and financial condition would be materially and adversely affected. If the Group is unable to grow its user base or the level of user engagement, or if the number of users or their level of engagement declines, this could result in its platform being less attractive to potential new users and thus advertising customers, which would have a material and adverse impact on the Group's business, results of operations and financial condition.

The Chinese government may prevent the Group from distributing content that it believes is noncompliant and the Group may be subject to penalties for such content or the Group may have to interrupt or suspend the operation of the Group's platform to comply with these regulatory requirements from time to time, which may materially and adversely affect the Group's results of operation.

China has enacted regulations governing Internet access and the distribution of news and other information. In the past, the Chinese government has stopped the distribution of information over the Internet or through mobile Internet devices that it believes violates Chinese law, including content that it believes is obscene, defamatory, misleading or inappropriately satirical, incites violence, endangers the national security, concerns politically sensitive topics, or contravenes the national interest. In the past, new downloads of certain mobile content aggregator applications and mobile news applications were temporarily blocked and suspended for different lengths of time, ranging from a few days to weeks, following the publication of content considered to be noncompliant. In July 2018, PRC governmental and regulatory authorities responsible for "eradicating pornography and illegal publications" announced new coordinated efforts to regulate and control the nascent online short video sector, including citations against 19 online short video platforms which allegedly had disregarded repeated warnings not to distribute content deemed by the authorities as obscene, misleading, pornographic, violent, infringing, sensationalist, deviant from socialist core values, harmful to younger viewers, or otherwise unlawful or detrimental. Of these 19 platforms, 15 had their applications removed from app stores and new downloads blocked; among these 15 platforms, three also had their operations suspended by relevant authorities. Any such future suspension in operations or downloads of the Group's mobile applications for this or other reasons may negatively affect the Group's relationships with users and advertisers, and advertisers affect the Group's business and results of operations.

While we strive to comply with applicable regulatory requirements and other obligations we may have with respect to the Group's operation, the failure or perceived failure to comply may result, and in some cases has resulted, in inquiries and other proceedings or actions against us by government agencies or others, as well as negative publicity and damage to our reputation and brand, any of which could cause the Group to lose users and customers and may materially and adversely affect the Group's business, results of operations and financial condition. For example, in order to comply with regulatory requirements, the Group undertook product upgrades and temporarily suspended content updates and certain commercial activities on *Midu Novels* from July 16 to October 15, 2019. *Midu Novels* has resumed regular content updates and commercial activities since October 16, 2019. We have endeavored to use the Group's technologies, employees and other resources in a manner that complies with applicable regulatory requirements, and as such, we believe that the likelihood of us receiving material administrative penalties is low. However, there can be no assurance that similar suspensions relating to the Group's mobile applications will not recur in the future, or that such incidents will not result in loss of users or advertisers, decrease in revenues or reputational damage to us, or have an adverse effect on the Group's business and results of operations.

The Chinese government may continue to implement stricter standards for compliant content, and increase enforcement against content considered to be noncompliant. In addition, certain news items, such as news relating to national security, may not be published without permission from the Chinese government. If the Chinese government were to take any action to limit or prohibit the distribution of information through the Group's mobile applications, or to limit or regulate any current or future content or services available to users on the Group's platform, the Group's business could be significantly harmed. Although we have adopted internal procedures to monitor the content displayed on the Group's platform, due to the significant amount of content, including user generated content, we may not be able to identify all the content that may violate relevant laws and regulations, whether or not due to our fault or oversight in content monitoring. Failure to identify and prevent inappropriate or illegal content from being displayed on the Group's platform may subject us to penalties, including suspension of operations.

Moreover, as the interpretation of noncompliant content is vague and subjective in many cases, and the definition of noncompliant content may be subject to constant changes, it is not always possible to determine or predict what content might be considered noncompliant under existing restrictions, or what restrictions might be imposed in the future. Chinese government authorities may also prohibit the marketing of other types of wireless value-added services and contents through mobile applications, which could materially and adversely affect the Group's business, results of operations and financial condition.

There is substantial doubt as to our ability to continue as a going concern.

The following factors raise substantial doubt about our ability to continue as a going concern:

- For the years ended December 31, 2019, 2020 and 2021, we incurred net losses of RMB2,689.3 million, RMB1,105.2 million and RMB1,240.2 million (US\$194.6 million), respectively.
- For the years ended December 31, 2019, 2020 and 2021, we had net cash used in operating activities of RMB2,367.3 million, RMB863.8 million and RMB279.1 million (US\$43.8 million), respectively.
- As of December 31, 2021, we had an accumulated deficit of RMB7,355.7 million (US\$1,154.3 million) and a deficit in working capital of RMB1,401.2 million (US\$219.9 million).
- As of December 31, 2021, we had cash, cash equivalents, restricted cash and short-term investments of RMB658.9 million (US\$103.4 million), short-term borrowings of RMB20.0 million (US\$3.1 million), and a convertible loan from Alibaba (the "Convertible Loan") of approximately RMB1,183.0 million (US\$185.6 million), including principal of US\$171.1 million (RMB1,147.0 million) and accrued and unpaid interest, that was expected to be matured within one year from the date of the issuance of the audited consolidated financial statements included elsewhere in this annual report.

Our ability to continue as a going concern is dependent upon our continued operations, which in turn is dependent on our ability to adjust the pace of the operation expansion, control operating cost and expenses to reduce the cash used in operating cash flows, pursue financing arrangements, including the renewal of the Convertible Loan with the creditor, and obtain additional funds from sale of our assets, which in turn, are subject to various risks discussed herein including, among others, risks relating to our ability to maintain and improve our liquidity and financial position. See "—We require a significant amount of cash to fund our operations as well as to meet our Convertible Loan obligations. If we cannot obtain additional financing and liquidity, our business, financial condition and results of operation will be materially and adversely affected."

The audited consolidated financial statements included in this annual report on Form 20-F were prepared on the basis of our continuing as a going concern. Facts and circumstances including accumulated and recurring losses from operations, net cash used in operating activities, negative working capital and uncertainties on the repayment of the Convertible Loan raise substantial doubt about our ability to continue as a going concern. Likewise, the report of our independent registered public accounting firm includes a qualification that there is substantial doubt about our ability to continue as a going concern. The audited financial statements do not include any adjustments that might result from the outcome of these uncertainties. If we become unable to continue as a going concern, we may have to liquidate our assets, and the value we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our audited consolidated financial statements. Our lack of cash resources and our potential inability to continue as a going concern may materially and adversely affect the price of our ADSs and our ability to continue our operations.

We require a significant amount of cash to fund our operations as well as to meet our Convertible Loan obligations. If we cannot obtain additional financing and liquidity, our business, financial condition and results of operation will be materially and adversely affected.

We require a significant amount of cash to fund our operations. The Group had negative cash flow from operating activities of RMB2,367.3 million, RMB863.8 million and RMB279.1 million (US\$43.8 million) for the years ended December 31, 2019, 2020 and 2021, respectively. Our ability to increase or maintain our user base, net revenues and gross profit will depend to a significant degree on our ability to obtain sufficient amount of additional cash and liquidity to fund our operations.

We also require a significant amount of cash to meet our Convertible Loan obligations. We have a Convertible Loan of US\$171.1 million advanced by Alibaba with an original maturity date of April 4, 2022. We and Alibaba entered into supplemental agreements to the original convertible loan agreement on March 28, 2022 and April 29, 2022. According to the supplemental agreements, the maturity date of the Convertible Loan has been extended to May 28, 2022. We have made several undertakings under the April 2022 supplemental agreement, including, among others, an undertaking to pay US\$3,000,000 as a part of the accrued interest of the Convertible Loan to Alibaba no later than May 15, 2022. The April 2022 supplemental agreement also provides that the maturity date of the Convertible Loan shall not be extended beyond May 28, 2022 without the prior consent of Alibaba. The interest rate of the Convertible Loan has also been amended from an original compound rate of 3% per annum to a compound rate of 9% per annum plus a simple rate of 3% per annum, calculated from the original loan drawdown date of April 4, 2019. The total amount of the principal and accumulated interest of the Convertible Loan, including the incremental interest related to the increase in interest rate under the supplemental agreements, will amount to approximately US\$240.4 million (RMB1.5 billion) as of May 28, 2022. See "Item 5. Operating and Financial Review and Prospects — B. Liquidity and Capital Resources" for further details. We cannot assure you that we will be able to further extend the maturity date of the principal and accrued and unpaid interest of the Convertible Loan as they become due. Given the significance of the amount repayable upon maturity, the maturity of the Convertible Loan will have a significant impact on our liquidity.

In addition, the investors of Fun Literature Limited, our subsidiary that is the holding company of the entities that operate *Midu Novels*, have the right to require Fun Literature Limited to repurchase all of their preferred shares and the right to sell all of their preferred shares to Qutoutiao Inc. upon occurrence of certain triggering events, including, among others, failure of Fun Literature Limited to complete a qualified IPO by the end of 2024, material breach of representations, warranties and covenants under the transactions documents, and willful or fraudulent misconduct of any entity within the Group that results in a material adverse effect of the Group's business. In addition, the investors of Fun Literature Limited may also require us to purchase their shares upon a sale of the shares of Fun Literature Limited that we hold or upon change of control resulting from such sale. If such right to repurchase or sell is triggered, we cannot assure you that we will have sufficient funds to pay the purchase price of the preferred shares. The obligation to make such payment will place additional significant burden on our liquidity and cash position, and we may not have sufficient cash to fund our operations.

There can also be no assurance that new financings, additional funds from sale of our assets or other transactions will be available to us on commercially acceptable terms, or at all. In addition, the potential worsening global economic conditions may adversely impact our ability to secure additional financing. If we are unable to generate sufficient cash in the future or obtain sufficient financing in a timely manner or on commercially acceptable terms or at all, our business, financial condition and results of operations will be materially and adversely affected and you may lose the entire value of your investment in our ADSs.

The Group has incurred net losses in the past and may continue to incur losses in the future.

The Group incurred net losses of RMB2,689.3 million, RMB1,105.2 million and RMB1,240.2 million (US\$194.6 million) for the years ended December 31, 2019, 2020 and 2021, respectively. If we are unable to generate adequate revenues and to manage our cost and expenses, we may continue to incur significant losses in the future and may not be able to achieve profitability. In addition, we may continue to incur losses in the future due to a number of reasons, many of which are beyond our control, including tightening advertising budget of the Group's advertising customers, declining demand for the Group's products and services, increasing competition, emergence of alternative business models, changes in regulations and government policies, changes in general economic conditions, COVID-19 as well as other risks described in this annual report.

The Group's inability to fully comply with Audio-visual Program Provisions may expose it to administrative sanctions, which would materially and adversely affect the Group's business, results of operations and financial condition.

Pursuant to the *Administrative Provisions on Internet Audio-visual Program Service*, or the Audio-visual Program Provisions, which was issued by the National Radio and Television Administration of the PRC, or the NRTA (previously known as the State Administration of Radio and Television, or the SART, the General Administration of Press and Publication, or the GAPPRFT and the State Administration of Radio, Film and Television, or the SARFT) and MIIT on December 20, 2007 and came into effect on January 31, 2008 and was amended on August 28, 2015, online transmission of audio and video programs requires an Internet audio-visual program transmission license and online audio-visual service providers must be either wholly state-owned or state-controlled. In a press conference jointly held by NRTA and MIIT to answer questions with respect to the Audio-visual Program Provisions in February 2008, NRTA and MIIT clarified that online audio-visual service providers that had already been operating lawfully prior to the issuance of the Audio-visual Program Provisions may re-register and continue to operate without becoming state-owned or controlled, provided that such providers have not engaged in any unlawful activities. This exemption will not be granted to online audio/video service providers established after the Audio-visual Program Provisions was issued. See "Item 4. Information on the Company — C. Regulations — Regulation on Online Transmission of Audio-visual Programs."

Although the Group has been taking measures to ensure compliance, it may not be able to fully comply with Audio-visual Program Provisions. As a result, the Group may face, according to Audio-visual Program Provisions, administrative sanctions including receiving a warning and be ordered to pay a fine of not more than RMB30,000. In the case of severe contravention, the Group may be ordered to cease transmission of audio and video programs, be subject to a penalty equal to one to two times the Group's total investment in the affected business and the devices it used for such operation may be confiscated. Furthermore, according to the Audio-visual Program Provisions, the telecommunications administrative authorities may, based on written opinions of the competent department of radio, film and television, and in accordance with the relevant laws and regulations on supervision of telecommunications and Internet, close the Group's platform, revoke the license for the provision of Internet information services, or the ICP license, and order the relevant network operation entity which provides us signal access services to stop such provision of services. Such penalties would materially and adversely affect the Group's business, results of operations and financial condition.

If the Group fails to maintain its Internet news license, it may be exposed to administrative sanctions, including an order to cease its Internet information services that provide news or to cease the Internet access services provided by third parties to the Group.

The PRC government regulates the Internet industry extensively, including foreign ownership of, and the licensing requirements pertaining to, companies in the Internet industry. A number of regulatory agencies, including the Ministry of Culture, or the MOC, the Ministry of Industry and Information Technology, or MIIT, the Cyberspace Administration of China, or the CAC, the NRTA (previously known as the SART, GAPPRFT and SARFT), the State Council Information Office, or the SCIO, and other governmental authorities, jointly regulate all major aspects of the Internet industry. Operators are required to obtain various government approvals and licenses prior to providing the relevant Internet information services.

The Group's platform primarily focuses on light entertainment content. Nonetheless, certain content related to current affairs, finance, society and economy provided on the Group's *Qutoutiao* mobile application may be deemed to be news content. According to the Provisions for the Administration of Internet News Information Services issued by the CAC on May 2, 2017 that became effective on June 1, 2017, an Internet news license shall be obtained for a provider of Internet news information services to the public in a variety of ways, including through the offering of platforms for the dissemination of Internet news.

Shanghai Jifen Culture Communications Co., Ltd., or Shanghai Jifen, one of the Group VIEs, obtained an Internet news license from the CAC in July 2019. However, if the Group fails to maintain such license, it may be ordered to cease disseminating news and impose a fine on the Group of not less than RMB10,000 but not more than RMB30,000. In the event the Group was ordered to cease disseminating news, its business, results of operations and financial condition could be materially and adversely affected.

If the Group does not continue to increase the strength of its brand, the Group may not be able to maintain current or attract new users and customers for its products and services.

The Group's operational and financial performance is highly dependent on the strength of our brand. We believe the Group enjoys lower user acquisition cost compared to acquiring users through other means. The Group's platform's innovative user account systems and gamified loyalty programs enable it to focus its resources on directly connecting with new users. In order to further expand the Group's user base, it may need to substantially increase its marketing expenditures to enhance brand awareness.

In addition, negative coverage in the media of our company could threaten the perception of our brand, and we cannot assure you that we will be able to defuse negative press coverage about our company to the satisfaction of our investors, users, advertising customers and content providers. If we are unable to defuse negative press coverage about our company, our brand may suffer in the marketplace, the Group's operational and financial performance may be negatively impacted and the price of the ADSs may decline.

Negative publicity about the Group's services, operations and our management has adversely affected and may adversely affect our reputation and business in the future.

We have from time to time received negative publicity, including negative Internet and blog postings about us, the Group's services, operations and our management. For example, a short seller published a report on December 10, 2019 with certain negative opinions on the Group, such as, the Group's related party transactions, the Group's products, the Group's financial conditions and the Group's acquisition decision, which could have a negative impact on our reputation, despite the fact that the short seller's claims were based on factual errors and misunderstanding of business and accounting rules, which we subsequently explained in a detailed public response. On January 18, 2020, the same short seller published another report on us, containing mostly the same negative opinions regarding us, and we have reported in detail the unfounded allegations in this report to the audit committee of our board of directors. On July 16, 2020, China Central Television, or CCTV, reported in its Annual Consumer Rights Show that certain advertisements placed by third-party advertising agents on *Qutoutiao* exaggerated the health benefits of certain food and diet products and promoted activities that may involve online-gambling, which led to negative media publicity on us.

Negative publicity could be the result of malicious intentions, direct or indirect anti-competitive behaviors, agendas of short sellers or advertisements placed on the Group's platform. We may even be subject to government or regulatory investigation as a result of such third-party conduct or misconduct and may be required to spend significant time and incur substantial costs to defend ourselves against such third-party conduct or misconduct, and we may not be able to conclusively refute each of the allegations within a reasonable period of time, or at all. Our brand and reputation may be materially and adversely affected as a result of any negative publicity, which in turn may cause us to lose market share, users, advertising customers and other third parties the Group conducts business with. As a result, the Group's financial position or operating results may be adversely affected and the price of the ADSs may decline.

The Group has implemented user loyalty programs to gamify user experience and tap into the competitive reward psyche of users. However, some users have taken interest in utilizing aggressive tactics to extract maximum monetary reward from the applications. Although the Group has put in mechanisms to detect and prevent such behaviors and the absolute amount of monetary reward so earned is never more than paltry, this feature of the Group's applications has in some cases given rise to criticisms from the very same users who take it to be a case of the Group not adequately rewarding or in fact overpromising reward to users in general. Such negative reviews could appear in open blogs on the internet, and, however unmerited, may twist the perception of those unfamiliar with or have no prior experience with the Group's applications, hence adversely impacting its ability to acquire new users.

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

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

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

A short seller published reports with certain negative opinions regarding us on December 10, 2019 and January 18, 2020, which negatively affected our reputation. However, it is not clear what effect such negative publicity could continue to have on us. If we were to become the subject of any unfavorable allegations, whether such allegations are proven to be true or untrue, we might have to expend a significant amount of resources to investigate such allegations and/or defend ourselves. While we would strongly defend against any such short seller attacks, we may be constrained in the manner in which we can proceed against the relevant short seller by principles of freedom of speech, applicable state law or issues of commercial confidentiality. Such a situation could be costly and time-consuming, and could distract our management from growing the Group's business. Even if such allegations are ultimately proven to be groundless, allegations against us could severely impact the Group's business operations and the trading price of the ADSs, and any investment in the ADSs could be greatly reduced or even rendered worthless.

Any catastrophe, including natural catastrophes and outbreaks of health pandemics and other extraordinary events, could disrupt the Group's business operation. For example, the COVID-19 pandemic may have a material adverse effect on the Group's business, results of operations and financial condition, as well as the trading price of the ADSs

The Group is vulnerable to natural disasters and other calamities. Fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks or similar events may give rise to server interruptions, breakdowns, system failures or Internet failures, which could cause the loss or corruption of data or malfunctions of software or hardware as well as adversely affect the Group's ability to provide its products or services. The Group's business could also be adversely affected by the effects of Ebola virus disease, H1N1 flu, H7N9 flu, avian flu, Severe Acute Respiratory Syndrome, or SARS, COVID-19, or other epidemics.

In particular, the COVID-19 pandemic has negatively affected the global and Chinese economy as well as the advertising market in China since the beginning of 2020, and put constraint on the advertising budget of the Group's advertising customers, which might negatively affect its business, results of operations and financial condition, as well as the trading price of the ADSs.

The Group's operations have been, and may continue to be, impacted by measures taken by national and regional Chinese government to contain COVID-19, including travel restrictions, closures and quarantines. The Group's business operations could be disrupted if any of its employees is suspected of being infected with COVID-19, since it could require the Group's employees to be quarantined and/or the Group's offices to be shut down for disinfection. The Group may be short on workforce if a large number of the Group's employees are diagnosed with COVID-19 or are required to be self-isolated. The Group's business could also be impacted if any of its advertising customers or suppliers is affected by COVID-19, which may result in suspension of the Group's services, reduction in its advertising and marketing revenues, delay in collection of account receivables and additional allowances for doubtful accounts.

The majority of the Group's workforce is based in Shanghai and starting from late March and early April 2022, the entire population of Shanghai were placed under a strict COVID-19 related city-wide lockdown. As a result of the lockdown, our employees in Shanghai were not able to work in the office and we were not able to conduct our business operations as usual, which had and may continue to have significant adverse impact on our business and results of operations.

In addition, COVID-19 may continue to adversely affect national and regional economy in China as well as global economy and financial markets, which could cause economic downturn or financial crisis. The Group's business, results of operations and financial condition could be adversely affected to the extent that COVID-19 harms the Chinese and global economy in general, and the trading price of the ADSs may decline significantly.

We have been closely monitoring the impact of COVID-19 on macro economy and advertising market in general, as well as the impact on the Group's business, results of operations and financial condition. The extent to which COVID-19 may continue to impact the Group's results is uncertain and difficult to predict and will depend on future developments, including the duration, severity and reach of the COVID-19 pandemic, and actions taken to contain the outbreak or treat its impacts.

New content formats and other products and services and changes to existing content formats and products and services could fail to attract users or generate revenues.

The Group's ability to increase the size and engagement level of its user base, attract advertising customers and generate revenues will depend in part on its ability to create and offer successful new content formats and other products and services. Such new content formats and other products and services may involve new distribution capabilities or technologies with which we have little or no prior development or operating experience, such as literature, online games and live-streaming. We may also continuously refine the Group's existing content formats and other products and services as part of the Group's efforts to further enhance user engagement. However, if such efforts or the Group's efforts in launching new content formats and other products and services fail to engage users, the Group may fail to attract or retain users or to generate sufficient revenues to justify our investments, and the Group's business, results of operations and financial condition could be adversely affected.

If the Group is unable to compete effectively in the industry it operates, the Group's business, results of operations and financial condition may be materially and adversely affected.

Competition for user traffic and user engagement, as well as advertising and marketing spending, is intense and we face strong competition in the Group's business. The Group's primary competitors include content aggregators such as Jinritoutiao (operated by Bytedance), Kuaibao (operated by Tencent) and Yidianzixun (an affiliate of Phoenix News). To a lesser extent, we also compete with mobile news portals such as Tencent News, SINA News, Sohu News, NetEase News and Phoenix News. We also compete with other mobile literature applications, such as iReader, QQ Reading, Qimao Free Novels and Fanqie Novels, as well as other mobile literature applications that have a business model similar to ours. To a lesser extent, we compete with traditional PC-based online literature platforms. Many of the Group's competitors have more resources and longer operating history than us. New players may emerge and seek to imitate the Group's business strategies, thereby directly competing with us for users. Furthermore, we may face potential competition from global online content delivery platforms that seek to enter the China market, whether independently or through the formation of strategic alliances with, or acquisition of, PRC Internet companies. If we are not able to effectively compete with the Group's competitors, the Group's overall user base and level of user engagement may decrease. We may be required to spend additional resources to further enhance the Group's brand recognition and promote the Group's products and services, and such additional spending could adversely affect the Group's profitability. Furthermore, if we are involved in disputes with any of the Group's competitors that result in negative publicity to us, such disputes, regardless of their veracity or outcome, may harm the Group's reputation or brand image and in turn lead to reduced number of users and advertising customers. The Group's competitors may unilaterally decide to adopt a wide range of measures targeted at us, including possibly designing their products to negatively impact the Group's operations. Any legal proceedings or measures we take in response to competition and disputes with the Group's competitors may be expensive, time-consuming and disruptive to the Group's operations and divert our management's attention.

In addition, the Group's users face a vast array of entertainment choices. Other forms of entertainment, including other Internet-based activities such as social networking, online video or games, live-streaming, as well as offline games and activities such as television, movies and sports, are much larger and more well-established markets and may be perceived by the Group's users to offer greater variety, affordability, interactivity and enjoyment. The Group's platform competes against these other forms of entertainment for the discretionary time and spending of the Group's users. If we are unable to sustain sufficient interest in the Group's platform in comparison to other forms of entertainment, including new forms of entertainment that may emerge in the future, the Group's business model may no longer be viable.

The Group generates a substantial majority of its revenues from advertising and marketing. A decline in the Group's advertising and marketing revenues could harm its business.

The Group generated a substantial majority of its revenues from advertising and marketing services in 2019, 2020 and 2021. Given the Group's short history, it has limited experience in operating the programmatic advertising system and in acquiring its own advertising agents and advertising customers. The Group may not be able to recruit sufficient sales personnel to effectively and efficiently acquire and retain advertising agents and advertising customers. The effectiveness of the Group's programmatic advertising system may not perform as expected and achieve widespread acceptance by advertising customers.

The Group's advertising customers for its programmatic advertising system are comprised of advertising agents and end advertisers. There can be no assurance that these advertising agents will continue to attract advertising customers to the Group's platform. Furthermore, as is common in the industry, the Group does not enter into long-term agreements with advertising agents or advertising customers. Advertising agents and advertising customers are not obligated to use the Group's advertising and marketing solutions on an exclusive basis and they generally use multiple channels to manage their advertising and marketing need. Accordingly, we or advertising agents must convince advertising customers to use the Group's programmatic advertising system, increase their usage and spend a larger share of their online advertising and marketing budgets with the Group, and to do so on an on-going basis. Advertising customers may not continue to utilize the Group's platform or may only be willing to advertise with the Group at reduced prices if it does not deliver advertising and marketing services in an effective manner, including persuading the Group's advertising customers as to the relevancy of the Group's user base for their products or services, or if they do not believe that their investment in advertising and marketing with the Group's will generate a competitive return relative to alternative advertising platforms. If the Group fails to retain existing advertising customers or ensure that their advertising spend with the Group remains at similar or increased levels or attract new advertising customers to advertise on the Group's platform, the Group's business, results of operations and financial condition may be materially and adversely affected.

Our efforts to expand the monetization of the Group's products and services in addition to advertising may not be successful.

In order to sustain the Group's operation and revenue, we must effectively monetize the Group's user base and expand the monetization of the Group's products and services in addition to advertising. We plan to leverage the Group's user account systems and loyalty programs to induce users not only to spend the cash credits in their accounts from using the Group's platform but also to supplement their spending on the Group's platform with additional funds. These measures include introducing paid content such as literature, online games, short videos, as well as live-streaming products. There can be no assurance that we can successfully capture such monetization opportunities. For example, users may prefer to purchase merchandise from "pure play" e-commerce platforms, which tend to offer wider selections and may provide better services due to their deeper industry experience. In addition, the Group has primarily offered free content to users, and the Group's paid content may not gain significant user acceptance. If we were unable to successfully execute the Group's monetization strategies, the Group's business, results of operations and financial condition would be materially and adversely affected.

If we fail to continue to anticipate user preferences and interests, the Group's may not be able to generate sufficient user traffic to remain competitive.

The Group's success depends on its ability to intelligently deliver personalized light entertainment content to users. Through an automated process, the Group develop interest and social graphs for each user based on such person's profile, behavior and social relationships. The user's behavior also provides the Group with a granular view of the topics and content characteristics that likely are of interest to the user. In addition, the interest and social graphs take into account the user's social relationships with other users and such other users' interests, including their behaviors. The Group's content recommendation engine analyzes content and the interest and social graphs of each user to identify content that is most likely to interest such person. Such recommendation is based on analysis the Group has made as to user preferences and interests, and any errors in such analysis may lead the Group's system to recommend content that fails to attract users. Furthermore, the Group's future success will depend on its ability to anticipate and adapt new technologies. If the Group fails to continuously improve user experience through better recommendation results, we may not be able to compete effectively with the Group's competitors, and the Group's business, results of operations and financial condition may be materially and adversely affected.

If content providers on the Group's platform do not continue to contribute content, decrease the amount of content contributed or the quality of their contribution declines, the Group may experience a decrease in the number of users and level of user engagement.

The Group's success depends on its ability to generate sufficient user traffic through the intelligent delivery of personalized light entertainment content, which in turn depends on the content contributed by the Group's content providers. We believe that access to light entertainment-oriented and easily digestible content is one of the main reasons users visit *Qutoutiao*. We encourage the Group's content providers to actively contribute quality content that will resonate with the Group's users by implementing a system in which fees paid to them are related to the number of views associated with content they contribute. We also seek to foster a broader and more engaged user base by encouraging social interactions and production of user generated content. If the Group's content providers do not continue to contribute content, including user generated content, to the Group's mobile applications due to their dissatisfaction with the Group's fee arrangements with them, their entry into exclusive arrangements with other platforms or any other reasons, or the attractiveness of their content declines, and the Group is unable to provide users with entertaining and relevant content, the Group's user base and user engagement may decline. If the Group is required to share a higher proportion of advertising and marketing revenues with content providers in order to enhance the quality of content delivered by it or increase the amount of content provided to it, the Group's profitability could be materially and adversely affected. If the Group experiences a decline in the number of users or the level of user engagement, advertising customers may not view the Group's platform as attractive for their advertising expenditures and may reduce their spending with the Group, which would harm the Group's business, results of operations and financial condition.

The Group's user metrics and other estimates are subject to inherent challenges in measuring its operating performance, which may harm its reputation.

We regularly review MAUs, DAUs, average time spent per DAU and other operating metrics to evaluate growth trends, measure the Group's performance, and make strategic decisions. These metrics are calculated using internal company data, have not been validated by an independent third party, and may not be indicative of the Group's future financial results. While these numbers are based on what we believe to be reasonable estimates for the applicable period of measurement, there are inherent challenges in measuring how the Group's platform is used across a large population in China. For example, we may not be able to distinguish individual users who have multiple registered accounts.

Errors or inaccuracies in the Group's metrics or data could result in incorrect business decisions and inefficiencies. For instance, if a significant understatement or overstatement of active users were to occur, we might expend resources to implement unnecessary business measures or fail to take required actions to remedy an unfavorable trend. If advertising customers or investors do not perceive the Group's user or other operating metrics to accurately represent the Group's user base, or if we discover inaccuracies in the Group's user or other operating metrics, our reputation may be harmed.

If we fail to effectively manage the Group's operation, the Group's business, results of operations and financial condition could be harmed.

We have faced downward pressures in the Group's business and operations in 2021, which have placed and will continue to place significant demands on our management, operational and financial resources. We may encounter difficulties as the Group establishes and expands its operations, product development, sales and marketing, and general and administrative capabilities. We face significant competition for talented employees from other highgrowth companies, which include both publicly traded and privately held companies, and we may not be able to hire new employees quickly enough to meet the Group's needs. To attract highly skilled personnel, we have had to offer, and believe we will need to continue to offer, competitive compensation packages. We are subject to the risks of over-hiring, over-compensating the Group's employees and over-expanding the Group's operating infrastructure, and to the challenges of integrating, developing and motivating a growing employee base. In addition, we may not be able to innovate or execute as quickly as a smaller and more efficient organization. If we fail to effectively manage the Group's hiring needs and successfully integrate the Group's new hires, the Group's efficiency and ability to meet the Group's forecasts and the Group's employee morale, productivity and retention could suffer, and the Group's business, results of operations and financial condition could be adversely affected.

Providing products and services to users may be costly and we expect the Group to continue to incur significant expenses in the future as it maintains its user base and user engagement, and develop and implement new content formats, features, products and services that require more infrastructure, such as literature, online games and live-streaming. Historically, changes in the Group's costs and expenses have affected its results of operations and financial condition. We expect to continue to invest in the Group's infrastructure to enable it to provide its products and services rapidly and reliably to users. This could also strain the Group's ability to maintain reliable service levels for its users, content providers and advertising customers, develop and improve the Group's operational, financial, legal and management controls, and enhance the Group's reporting systems and procedures. The Group's expenses may grow faster or decrease slower than its revenues, and its expenses may be greater than we anticipate. Managing the Group's operation will require significant expenditures and allocation of valuable management resources. If we fail to achieve the necessary level of efficiency in the Group's organization, the Group's business, results of operations and financial condition could be harmed.

Advertisements on the Group's mobile applications may subject us to penalties and other administrative actions.

Under PRC advertising laws and regulations, we are obligated to monitor the advertising content shown on the Group's mobile applications to ensure that such content is true, accurate and in full compliance with applicable laws and regulations. On April 24, 2015, the Standing Committee of the National People's Congress, or the SCNPC, issued the Advertisement Law, which was amended on October 26, 2018 and April 29, 2021, to further strengthen the supervision and management of advertisement services. On July 4, 2016, SAIC issued the Interim Measures for the Administration of Internet Advertising, or the New Interim Measures, to further regulate Internet advertising activities. Pursuant to these laws and regulations, 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. Also, according to the New Interim Measures, no advertisement of such special products or services which are subject to examination by an advertising examination authority shall be published unless it has passed such examination. In addition, an Internet advertisement shall be identifiable and clearly identified as an "advertisement" so that consumers will know that it is an advertisement. The New Interim Measures also provide that Internet advertisement publishers shall verify related supporting documents, check the content of the advertisement and be prohibited from publishing any advertisement with nonconforming content or without all the necessary certification documents. However, for the determination of the truth and accuracy of the advertisements, there are no implementing rules or official interpretations, and such a determination is at the sole discretion of the relevant local branch of the State Administration for Market Regulation, or the SAMR (successor of SAIC and the State Food and Drug Administration), which results in uncertainty in the application of these laws and regulations. In addition, advertising content deemed as obscene, defamatory, inappropriately satirical or otherwise inappropriate by a relevant government authority may also subject us to penalties. For instance, the Chinese government has temporarily suspended advertising services on a short video platform in China because advertising content shown on the platform was deemed to be offensive and disrespectful to a revolutionary figure.

On November 26, 2021, the SAMR publicly solicited opinions on the Measures for the Administration of Online Advertising (Draft for Comments), or the Draft Internet Advertising Measures, which states that all Internet advertising activities will be regulated and clearly states that livestreaming room operators and livestreaming marketers must abide by the responsibilities and obligations of Internet Advertising operators. The Draft Internet Advertising Measures also provides that Internet advertisement publishers should not publish advertisements on vehicles or intelligence household electronic appliances without the users' permission or request. The Draft Internet Advertising Measures further strengthens the one-click-to-close requirement and prohibits advertisements for certain items on Internet media that targets minors, including, among others, advertisements related to online games that are harmful to the physical or mental health of minors. The SAMR solicited comments on this Draft Internet Advertising Measures, but it has not been formally adopted. We cannot assure you that all the advertisements shown on the Group's mobile applications are true, accurate, appropriate and in full compliance with applicable laws and regulations. For example, advertisers on the Group's mobile applications, or their agents, may use measures that are designed to evade the Group's monitoring, such as providing inauthentic material that does not match the actual advertisement, or supplying advertising which is superficially compliant but nevertheless is linked to one or more webpages that feature noncompliant advertising content. In addition, the Group's employees responsible for reviewing advertisements may not fully understand the relevant laws and regulations or may be inappropriately influenced by the advertisers. In each case, we may still be held responsible for noncompliant advertising content. We include clauses in most of the Group's advertising contracts requiring that all advertising content provided by advertising customers must comply with relevant laws and regulations. Pursuant to the contracts between the Group's and the relevant advertising agents or advertising customers, they are liable for all damages to us caused by their breach of such representations. However, there can be no assurance that we will be able to successfully enforce the Group's contractual rights.

Violation of these laws and regulations may subject the Group to penalties, including fines, confiscation of the Group's advertising income, orders to cease dissemination of the advertisements and orders to eliminate the effect of illegal advertisement. If an illegal advertisement featured on the Group's mobile applications were to have excessive negative effects, our brand and reputation may be harmed, and PRC governmental authorities may pursue more severe penalties and administrative actions against us. PRC governmental authorities may even force us to terminate the Group's advertising operation or revoke the Group's licenses in circumstances involving serious violations. Such penalties may have a material and adverse effect on the Group's business, results of operations and financial condition.

On July 16, 2020, CCTV reported in its Annual Consumer Rights Show that certain advertisements placed by third-party advertising agents on *Qutoutiao* exaggerated the health benefits of certain food and diet products and promoted activities that may involve online-gambling. In response, we promptly took appropriate measures such as immediate suspension of all employees involved in these advertisements, including the person in charge of advertising operations, stricter management of all third-party advertising agents, enhancement of content management capabilities in identifying misleading or inappropriate advertisements, and the launch of an easy-to-use and easy-to-find complaint channel on the home screen of *Qutoutiao* so that users can file their complaints with us on any advertisement placed on the Group's app. The *Qutoutiao* app was temporarily removed from several major Android-based app stores in China after the report but was reinstated on July 31, 2020. On October 14, 2020, Shanghai Jifen and Shanghai Dianguan were fined by a local Regulator for certain false advertisements placed on the *Qutoutiao* app. The advertisement fees that these two entities earned from the false advertisements were also confiscated. The aggregate amounts of the fines and confiscated earnings were approximately RMB0.6 million for Shanghai Jifen and RMB2.0 million for Shanghai Dianguan, which were fully paid on November 27, 2020. Although we have enhanced the Group's internal procedures by taking remedial actions, we cannot assure you that all of the advertisements on the Group's platform will be fully in compliance with the applicable rules and regulations.

Increased government regulation of content platforms may subject us to penalties and other administrative actions.

In recent years, PRC government authorities have strengthened their oversight of content platforms similar to the Group's mobile applications. Other than the content that are considered to be violating PRC laws and regulations, such oversight has tend to pay more attention to content that is or may be deemed misleading, obscene, pornographic, detrimental, and/or contrary to social values and morals prevailing in China, which content may subject the platform's operator to penalties and other administrative actions. For example, in April 2018, a platform that provides entertainment-oriented contents was ordered by the NRTA to permanently cease its operation for delivering content that were considered to be vulgar and "deviating from mainstream values." In addition, in July 2018, PRC governmental and regulatory authorities responsible for "eradicating pornography and illegal publications" announced new coordinated efforts to regulate and control the nascent online short video sector, including citations against 19 online short video platforms which allegedly had disregarded previous and repeated warnings not to distribute content deemed by the authorities as obscene, misleading, pornographic, violent, infringing, sensationalist, deviant from socialist core values, harmful to younger viewers, or otherwise unlawful or detrimental. Of these 19 platforms, 15 had their applications removed from app stores and new downloads blocked; among these 15 platforms, three also had their operations suspended by relevant authorities.

Government regulation of content and of content platforms generally may broaden in scope and oversee additional aspects of content platforms' operation, such as information security, user suitability management, anti-addiction, and sales and marketing, in addition to being strengthened and becoming stricter as to content and advertising. For example, on December 15, 2019, the CAC promulgated the Provisions on Ecological Governance of Network Information Content, which became effective on March 1, 2020. The Provisions specify the information that is encouraged for, prohibited from or prevented and rejected from dissemination, to further regulate the network information and content. In addition, on November 29, 2021, the Office of the Ministry of Culture and Tourism issued the Opinions on Strengthening the Protection of Minors in the Network Cultural Market, which propose the entities to strengthen the construction of online content, explore the establishment of the review and judgment standards of the content unsuitable for minors to access, continue to improve the ability to identify illegal content models and improve the professionalism and effectiveness of manual audit to block and clean up the harmful content timely and effectively such as cult, pornography, illegal missionary, dangerous behavior, negative values and so on. Any such new or broadened regulatory measures or oversight may cause the Group to incur higher compliance costs, revise the Group's operational strategies, target user groups or promotional models, and thereby adversely affect the Group's business and results of operations.

If we fail to detect click-through fraud of the Group's platform, we could lose the confidence of advertising customers and the Group's revenues could decline.

We are exposed to the risk of click-through fraud on the Group's advertising services. Click-through fraud occurs when a person, automated script or computer program imitates a legitimate user clicking on an advertisement, for the purpose of generating a charge per click without having an actual interest in the target of the advertisement's link. If we fail to detect fraudulent clicks or otherwise are unable to prevent such fraudulent activity, the affected advertising customers may experience a reduced return on their investment in the Group's mobile advertising services and lose confidence in the integrity of the Group's services. If this happens, our reputation may be damaged and the Group may be unable to retain existing advertising customers and attract new advertising customers for the Group's advertising services and the Group's advertising revenue could decline.

If we fail to detect user misconduct on the Group's platform, the Group's business, results of operations and financial condition may be materially and adversely affected.

The Group's platform enables users to upload content, post comments, interact with others and engage in various other online activities. As the gatekeeper for the Group's platform, the Group's content management system is designed to ensure both the quality and appropriateness of information presented to users, which include content and comment postings. The Group undertakes an efficient and thorough screening process that involves both algorithm-based screening and manual review. The Group has also implemented a complaint procedure that enables it to identify bad content with its users' help. However, such procedures may not prevent all illegal or inappropriate content or comments from being posted, and the Group's staff may fail to review and screen such content or comments effectively. In response to allegations of illegal or inappropriate activities conducted through the Group's platform or any negative media coverage about the Group, PRC government authorities may intervene and hold the Group liable and subject it to administrative penalties or other sanctions, such as requiring the Group to restrict or discontinue some of the features and services provided on its mobile application. As a result, the Group's business may suffer and its user base, revenues and profitability may be materially and adversely affected, and the price of the ADSs may decline.

Additionally, the Group may be subject to fines or other disciplinary actions, including suspension or revocation of the licenses necessary to operate the Group's platform, if it is deemed to have facilitated the appearance of inappropriate content placed by third parties on its platform, including user generated content. Although the Group requires content providers on its platform to promise that they will not infringe upon the intellectual property rights of third parties, such content may nevertheless be unauthorized and infringe upon others' intellectual property, including copyrights, and the Group may not be able to detect and identify every instance of intellectual property infringement. See "—Non-compliance with law on the part of third parties with which the Group conduct business could disrupt the Group's business and adversely affect results of its operation and financial condition" and "The Group may be subject to intellectual property infringement claims or other allegations by third parties for information or content displayed on, retrieved from or linked to the Group's platform, or delivered to the Group's users, which may materially and adversely affect the Group's business, financial condition and prospects." As a result, the Group may face claims for defamation, libel, negligence, copyright, patent or trademark infringement, other unlawful activities or other claims based on the nature and content of the information delivered on or otherwise accessed through the Group's platform. Defending such actions could be costly and involve significant time and attention of our management and other resources, which would materially and adversely affect the Group's business, results of operations and financial conditions.

The Group's ability to prevent the misuse of its user loyalty programs while ensuring their efficacy in user acquisition and engagement will have a material effect as to the Group's business, results of operations and financial condition.

To incentivize word-of-mouth viral referrals and improve user engagement and loyalty, the Group's mobile applications have game-like features allowing users to earn loyalty points while enjoying the content and earn cash credit in some cases by participating in fun tasks. Registered users of the Group's mobile applications can earn loyalty points if they become active users, refer others who later register and become active users, or engage in various activities while logged in. Accumulated loyalty points, if exceeding certain threshold, can be withdrawn by the user in the form of cash by directly crediting the user's electronic wallet. We have the sole discretion in determining the withdraw threshold and the exchange rate between loyalty points and the monetary value available to be withdrawn. The Group's user loyalty programs have contributed significantly to the growth in the Group's installed users and high user engagement. Although we believe consuming content, rather than earning loyalty points, is the main purpose for the Group's registered users to use applications, we have nonetheless designed the Group's loyalty programs to balance between their efficacy in user acquisition and engagement while preventing users from using the Group's mobile applications merely for the loyalty points. Our inability to achieve such balance may make the Group's user loyalty programs no longer becoming enticing to users, which may materially and adversely affect user growth and user engagement. Moreover, we cannot assure you that there will still be users who are only attracted to the Group's mobile applications because of the Group's user loyalty programs. We have mechanisms in place to prevent potential abuse of the Group's user loyalty programs. For example, the Group's system takes into account how fast the user scrolls down the page to determine whether the viewer has actually viewed the article and loyalty points are now provided on a per minute spent on viewing content basis. However, the Group's system may not be able to detect all instances of abuse. Furthermore, although the Group's loyalty programs are designed so that only a small amount of loyalty points is provided for taking any specific action with the aim to entice user referral and engagement, we cannot ensure you that there will not be users who will be able to hack the Group's user loyalty programs to make earning loyalty points a highly lucrative endeavor. We have also focused on developing fraud detection technologies to combat fraudulent users and activities targeting the Group's user loyalty programs and we cannot assure you that such system will be effective in identifying fraud. If we allow users to improperly earn loyalty points, the Group's business, results of operations and financial condition may be materially and adversely affected. As clearly stated in the Group's user agreement, the Group has the sole discretion in determining user misuse of the Group's user loyalty programs, and the Group may freeze a user's account if it finds such user misused the Group's user loyalty programs. Certain users that have their accounts frozen have complained online. Such complaints could undermine the public perception and credibility of the Group's platform, and the Group's business, results of operations and financial condition could be materially and adversely affected.

The Group's results of operations may fluctuate from quarter to quarter, which makes them difficult to predict.

The Group's quarterly results of operations have fluctuated in the past and will continue to fluctuate in the future. As a result, the Group's past quarterly results of operations are not necessarily indicators of future performance. The Group's results of operations in any given quarter can be influenced by numerous factors, many of which we are unable to predict or are outside of our control, including:

- the Group's ability to maintain its user base and user engagement;
- · fluctuations in spending by the Group's advertising customers, including as a result of seasonality or other factors;
- the Group's ability to attract and retain advertising customers;
- the occurrence of planned or unplanned significant events, including events that may cause substantial share-based compensation or other charges;
- the development and introduction of new content formats, products or services or changes in features of existing content formats, products or services:
- the impact of competitors or competitive products and services;
- increases in the Group's costs and expenses that we may incur to grow and expand the Group's operations and to remain competitive;
- changes in the legal or regulatory environment or proceedings, including with respect to security, privacy or enforcement by government regulators, including fines, orders or consent decrees; and
- changes in Chinese or global business or macroeconomic conditions.

Given the Group's limited operating history and the rapidly evolving market in which we compete, the Group's historical results of operations may not be sufficiently informative for you in predicting the Group's future results of operations. The Group's short operating history makes it difficult for us to identify recurring seasonal trends in the Group's business. The advertising industry in China experiences seasonality. Historically, advertising spending and user activities on the Group's platform tend to be the lowest in the first quarter of each calendar year due to long holidays around the Lunar New Year, during which users tend to spend more time with family and celebrations offline and less time online, including on the Group's mobile applications. In addition, advertising customers, such as those in the e-commerce industry, may also reduce its advertising spending during the holidays around the Lunar New Year due to reduced consumer spending or reduced or suspended production and logistics activities by manufacturers or other service providers. We believe this seasonality affects the Group's quarterly results especially the Group's results of operations in the first quarter of each year.

The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications.

The Chinese government heavily regulates the Internet industry, including foreign investment in the Chinese Internet industry, content on the Internet and license and permit requirements for service providers in the Internet industry. Since some of the laws, regulations and legal requirements with respect to the Internet are relatively new and evolving, their interpretation and enforcement involve significant uncertainties. In addition, the Chinese legal system is based on written statutes, such that prior court decisions can only be cited for reference and have little precedential value. As a result, in many cases it is difficult to determine what actions or omissions may result in liabilities. Issues, risks and uncertainties relating to China's government regulation of the Chinese Internet sector include the following:

- The Group operates its mobile applications in China through businesses controlled via contractual arrangements rather than equity
 ownership due to restrictions on foreign investment in businesses providing value-added telecommunication services, including
 substantially all of the Group's paid services and advertising services.
- Uncertainties relating to the regulation of the Internet business in China, including evolving licensing practices, give rise to the risk that some of the Group's permits, licenses or operations may be subject to challenge, which may be disruptive to the Group's business, subject us to sanctions or require us to increase capital, compromise the enforceability of relevant contractual arrangements, or have other adverse effects on the Group. The numerous and often vague restrictions on acceptable content in China subject the Group to potential civil and criminal liability, temporary blockage of the Group's mobile applications or complete shut-down of the Group's mobile applications. For example, the State Secrecy Bureau, which is directly responsible for the protection of state secrets of all Chinese government and Chinese Communist Party organizations, is authorized to block any website or mobile applications it deems to be leaking state secrets or failing to meet the relevant regulations relating to the protection of state secrets in the distribution of online information. In addition, the 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. Failure to do so on a timely and adequate basis may subject the service provider to liability and certain penalties imposed by the State Security Bureau, Ministry of Public Security and/or MIIT or their respective local counterparts.

- On September 28, 2009, the NRTA (previously known as the SART, GAPPRFT and SARFT) and the National Office of Combating Pornography and Illegal Publications jointly published a circular expressly prohibiting foreign investors from participating in Internet 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. On February 4, 2016, the NRTA and the MIIT jointly issued the *Rules for the Administration for Internet Publishing Services*, or the Internet Publishing Rules, which took effect in March 10, 2016 and prohibit wholly foreign-owned enterprises, Sino-foreign equity joint ventures and Sino-foreign cooperative enterprises from engaging in the provision of web publishing services. Under such rules, an Internet publishing license is required for a provider of online publications. Uncertainty remains regarding the interpretation of relevant concepts, including "online publications." Although we have not been explicitly required by the NRTA or other relevant authorities to obtain an Internet publishing license to continue our business so far, we may face further scrutiny by such authorities, which may require us to apply for such license and/or subject us to penalties. In addition, project cooperation between an Internet publishing service provider and a wholly foreign-owned enterprise, Sino-foreign equity joint venture, or Sino-foreign cooperative enterprise within China or an overseas organization or individual involving Internet publishing services shall be subject to examination and approval by the NRTA in advance.
- In November 2020, the NRTA promulgated the Circular on Strengthening the Administration of the Online Show Live Streaming and E-commerce Live Streaming, or Circular 78. According to Circular 78, platforms providing online show live streaming or e-commerce live streaming services shall, among other things, register their information and business operations in the National Internet Audio-visual Platforms Information Management System, ensure real-name registration for all live streaming hosts and virtual gifting users, prohibit users that are minors or without real-name registration from virtual gifting, and set a limit on the maximum amount of virtual gifting per time, per day, and per month. On February 9, 2021, the CAC, the National Office of Anti-Pornography and Anti-Illegal, the MIIT, the Ministry of Public Security, or the MPS, the MCT, the SAMR and the NRTA jointly issued the Circular on the Guiding Opinions on Strengthening Standardized Management of Online Live Streaming, which further states that live streaming platforms which provide online audio-visual program services must obtain the Audio-Visual Permit (or complete the registration on the National Internet Audiovisual Platforms Information Management System) and complete the ICP filing procedure. As of the date of this annual report, the Group has been registered in the National Internet Audio-visual Platforms Information Management System with the Qutoutiao app. We cannot assure you all the live streaming platform operated by us can be successfully registered with the National Internet Audio-visual Platforms Information Management System. Failure to make such registration may have adverse impact on the Group's business. Circular 78 also sets forth requirements for certain live streaming businesses with respect to live streaming review personnel requirements, content tagging requirements, and other requirements. For more information on Circular 78, see "Item 4. Information on the Company—C. Regulations— Regulations Related to Online Live Streaming Services." As there remains uncertainties to some of the requirements in Circular 78 and its implementation standards, we are still in the process of getting further guidance from regulatory authorities and evaluating the applicability and effect of the various requirements under Circular 78 on the Group's business. Any further regulatory updates with respect to Circular 78 or other intensified regulation with respect to live streaming may increase the Group's compliance burden in the live streaming business, and may have an adverse impact on the Group's business and results of operations.

Due to the increasing popularity and use of the Internet and other online services, it is possible that a number of laws and regulations may be adopted with respect to the Internet or other online services covering issues such as user privacy, pricing, content, copyrights, distribution, antitrust and characteristics and quality of products and services. The adoption of additional laws or regulations may impede the growth of the Internet or other online services, which could, in turn, decrease the demand for the Group's products and services and increase the Group's cost of doing business. Moreover, the applicability to the Internet and other online services of existing laws in various jurisdictions governing issues such as property ownership, sales and other taxes, libel and personal privacy is uncertain and may take years to resolve. Any new legislation or regulation, the application of laws and regulations from jurisdictions where laws do not currently apply to the Group's business, or the application of existing laws and regulations to the Internet and other online services could significantly disrupt the Group's operations or subject us to penalties.

The interpretation and application of existing PRC laws, regulations and policies, the stated positions of relevant PRC government authorities and possible new laws, regulations or policies 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 the Group's business.

Non-compliance with law on the part of third parties with which the Group conducts business could disrupt the Group's business and adversely affect results of its operation and financial condition.

Third parties with which the Group conducts business, such as content providers, advertising agents, advertising customers and merchandise suppliers, may be subject to regulatory penalties or punishments because of their regulatory compliance failures, subject to criminal investigations or legal proceedings, or infringe upon other parties' legal rights, which may, directly or indirectly, disrupt the Group's business. Although the Group conducts review of legal formalities and certifications before entering into contractual relationships with third parties, and take measures to reduce the risks that it may be exposed to in case of any non-compliance by third parties, we cannot be certain whether such third party has violated any regulatory requirements, breached any applicable laws, or infringed or will infringe any other parties' legal rights. For example, content providers may submit copyrighted content that they have no right to distribute. While the Group's content management system screens content for potential copyright infringements, it may not be able to identify all instances of copyright infringement. In the event the Group delivers content that violates the copyrights of a third party, it may be required to pay damages to compensate such third party. Even though the Group has the contractual right to seek indemnification from the relevant content provider for such payment, there can be no assurance that the Group will be able to enforce such right. As a result, the Group's business, results of operations and financial condition could be materially and adversely affected. Similarly, advertising content of advertising customers may also not be in full compliance with applicable laws and regulations that may have an adverse effect as to the Group's business, results of operations and financial condition. See "- Advertisements on the Group's mobile applications may subject us to penalties and other administrative actions." We have been asked by local police in Fujian to cooperate with legal investigation with regard to alleged fraudulent conduct of an advertising agent which has placed advertisements of a fraudulent mobile app on our platform. In connection with the investigation, bank and shortterm investment accounts of several of our subsidiaries and Group VIEs has been frozen by the police since November 2021. As of the date of this annual report, the total value of such frozen accounts was approximately RMB106.0 million (US\$16.6 million). We are not certain when such bank accounts will be unfrozen, and whether such investigation will result in legal proceedings against us. If the bank account freeze has not been lifted for a prolonged period of time, our working capital and business operations may be materially and adversely affected.

We cannot rule out the possibility of incurring liabilities or suffering losses due to any non-compliance by third parties. We cannot assure you that the Group will be able to identify irregularities or non-compliance in the business practices of third parties the Group conducts business with, or that such irregularities or non-compliance will be corrected in a prompt and proper manner. Any legal liabilities and regulatory actions affecting third parties involved in the Group's business may affect its business activities and reputation, and may in turn affect the Group's business, results of operations and financial condition.

Privacy concerns relating to the Group's products and services and the use of user information could damage its reputation, deter current and potential users and customers from using the Group's mobile applications and negatively impact its business.

The Group collects personal data from its users in order to better understand its users and their needs and to help advertising customers target specific demographic groups. Through an automated process, the Group develops a social graph for each user based on such person's profile, behavior and social relationships. Concerns about the collection, use, disclosure or security of personal information or other privacy-related matters, even if unfounded, could damage our reputation, cause the Group to lose users and customers and adversely affect the Group's business, results of operations and financial condition. While the Group strives to comply with applicable data protection laws and regulations, as well as its own posted privacy policies and other obligations it may have with respect to privacy and data protection, the failure or perceived failure to comply may result, and in some cases has resulted, in inquiries and other proceedings or actions against us by government agencies or others, as well as negative publicity and damage to our reputation and brand, each of which could cause the Group to lose users and customers, which could have an adverse effect on the Group's business.

Any systems failure or compromise of the Group's security that results in the unauthorized access to or release of the Group's users' or customers' data could significantly limit the adoption of the Group's products and services, as well as harm our reputation and brand and, therefore, the Group's business. We expect to continue to expend significant resources to protect against security breaches. The risk that these types of events could seriously harm the Group's business is likely to increase as the Group expands the number of products and services it offer and expand its user base.

New laws or regulations concerning data protection, or the interpretation and application of existing consumer and data protection laws or regulations, which is often uncertain and in flux, may be inconsistent with the Group's practices. Complying with new laws and regulations could cause the Group to incur substantial costs or require the Group to change its business practices in a manner materially adverse to its business. For example, if privacy concerns or regulatory restrictions prevent the Group from selling demographically targeted advertising, the Group may become less attractive to advertising customers.

If the Group is unable to keep pace with rapid technological changes in the mobile Internet industries, its business may suffer.

The mobile content industry, and the Internet industry in general, are characterized by constant changes, including rapid technological evolution, continual shifts in customer demands, frequent introductions of new products and services and constant emergence of new industry standards and practices. Thus, the Group's success will depend, in part, on its ability to respond to these changes in a cost-effective and timely manner. If we are unable to keep up with big data analysis, artificial intelligence and other technological developments, users may no longer be attracted to the Group's platform. A decrease in the number of active users may reduce the Group's monetization opportunities and have a material and adverse effect on the Group's business, results of operations and financial condition.

The Group's technological capabilities and infrastructure underlying its platform are critical to the Group's success. The industry the Group operates in is subject to rapid technological changes and is evolving quickly in terms of technology innovation. We need to anticipate the emergence of new technologies and assess their market acceptance. We also need to invest significant resources, including financial resources, in research and development to keep pace with technological advances in order to make the Group's products and services competitive in the market. However, development activities are inherently uncertain, and we might encounter practical difficulties in commercializing the Group's development results. The Group's significant expenditures on research and development may not generate corresponding benefits. Given the fast pace with which the technology has been and will continue to be developed, we may not be able to timely upgrade the Group's technologies in an efficient and cost-effective manner, or at all. New technologies in programming or operations could render the Group's technologies, the Group's platform or products or services that we are developing or expect to develop in the future obsolete or unattractive, thereby limiting the Group's ability to recover related product development costs, outsourcing costs and licensing fees, which could result in a decline in the Group's revenues and market share.

If the Group's security measures are breached, or if the Group's products and services are subject to attacks that degrade or deny the ability of users to access the Group's products and services, the Group's products and services may be perceived as not being secure, users may curtail or stop using the Group's products and services and the Group's business, results of operations and financial condition may be harmed.

The Group's products and services involve the storage and transmission of users' information, and security breaches expose us to a risk of loss of this information, litigation and potential liability. We may experience cyber-attacks of varying degrees, including attempts to hack into the Group's user accounts or redirect the Group's user traffic to other websites. Functions that facilitate interactivity with other mobile applications, such as WeChat, which among other things allows users to log into the Group's platform using their WeChat identities, could increase the scope of access of hackers to user accounts. The Group's security measures may also be breached due to employee error, malfeasance or otherwise. Additionally, outside parties may attempt to fraudulently induce employees or users to disclose sensitive information in order to gain access to the Group's data or the Group's users' data or accounts, or may otherwise obtain access to such data or accounts. Any such breach or unauthorized access could result in significant legal and financial exposure, damage to our reputation and a loss of confidence in the security of the Group's products and services that could have an adverse effect on the Group's business, results of operations and financial condition. Because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. If an actual or perceived breach of the Group's security occurs, the market perception of the effectiveness of the Group's security measures could be harmed, the Group could lose users and we may be exposed to significant legal and financial risks, including legal claims and regulatory fines and penalties. Any of these actions could have a material and adverse effect on the Group's business, results of operations and financial condition.

The Group relies on third-party online payment platforms as to certain aspects of its operations.

The Group's users withdraw cash credits from their accounts on the Group's mobile applications through third-party online payment systems. The Group's users also can use third-party online payment systems to supplement their spending on the Group's mobile applications with additional funds. In such online payment transactions, secured transmission of confidential information such as customers' personal information over public networks is essential to maintain consumer confidence.

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

Furthermore, if any of the payment platforms the Group uses decide to significantly increase the percentage they charge us for using their payment systems, the Group's business, results of operations and financial condition may be materially and adversely affected.

We may be subject to cybersecurity review by regulatory authorities of the PRC in the future.

On April 13, 2020, the CAC, together with 11 other government authorities, jointly issued the *Cybersecurity Review Measures*, or the Review Measures. The Review Measures, under which the scope of application, reporting procedures, evaluation factors and legal responsibilities are stipulated, was implemented on June 1, 2020 to replace the Measures for Security Review of Cyber Products and Services (for Trial Implementation) issued by the CAC on May 2, 2017. According to the Review Measures, any operator of critical information infrastructure, which, according to the Reply to Questions on the Review Measures published by the CAC, includes critical network and information system operators in the telecommunications industry, purchases any network product or service that affect or may affect national security, must apply for a cybersecurity review to be conducted by Cybersecurity Review Office.

On November 14, 2021, the CAC issued the Draft Network Data Security Management Regulations for public comments, pursuant to which, data processors carrying out the following activities must, in accordance with the relevant national regulations, apply for a cybersecurity review: (i) the merger, reorganization or spin-off of internet platform operators that possess a large number of data resources related to national security, economic development and public interests that affects or may affect national security; (ii) listing in a foreign country of data processors that process the personal information of more than one million users; (iii) listing in Hong Kong of data processors and such listing affects or may affect national security; and (iv) other data processing activities that affect or may affect national security. The scope of and threshold for determining what "affects or may affect national security" is still subject to uncertainty and further elaboration by the CAC. It further requires that a data processor which processes important data or is listed overseas shall complete an annual data security assessment either self-conducted or conducted by a data security service organization engaged, and before January 31 of each year, submit the annual data security assessment report of the previous year to the local cyberspace affairs administration department. As of the date of this annual report, the Network Data Security Management Regulations was released for public comment only, and no interpretation or implementation rules for this proposed regulation have been issued by the CAC or any other PRC regulatory authorities. It remains uncertain when the Network Data Security Management Regulations will be adopted and become effective and whether it will be adopted as it was initial proposed.

On December 28, 2021, the CAC and other 12 PRC regulatory authorities jointly issued the revised Cybersecurity Review Measures, which became effective from February 15, 2022, superseding and replacing the cybersecurity review measures that had been in effect since June 2020. The revised Cybersecurity Review Measures require that, (i) any procurement of network products and services by critical information infrastructure operators, which affects or may affect national security, (ii) any data processing activities by network platform operators, which affects or may affect national security, or (iii) any network platform operators which has personal information of more than one million users and is going to be listed abroad, shall be subject to cybersecurity review. Furthermore, the relevant PRC governmental authorities may initiate cybersecurity review if they determine certain network products, services, or data processing activities affect or may affect national security. During such review, the Group may be required to suspend new user registration in China and/or experience other disruptions of the Group's operations. Cybersecurity review could also result in negative publicity with respect to our company and diversion of our managerial and financial resources. Furthermore, if the Group were found to be in violation of applicable laws and regulations of the PRC during such review, it could be subject to administrative penalties, such as warnings, fines, service suspension or removal of the Group's apps from the relevant app stores. Therefore, cybersecurity review could have a material and adverse impact on the Group's business, results of operations and financial condition. Since the measures were recently promulgated, there exists uncertainties with respect to their interpretation and implementation.

As of the date of this annual report, the Group has not been informed by any PRC governmental authority of any requirement for us to file for a cybersecurity review. However, in anticipation of the strengthened implementation of cybersecurity laws and regulations and the continued expansion of the Group's business, the Group faces potential risks if it is deemed as a "critical information infrastructure operator" or a "network platform operator" that affects or may affect national security under the Cybersecurity Review Measures and relevant regulations, and would be required to follow cybersecurity review procedures.

On June 10, 2021, the Standing Committee of the National People's Congress, or the SCNPC, promulgated the PRC Data Security Law, which has come into effect on September 1, 2021. The PRC Data Security Law imposes data security and privacy protection obligations on entities and individuals carrying out data activities, including but not limited to the collection, storage, use, processing, transmission, provision, and public disclosure of data. Furthermore, the PRC Data Security Law proposes to establish a data classification and hierarchical protection system to protect data by classification and level, depending on the importance of the data in economic and social development, and the damage may be caused to national security, public interests, or the legitimate rights and interests of individuals and organizations if the data is falsified, damaged, disclosed, illegally obtained or illegally used. The PRC Data Security Law also provides a national security review procedure for data activities that may affect national security and imposes export restrictions on certain data and information.

The Group has been making constant efforts to comply with the revised Cybersecurity Review Measures and other data protection laws and regulations of the PRC. Our mobile apps and websites only collect basic user information which are necessary for the provision of the corresponding services. The Group updates its privacy policies and adjust its data processing practices from time to time to meet the latest regulatory requirements of CAC and other authorities and adopts technical and organizational measures to protect data and cybersecurity. However, since the revised Cybersecurity Review Measures were recently promulgated, there exists uncertainties with respect to their interpretation and implementation, and as the Draft Data Security Regulation has not been adopted and it remains unclear whether the formal version adopted in the future will have any further material changes, the Group still faces uncertainties that the rules may be enacted, interpreted or implemented in ways that will negatively affect the Group. The Group could be subject to cybersecurity review, and if so, it may not be able to pass such a review. In addition, the Group could become subject to enhanced cybersecurity review or investigations launched by PRC regulators in the future. Any failure or delay in the completion of the cybersecurity review procedures or any other non-compliance with the related laws and regulations may result in fines or other penalties, including suspension of business, website closure, removal of the Group's app from app stores, and revocation of licenses, as well as reputational damage or legal proceedings or actions against the Group, which may have an material adverse effect on the Group's business, financial condition or results of operations. In addition, our ability to continue to offer our ADSs to investors could be significantly limited or completed hindered, and the value of our ADSs could significantly decline or become worthless. Our Qutoutiao and Midu Novels mobile applications were listed in the notices issued by CAC in June 2021 and August 2021, respectively, for issues regarding collection of personal data, and we were asked to undertake remedial measures. Since then, we have implemented measures to improve the data privacy protection of our mobile applications, and we have not received any administrative penalties in this regard. As of the date of this annual report, the Group has not been involved in any cybersecurity review initiated by the CAC or other relevant governmental regulatory authorities, and it has not received any inquiry, notice, warning, or sanction in such respect, other than the incidents mentioned above. However, we cannot rule out the possibility that the Group may be subject to the cybersecurity review or other investigations initiated by the CAC or the related governmental regulatory authorities.

The PRC has adopted regulations governing the use of algorithms. If new or existing regulations restrict our ability to use algorithms in our business, our business, results of operations and prospects would be adversely impacted.

The PRC has adopted regulations governing the use of algorithms. On August 17, 2021, the SAMR issued a discussion draft of Provisions on the Prohibition of Unfair Competition on the Internet, under which business operators should not use data or algorithms to hijack traffic or influence users' choices, or use technical means to illegally capture or use other business operators' data. On September 17, 2021, the CAC, together with certain other governmental authorities, jointly issued the Guidelines on Strengthening the Comprehensive Regulation of Algorithms for Internet Information Services, which provide that, daily monitoring of data use, application scenarios and effects of algorithms shall be carried out by the relevant regulators, and the relevant regulators should conduct security assessments of algorithms. The guidelines also provide that an algorithm filing system should be established, and classified security management of algorithms should be promoted. On December 31, 2021, the CAC and certain other PRC governmental authorities promulgated the Administrative Provisions on Algorithm Recommendation for Internet Information Services, which took effect on March 1, 2022. These provisions require that algorithmic recommendation service providers shall inform users in a conspicuous manner of their provision of algorithmic recommendation services, and publicize the basic principles, purposes, and main operating mechanisms of algorithmic recommendation services in an appropriate manner. For more information about PRC laws and regulations relating to algorithms, see "Item 4. Information on the Company — C. Regulations — Regulation on Cybersecurity and Censorship."

Algorithms are an effective tool for us in improving the features of our mobile applications and improving user experience. For example, we leverage algorithms to push personalized content to our users, which helps us attract and retain users and improve user engagement. If new or existing regulations restrict our ability to use algorithms in our business, we may be unable to leverage this technology to the same extent, and our business, results of operations and prospects would be adversely impacted.

Any change, disruption, discontinuity in the features and functions of major social networks could limit the Group's ability to continue growing the Group's user base, and the Group's business may be materially and adversely affected.

The Group leverages social networks, such as WeChat and QQ, as part of its user acquisition and engagement effort. These social networks enable users to share content on the Group's mobile applications or recommend the Group's mobile applications to their friends, family and other social contacts to generate low-cost organic traffic and enhance user engagement for the Group. To the extent that the Group fails to leverage such social networks, its ability to attract or retain users may be harmed. If any of these social networks makes changes to its functions or support, or stops offering its functions or support to the Group, the Group may not be able to locate alternative social networks of similar scale to provide similar functions or support. Furthermore, the Group may fail to establish or maintain relationships with additional social network operators to support the growth of its business on economically viable terms, or at all. Any interruption to or discontinuation of the Group's relationships with major social network operators may severely and negatively impact its ability to continue growing its user base, and any occurrence of the circumstances mentioned above may have a material adverse effect on the Group's business, financial condition and results of operations.

The Group's business and growth could suffer if it is unable to hire and retain key personnel.

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

We are also dependent on the services of Mr. Eric Siliang Tan, our co-founder, chairman and chief executive officer. Although Mr. Tan spends significant time with us and is active in the management of the Group's business, he does not devote his full time and attention to us. If Mr. Tan reduces his time with us in the future and become less involved with the management of the Group's business, we may no longer benefit from his extensive industry experience and the Group's business and growth may suffer.

Our co-founder, chairman and chief executive officer, Mr. Eric Siliang Tan, has control over us and our corporate matters. Our dual-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

We have a dual-class share structure which consists of Class A ordinary shares and Class B ordinary shares. In respect of matters requiring the votes of shareholders, holders of Class B ordinary shares are entitled to ten (10) votes per share, subject to certain conditions, while holders of Class A ordinary shares are entitled to one vote per share. Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof, while Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances. Upon any transfer of Class B ordinary shares by a holder to any person or entity which is not an affiliate of such holder, each of such Class B ordinary shares shall be converted into one Class A ordinary share in accordance with our amended and restated memorandum and articles of association.

Our co-founder, chairman and chief executive officer, Mr. Eric Siliang Tan, has control over us and our corporate matters. Mr. Tan beneficially owns 27,123,442 of our Class B ordinary shares through Innotech Group Holdings Ltd., a British Virgin Islands limited liability company which is ultimately controlled by him. As of the date of this annual report on Form 20-F, these Class B ordinary shares constituted approximately 35.3% of our total issued and outstanding share capital and 72.7% of the aggregate voting power of our total issued and outstanding share capital due to the disparate voting powers associated with our dual-class share structure. See "Item 6. Directors, Senior Management and Employees — C. Share Ownership." As a result of the dual-class share structure and the concentration of ownership, Mr. Tan has considerable influence over matters such as decisions regarding mergers, consolidations and the sale of all or substantially all of our assets, election of directors and other significant corporate actions. This concentrated control will limit your ability to influence corporate matters and could also discourage others from pursuing any potential merger, takeover or other change of control transactions, which could have the effect of depriving the holders of our ordinary shares and the ADSs of the opportunity to sell their shares at a premium over the prevailing market price.

We are a "controlled company" under the rules of NASDAQ Global Select Market and, as a result, we rely on exemptions from certain corporate governance requirements that provide protection to shareholders of other companies.

We are a "controlled company" as defined under the NASDAQ Stock Market Rules because Mr. Eric Siliang Tan holds more than 50% of the aggregate voting power of our company. For so long as we remain a controlled company under that definition, we are permitted to elect to rely, and will rely, on certain exemptions from corporate governance rules, including an exemption from the rule that a majority of our board of directors must be independent directors. As a result, you do not have the same protection afforded to shareholders of companies that are subject to these corporate governance requirements.

$The \ Group \ has \ incurred \ and \ may \ continue \ to \ incur \ substantial \ share-based \ compensation \ expenses.$

We have adopted an equity incentive plan that permits the grant of share options, restricted shares, restricted share units, dividend equivalents, share appreciation rights and share payments as equity-based awards, to our directors, officers, employees and consultants. The equity incentive plan replaced the 2017 equity incentive plan and 2018 equity incentive plan that we previously adopted in their entirety and assumed all awards granted under these two plans. The maximum aggregate number of ordinary shares that may be issued pursuant to all share options and other awards under our equity incentive plan was initially 12,464,141 Class A ordinary shares. On March 5, 2019, the Company increased the aggregate number of Class A ordinary shares reserved for issuance pursuant to awards granted under the equity incentive plan by 3.5% of the total number of Class A ordinary shares outstanding as of December 31, 2018. On every January 1 thereafter for four years, the aggregate number of Class A ordinary shares reserved and available for issuance pursuant to awards granted under the equity incentive plan will be increased by 2.0% of the total number of Class A ordinary shares and Class B ordinary shares outstanding on December 31 of the preceding calendar year. As of the date of this annual report on Form 20-F, options to purchase 6,020,287 Class A ordinary shares had been granted and were outstanding under our equity incentive plan. The Group is required to account for options granted to our employees, directors and consultants as equity awards and recognize share-based compensation expense based on the fair value of such share options, with the share-based compensation expense recognized over the period in which the recipient is required to provide service in exchange for the share option or other equity award. In 2019, 2020 and 2021, RMB272.0 million, RMB463.2 million and RMB200.2 million (US\$31.4 million) was recognized as share-based compensation expenses, respectively.

We believe the granting of share-based compensation is of significant importance to our ability to attract, retain and motivate our management team and talented employees, and we will continue to grant share-based compensation to employees in the future. As a result, the Group's expenses associated with share-based compensation may increase significantly, which may have an adverse effect on the Group's results of operations and financial condition. See Note 16 to our audited consolidated financial statements included elsewhere in this annual report.

Future investments in and acquisitions of complementary assets, technologies and businesses may fail and may result in equity or earnings dilution.

We may invest in or acquire assets, technologies and businesses that are complementary to the Group's existing business. Our investments or acquisitions may not yield the results we expect. In addition, investments and acquisitions could result in the use of substantial amounts of cash, potentially dilutive issuances of equity securities, significant amortization expenses related to goodwill or intangible assets and exposure to potential unknown liabilities of the acquired business. Furthermore, if such goodwill or intangible assets become impaired, the Group may be required to record a significant charge to its results of operations. Such investments and acquisitions may also require our management team to devote a significant amount of attention. Moreover, the cost of identifying and consummating investments and acquisitions, and integrating the acquired businesses into the Group's, may be significant, and the integration of acquired businesses may be disruptive to the Group's existing business operations. In addition, we may have to obtain approval from the relevant PRC governmental authorities for the investments and acquisitions and comply with any applicable PRC rules and regulations, which may be costly. In the event our investments and acquisitions are not successful, the Group's results of operations and financial condition may be materially and adversely affected.

We may not be able to adequately protect the Group's intellectual property, which could cause the Group to be less competitive.

We regard the Group's intellectual property as critical to its success. Such intellectual property includes trademarks, patents, domain names, copyrights, know-how and proprietary technologies. We currently rely on trademarks, copyrights, trade secret law and confidentiality, invention assignment and non-compete agreements with the Group's employees and others to protect the Group's proprietary rights. See "Item 4. Information on the Company — B. Business Overview — Intellectual Property" and "Item 4. Information on the Company — C. Regulations — Regulations Related to Intellectual Property Rights." However, we cannot assure you that any of the Group's intellectual property rights would not be challenged, invalidated or circumvented, or such intellectual property will be sufficient to provide us with competitive advantages. One of the Group's competitors previously filed an objection when we applied for the trademark registration for "Qutoutiao" on the purported ground that "Qutoutiao" is similar to a trademark registered by such competitor. Although such objection was denied by the Trademark Office and we have successfully registered trademark for "Qutoutiao" in 2019, we have received a verdict in which the Trademark Office partially supported such competitor's subsequent challenge against the validity of this registered trademark. We have brought administrative proceedings against the Trademark Office to dispute the verdict. We were supported by the Beijing Intellectual Property Court which requires the Trademark Office to withdraw the verdict. However, the competitor appealed to Higher People's Court of Beijing in February 2022.

We will use our best efforts to maintain, protect and enforce the Group's intellectual property rights. However, there can be no assurance that we will always prevail and the Group's trademarks and other intellectual property will be fully protected. In addition, other parties may misappropriate the Group's intellectual property rights, which would cause the Group to suffer economic or reputational damages. Because of the rapid pace of technological change, nor can we assure you that all of the Group's proprietary technologies and similar intellectual property can be patented in a timely or cost-effective manner, or at all. Furthermore, parts of the Group's business rely on technologies developed or licensed by other parties, or co-developed with other parties, and the Group may not be able to obtain or continue to obtain licenses and technologies from these other parties on reasonable terms, or at all.

It is often difficult to register, maintain and enforce intellectual property rights in China. Statutory laws and regulations are subject to judicial interpretation and enforcement and may not be applied consistently due to the lack of clear guidance on statutory interpretation. Confidentiality, invention assignment and non-compete agreements may be breached by counterparties, and there may not be adequate remedies available to us for any such breach. Accordingly, we may not be able to effectively protect the Group's intellectual property rights or to enforce the Group's contractual rights in China. Preventing any unauthorized use of the Group's intellectual property is difficult and costly and the steps we take may be inadequate to prevent the misappropriation of the Group's intellectual property. In the event that we resort to litigation to enforce the Group's intellectual property rights, such litigation could result in substantial costs and a diversion of the Group's managerial and financial resources. We can provide no assurance that we will prevail in such litigation. In addition, the Group's trade secrets may be leaked or otherwise become available to, or be independently discovered by, the Group's competitors. To the extent that the Group's employees or consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related know-how and inventions. Any failure in protecting or enforcing the Group's intellectual property rights could materially and adversely affect the Group's business, results of operations and financial condition.

The Group may be subject to intellectual property infringement claims or other allegations by third parties for information or content displayed on, retrieved from or linked to the Group's platform, or delivered to the Group's users, which may materially and adversely affect the Group's business, financial condition and prospects.

We may be subject to intellectual property infringement claims or other allegations by third parties for products or services on the Group's platform, which may materially and adversely affect the Group's business, financial condition and prospects.

Companies in the Internet, technology and media industries are frequently involved in litigation based on allegations of infringement of intellectual property rights, unfair competition, invasion of privacy, defamation and other violations of other parties' rights. The validity, enforceability and scope of protection of intellectual property rights in Internet-related industries, particularly in China, are uncertain and still evolving. As we face increasing competition and as litigation becomes more common in China in resolving commercial disputes, we face a higher risk of being the subject of intellectual property infringement claims.

The Group allows content providers to upload texts, images and videos on its platform. We have procedures designed to reduce the likelihood that content might be used without proper licenses or third-party consents. However, these procedures may not be effective in preventing the unauthorized posting of copyrighted content. We may face liability for copyright or trademark infringement, defamation, unfair competition, libel, negligence, and other claims based on the nature and content of the materials that are delivered, shared or otherwise accessed through the Group's platform. As of the date of this annual report, the Group is in the process of defending certain claims against it for the alleged unauthorized content delivered, shared or otherwise accessed through the Group's platform.

Defending intellectual property litigation is costly and can impose a significant burden on our management and employees, and there can be no assurances that favorable final outcomes will be obtained in all cases. Such claims, even if they do not result in liability, may harm our reputation. Any resulting liability or expenses, or changes required to the Group's platform to reduce the risk of future liability, may materially and adversely affect the Group's business, financial condition and prospects.

If we fail to implement and maintain an effective system of internal control, we may be unable to accurately or timely report the Group's results of operations or prevent fraud, and investor confidence and the market price of the ADSs may be materially and adversely affected.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of the NASDAQ Global Select Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting in our Form 20-F, as required by Section 404 of the Sarbanes-Oxley Act.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act). Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. 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 conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, it used the criteria established within the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management has concluded that, as of December 31, 2021, our internal control over financial reporting was ineffective due to the material weakness identified below.

In accordance with reporting requirements set forth by the SEC, a "material weakness" is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis. The material weakness, which was first identified in the course of preparing the Group's consolidated financial statements for the year ended December 31, 2017, relates to the lack of sufficient financial reporting and accounting personnel with appropriate knowledge of U.S. GAAP and SEC reporting requirements to formalize key controls over financial reporting and to prepare consolidated financial statements and related disclosures. To remedy our previously identified material weakness, we have undertaken and will continue to undertake steps to strengthen our internal control over financial reporting, including: (i) hiring more qualified resources including financial controller, equipped with relevant U.S. GAAP and SEC reporting experience and qualifications to strengthen the financial reporting function and to set up a financial and system control framework, (ii) implementing regular and continuous U.S. GAAP accounting and financial reporting training programs for our accounting and financial reporting personnel, (iii) establishing effective oversight and clarifying reporting requirements for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are accurate, complete and in compliance with SEC reporting requirements, and (iv) enhancing an internal audit function as well as engaging an external consulting firm to help us assess our compliance readiness under rule 13a-15 of the Exchange Act and improve overall internal control. However, such measures have not been fully implemented and we concluded that the material weakness in our internal control over financial reporting had not been rem

Since we qualified as an "emerging growth company" as defined under the JOBS Act as of December 31, 2021, this annual report on Form 20-F does not include an attestation report of our independent registered public accounting firm. Once we cease to be an "emerging growth company" as the term is defined in the JOBS Act, our independent registered public accounting firm must attest to and report on the effectiveness of our internal control over financial reporting. In the future, our management may conclude that our internal control over financial reporting is still not effective. Moreover, even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm, after conducting its own independent testing, may not reach the same conclusion. In addition, our reporting obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future. We may be unable to timely complete our evaluation testing and any required remediation.

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

If we are unable to implement and maintain proper and effective internal control, we may not be able to produce timely and accurate financial statements. If that were to happen, the market price of the ADSs could decline and we could be subject to sanctions or investigations by the NASDAQ Global Select Market, SEC or other regulatory authorities.

The discontinuation of any of the preferential tax treatments available to the Group in China could materially and adversely affect the Group's results of operations and financial condition.

Under PRC tax laws and regulations, Shanghai Jifen, one of the Group VIEs, and Shanghai Chenxing Software Technology Co., Ltd., or Shanghai Chenxing, a subsidiary of Shanghai Quyun Network Technology Co., Ltd., or Shanghai Quyun, are both qualified to enjoy, certain preferential income tax benefits. The modified Enterprise Income Tax Law, effective on December 29, 2018, or the EIT Law, and its implementation rules generally impose a uniform income tax rate of 25% on all enterprises, but grant preferential treatment to "high and new technology enterprises strongly supported by the state", or HNTEs, to enjoy a reduced enterprise tax rate of 15%. According to the relevant administrative measures, to qualify as a "HNTE", Shanghai Jifen and Shanghai Chenxing must meet certain financial and non-financial criteria and complete verification procedures with the administrative authorities. Continued qualification as a "HNTE" is subject to review by the relevant government authorities in China once every three years, and in practice certain local tax authorities also require annual evaluation of the qualification. In addition to the foregoing tax benefit, Shanghai Jifen and Shanghai Chenxing are qualified to enjoy certain preferential value-added tax benefits, according to the Notice on Value-added Tax Policies for Software Products issued by the Ministry of Finance, or the MOF, and the State Administration of Taxation, or the SAT, on October 13, 2011. Apart from that, Shanghai Chenxing obtained the certificate of Qualified Software Enterprise. Once meeting other criteria, Shanghai Jifen and Shanghai Chenxing will be qualified to enjoy certain preferential enterprise income tax benefits, according to relevant rules, including the Notice on Enterprise Income Tax Policies for Further Encouraging the Development of Software and Integrated Circuit Industries issued by the MOF and the SAT on April 20, 2012, Notice on Relevant Issues concerning Preferential Enterprise Income Tax Policies for Enterprises in Software and Integrated Circuit Industries issued by the MOF, the SAT, the National Development and Reform Commission, or the NDRC, and the MIIT on May 4, 2016, and Announcement on the Enterprise Income Tax Policies for Promoting the High-quality Development of the Integrated Circuit Industry and the Software Industry jointly issued by the MOF, the SAT, the NDRC and the MIIT on December 11, 2020. In the event the preferential tax treatments for the entities are discontinued or are not verified by the local tax authorities, and the affected entity fails to obtain preferential tax treatments based on other qualifications such as Advanced Technology Service Enterprise, it will become subject to the standard tax rates and policies, including the PRC enterprise income tax rate of 25%. We cannot assure you that the tax authorities will not, in the future, discontinue any of the Group's preferential tax treatments, potentially with retroactive effect.

User growth and engagement depend upon effective interoperation with operating systems, networks, devices and major mobile application distribution channels that the Group does not control.

We make the Group's products and services available across a variety of mobile operating systems and through major mobile application distribution channels, namely app stores. We are dependent on the interoperability of the Group's products and services with popular devices and mobile operating systems that the Group does not control, such as Android and iOS. We are also dependent on users' ability to find and download the Group's mobile applications through app stores operated by third parties, such as the Apple App Store and app stores operated by mobile phone manufacturers in China such as Huawei, Oppo, Vivo and Xiaomi.

Any changes in such operating systems, devices or mobile application distribution channels that degrade the functionality of the Group's products and services or give preferential treatment to competitive products or services could adversely affect usage of the Group's products and services. Further, if the number of platforms for which the Group develops its products increases, it will result in an increase in the Group's costs and expenses. In order to deliver high-quality products and services, it is important that the Group's products and services work well with a range of mobile operating systems and devices which the Group does not control. The various app stores also have their own rules and requirements that the Group's mobile applications need to comply with for them to be included in the respective app stores. Such rules and requirements may change from time to time. There are no assurances that the Group's mobile applications will be able to continue to meet these rules and requirements, which may result in their removal from the relevant app stores. Compliance with these rules and requirements may also prove to be costly or require change to the functionality of the Group's mobile applications that may make them less desirable to users. We may not be successful in developing relationships with key participants in the mobile Internet industry or in developing products or services that operate effectively with these mobile operating systems, devices and mobile application distribution channels. In the event it is difficult for the Group's users to access and use its products and services on their mobile devices, the Group's user growth and user engagement could be harmed, and the Group's business, results of operations and financial condition could be adversely affected.

The Group's operations depend on the performance of the Internet infrastructure and fixed telecommunications networks in China.

Almost all access to the Internet in China is maintained through state-owned telecommunication operators under the administrative control and regulatory supervision of the Ministry of Industry and Information Technology, or the MIIT. Moreover, the Group primarily relies on a limited number of telecommunication service providers to provide the Group with data communications capacity through local telecommunications lines and Internet data centers to host the Group's servers. The Group has limited access to alternative networks or services in the event of disruptions, failures or other problems with China's Internet infrastructure or the fixed telecommunications networks provided by telecommunication service providers. Internet traffic in China has experienced significant growth during the past few years. Effective bandwidth and server storage at Internet data centers in large cities such as Shanghai are scarce. With the expansion of the Group's business, it may be required to upgrade its technology and infrastructure to keep up with the increasing traffic on its platform. We cannot assure you that the Internet infrastructure and the fixed telecommunications networks in China will be able to support the demands associated with the continued growth in Internet usage. If we are unable to increase the Group's online content and service delivering capacity accordingly, the Group may not be able to continuously grow its traffic, and the adoption of its products and services may be hindered, which could adversely impact the Group's business and our share price.

In addition, we have no control over the costs of the services provided by telecommunication service providers. The Group's information technology infrastructure cost increased as a result of our enriching the Group's product offerings to include more engaging contents such as short videos, games and live-streaming. If the prices we pay for telecommunications and Internet services rise significantly, the Group's business, results of operations and financial condition may be materially and adversely affected. Furthermore, if mobile Internet access fees or other charges to mobile Internet users increase, some users may be prevented from accessing the mobile Internet and thus cause the growth of mobile Internet users to decelerate. Such deceleration may adversely affect our ability to continue to expand the Group's user base and increase the Group's attractiveness to online customers.

The Group's business, results of operations and financial condition may be harmed by service disruptions, or by our failure to timely and effectively scale and adapt the Group's existing technology and infrastructure.

We may experience service disruptions, outages and other performance problems due to a variety of factors, including infrastructure changes, human or software errors, hardware failure, capacity constraints due to an overwhelming number of people accessing the Group's products and services simultaneously, computer viruses and denial of service, fraud and security attacks. Any disruption or failure in the Group's infrastructure could hinder our ability to handle existing or increased traffic on the Group's platform or cause us to lose content stored on the Group's platform, which could significantly harm the Group's business and our ability to retain existing users and attract new users.

As the number of the Group's users increases and its users generate increasing volumes of user generated videos on the Group's platform, and as we continue to diversify into new content formats, we may be required to expand and adapt the Group's technology and infrastructure to continue to reliably store, analyze and deliver content. It may become increasingly difficult to maintain and improve the performance of the Group's products and services, especially during peak usage times, as the Group's products and services become more complex and the Group's user traffic increases. In addition, because the Group leases its data center facilities, we cannot be assured that we will be able to expand the Group's data center infrastructure to meet users' demand in a timely manner, or on favorable economic terms. If the Group's users are unable to access any of the Group's mobile applications or we are not able to make information available rapidly on any of the Group's mobile applications, or at all, users may become frustrated and seek other channels for their light entertainment needs, and may not return to the Group's mobile applications or use the Group's mobile applications as often in the future, or at all. This would negatively impact the Group's ability to attract users and maintain high level of user engagement as well as the Group's ability to attract advertising customers.

Legal or administrative proceedings or allegations of impropriety against us or our management could have a material adverse impact on the Group's reputation, results of operation and financial condition.

We and members of our management may be subject to allegations or lawsuits brought by our competitors, individuals, government and regulatory authorities or other persons in the future. Any such lawsuit or allegation, with or without merit, or any perceived unfair, unethical, fraudulent or inappropriate business practice by the Group or perceived wrong-doing by any key member of our management team could harm our reputation and cause the Group's user base to decline and distract our management from day-to-day operations of the Group's. We cannot assure you that the Group or key members of our management team will not be subject to lawsuits or allegations of a similar nature in the future. Where we can make a reasonable estimate of the liability relating to pending litigation and determine that an adverse liability resulting from such litigation is probable, the Group will record a related contingent liability. As additional information becomes available, we will assess the potential liability and revise estimates as appropriate. In 2019, 2020 and 2021, the Group did not record any contingent liabilities relating to pending litigation. On August 20, 2020, we and certain of our current and former directors and officers were named as defendants in a putative shareholder class action lawsuit filed in the United States District Court for the Southern District of New York. This action is brought on behalf of a putative class of persons who purchased or acquired our securities pursuant or traceable to our September 2018 initial public offering or April 2019 secondary public offering, or otherwise acquired our securities between September 14, 2018 and December 16, 2020 or "the Putative Class Period". The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933, Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and Rule 10b-5 promulgated thereunder based on alleged materially false or misleading statements or omissions in offering documents and/or issued throughout the Putative Class Period. Lead Plaintiff was appointed, and a consolidated amended complaint was filed on January 15, 2021. We filed a motion to dismiss such amended complaint on March 16, 2021. Lead Plaintiff filed an opposition to the motion on May 17, 2021, and we filed a reply on July 1, 2021. A decision on the motion is pending. For a detailed description of these cases, please refer to "Item 8. Financial Information — A. Consolidated Statement and other Financial Information — Legal and Administrative Proceedings".

When the Group records or revises our estimates of contingent liabilities in the future, the amount of our estimates may be inaccurate due to the inherent uncertainties relating to litigation. In addition, the outcomes of actions we institute against third parties may not be successful or favorable to us. Litigation and allegations against the Group or any of our management members, irrespective of their veracity, may also generate negative publicity that significantly harms our reputation, which may materially and adversely affect the Group's user base and our ability to attract content providers and advertising customers. In addition to the related cost, managing and defending litigation and related indemnity obligations can significantly divert our management and the board of directors' attention from operating the Group's business. We may also need to pay damages or settle the litigation with a substantial amount of cash. All of these could have a material adverse impact on the Group's reputation, results of operation and financial condition.

The Group may not have fully paid certain fees and surcharges in the past. As such, the Group may be subject to further scrutiny by the PRC tax authorities that may result in a finding which may subject the Group to additional taxes, fees and surcharges and fines or other penalties.

According to the Circular on Issues Relating to Cultural Undertaking Development Fee Policies and Administration of Levying and Collection Relating to Levving VAT in place of Business Tax, which was issued by the Ministry of Finance and the SAT on March 28, 2016, or Circular 25, the provision of advertising services by advertising media agencies and outdoor advertisement business operators (including entities engaging in distribution, screening, promotion and exhibition of outdoor advertisements and other advertisements, as well as entities engaging in advertisement agency services) in China is subject to a cultural development fee. The fee was charged at an applicable rate of 3% of the net advertising revenues prior to June 30, 2019, which was reduced to 1.5% commencing on July 1, 2019, according to a preferential tax policy issued on June 12, 2019 by the government of Shanghai. The preferential policy is said to be in effect until December 31, 2024. The net advertising revenues refer to, as specified in Circular 25, the balance after deducting advertisement distribution fee paid to other advertising company or advertisement distributor, from the total tax inclusive price and out of pocket expenses obtained from provision of advertising and marketing services. Historically, the Group did not pay cultural development fee and surcharges for the part of the Group's revenue that we did not consider as revenues from advertising services subject to Circular 25. Pursuant to the Announcement on the Supporting Tax and Fee Policy for Film Industry and Other Industries issued by the MOF and the SAT on May 13, 2020, the cultural development fee was waived from January 1, 2020 until December 31, 2020. Pursuant to the Announcement on the Extension of Certain Tax Preferential Policies in Response to COVID-19 Epidemic, the exemption period of the cultural development fee was extended until December 31, 2021. Although the Group has not been challenged by the tax authorities so far, it may face further scrutiny by the PRC tax authorities that may result in a conclusion that subjects the Group to additional taxes, fees and surcharges and substantially increases the Group's taxes owed, thereby materially and adversely affecting the Group's results of operations. As a result of not making adequate contributions, the Group may also be subject to fines or other penalties imposed by the relevant authorities pursuant to applicable laws and regulations.

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

Any prolonged slowdown in the Chinese or global economy may have a negative impact on the Group's business, results of operations and financial condition. In particular, general economic factors and conditions in China or worldwide, including the general interest rate environment and unemployment rates, may affect advertising customers' willingness to advertise or consumers' willingness to spend on entertainment. Economic conditions in China are sensitive to global economic conditions. The global financial markets have experienced significant disruptions since 2008 and the United States, Europe and other economies have experienced periods of recession. The recovery from the lows of 2008 and 2009 has been uneven and is facing new challenges, including the escalation of the European sovereign debt crisis from 2011 and the slowdown of the Chinese economy since 2012. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. There have been concerns over unrest in North Korea, Ukraine, the Middle East and Africa, which have resulted in volatility in financial and other markets. There have also been concerns over the expected withdrawal of the United Kingdom from the European Union as well as concerns about the economic effect of the tensions in the relationship between the United States, China and neighboring Asian countries. If present Chinese and global economic uncertainties persist, the Group may have difficulty in attracting advertising customers or spending by consumers on entertainment. Additionally, continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs.

We have limited business insurance coverage.

Insurance companies in China currently do not offer as extensive an array of insurance products as are offered by insurance companies in more developed economies. We do not have any business liability or disruption insurance coverage for the Group's operations. Any uninsured business disruptions may result in the Group's incurring substantial costs and diversion of resources, which could have an adverse effect on the Group's results of operations and financial condition.

Risks Relating to Our Corporate Structure

We rely on contractual arrangements with the Group VIEs and their respective shareholders to operate the Group's business, which may be less effective than equity ownership in providing operational control and otherwise materially and adversely affect the Group's business.

We are not a Chinese operating company but a Cayman Island holding company with operations conducted by our operating subsidiaries and the Group VIEs based in China. We rely on contractual arrangements with the Group VIEs, especially the Key VIEs, and their respective shareholders to operate the Group's business. For a description of these contractual arrangements, see "Item 4. — Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders." The majority of the Group's revenue is attributed to the Group VIEs and their subsidiaries. These contractual arrangements may be less effective than equity ownership in providing us with control over the Group VIEs. If the Group VIEs or their respective shareholders fail to perform their respective obligations under these contractual arrangements, our recourse to the assets held by the Group VIEs is indirect and we may have to incur substantial costs and expend significant resources to enforce such arrangements in reliance on legal remedies under PRC law. These remedies may not always be effective, particularly in light of uncertainties in the PRC legal system. Furthermore, in connection with litigation, arbitration or other judicial or dispute resolution proceedings, assets under the name of any of record holder of equity interest in the Group VIEs, including such equity interest, may be put under court custody. As a consequence, we cannot be certain that the equity interest will be disposed pursuant to the contractual arrangement or ownership by the record holder of the equity interest.

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 laws and any disputes would be resolved in accordance with PRC legal procedures. The legal environment in the PRC is not as developed as in other jurisdictions, such as the U.S. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. In the event that we are unable to enforce these contractual arrangements, or if we suffer significant time delays or other obstacles in the process of enforcing these contractual arrangements, it would be very difficult to exert effective control over the Group VIEs, and our ability to conduct the Group's business and the Group's results of operations and financial condition may be materially and adversely affected. See "— Risks Relating to Doing Business in China — There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. In addition, rules and regulations in China can change quickly with little advance notice."

The arbitration provisions under these contractual arrangements have no effect on the rights of our shareholders to pursue claims against us under United States federal securities laws.

Furthermore, in connection with the share purchase agreement entered into with Shanghai Dongfang Newspaper Co., Ltd. and its subsidiaries, or collectively, The Paper, Shanghai Jifen has issued equity interests representing 1% of its enlarged share capital to Shanghai Xinpai Management Consulting Co., Ltd., or Shanghai Xinpai, an affiliate of The Paper, at a nominal price. However, Shanghai Xinpai is not a party to the contractual arrangements that are currently entered into among Shanghai Quyun and Shanghai Jifen and its shareholders. As such, despite the fact that we are still able to enjoy economic benefits and exercise effective control over Shanghai Jifen and its subsidiaries, in contrast to what we have been granted by other shareholders of Shanghai Jifen under the contractual arrangements, we are unable to purchase or have Shanghai Xinpai pledge such 1% equity interests in the same manner as agreed under existing contractual arrangements, nor have we been granted the authorization of voting rights over these 1% equity interests. We believe Shanghai Quyun, our wholly-owned PRC subsidiary, still controls and is the primary beneficiary of Shanghai Jifen as it continues to have a controlling financial interest in Shanghai Jifen pursuant to ASC 810-10-25-38A. See "Item 4. Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders — Supplemental Agreement to the Contractual Arrangements in Connection with The Paper."

Any failure by the Group VIEs or their respective shareholders to perform their obligations under our contractual arrangements with them would materially and adversely affect the Group's business.

We, through our subsidiaries and wholly foreign-owned enterprises in the PRC, have entered into a series of contractual arrangements with the Group VIEs and their respective shareholders. For a description of these contractual arrangements, see "Item 4. Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders." If the Group VIEs or their respective shareholders fail to perform their respective obligations under these contractual arrangements, we may incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under PRC laws, including seeking specific performance or injunctive relief, and claiming damages, which we cannot assure you will be effective under PRC laws. For example, if the shareholders of the Group VIEs were to refuse to transfer their equity interests in the Group VIEs to us or our designee when we exercise the purchase option pursuant to these contractual arrangements, or if they were otherwise to act in bad faith toward us, then we may have to take legal actions to compel them to perform their contractual obligations.

All the agreements under our contractual arrangements are governed by PRC laws and provide for the resolution of disputes through arbitration in China. Accordingly, these contracts would be interpreted in accordance with PRC legal procedures. The legal system in the PRC is not as developed as in some other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. The contractual arrangements have not been tested in a court of law in China. There are very few precedents and little formal guidance as to how contractual arrangements in the context of a VIE should be interpreted or enforced under PRC laws. There remain significant uncertainties regarding the ultimate outcome of such arbitration should legal action become necessary. In addition, under PRC laws, rulings by arbitrators are final and parties cannot appeal arbitration results in court unless such rulings are revoked or determined unenforceable by a competent court. If the losing parties fail to carry out the arbitration awards within a prescribed time limit, the prevailing parties may only enforce the arbitration awards in PRC courts through arbitration award recognition proceedings, which would require additional expenses and delay. In the event that we are unable to enforce these contractual arrangements, or if we suffer significant delay or other obstacles in the process of enforcing these contractual arrangements, we may not be able to exert effective control over the Group VIEs and relevant rights and licenses held by such VIEs which we require in order to operate the Group's business, and our ability to conduct the Group's business may be negatively affected. See "— Risks Related to Doing Business in China — There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. In addition, rules and regulations in China can change quickly with little advance notice."

The shareholders of the Group VIEs may have potential conflicts of interest with us, which may materially and adversely affect the Group's business, results of operations and financial condition.

The interests of the shareholders of the Group VIEs in their capacities as such shareholders may differ from the interests of our company as a whole, as what is in the best interests of the Group VIEs, including matters such as whether to distribute dividends or to make other distributions to fund our offshore requirement, may not be in the best interests of our company. There can be no assurance that when conflicts of interest arise, any or all of these shareholders will act in the best interests of our company or those conflicts of interest will be resolved in our favor. In addition, these shareholders may breach or cause the Group VIEs and their subsidiaries to breach or refuse to renew the existing contractual arrangements with us.

Currently, we do not have arrangements to address potential conflicts of interest the shareholders of the Group VIEs may encounter, on the one hand, and as a beneficial owner of our company, on the other hand. We, however, could, at all times, exercise our option under the exclusive option agreement to cause them to transfer all of their equity ownership in the Group VIEs to a PRC entity or individual designated by us as permitted by the then applicable PRC laws. In addition, if such conflicts of interest arise, we could also, in the capacity of attorney-in-fact of the then existing shareholders of the Group VIEs as provided under the power of attorney agreements, directly appoint new directors of the Group VIEs. We rely on the shareholders of the Group VIEs to comply with PRC laws and regulations, which protect contracts and provide that directors and executive officers owe a duty of loyalty to our company and require them to avoid conflicts of interest and not to take advantage of their positions for personal gains, and the laws of the Cayman Islands, which provide that directors have a duty of care and a duty of loyalty to act honestly in good faith with a view to our best interests. However, the legal frameworks of China and the Cayman Islands do not provide guidance on resolving conflicts in the event of a conflict with another corporate governance regime. If we cannot resolve any conflicts of interest or disputes between us and the shareholders of the Group VIEs, we would have to rely on legal proceedings, which could result in disruption of the Group's business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

If the PRC government deems that the contractual arrangements in relation to the Group VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. In addition, our ADSs may significantly decline in value or become worthless if we are unable to assert our contractual control over the assets of the Group VIEs.

The PRC government regulates telecommunications-related businesses through strict business licensing requirements and other government regulations. These laws and regulations also include limitations on foreign ownership of PRC companies that engage in telecommunications-related businesses. Specifically, subject to undertakings for opening telecommunication industries made by China for joining WTO, foreign investors are not allowed to own more than a 50% equity interest in any PRC company engaging in value-added telecommunications businesses. It is required under the prior Provisions on the Administration of Foreign-Invested Telecommunications Enterprises, or the FITE Regulations, which were issued by the State Council on December 11, 2001, became effective on January 1, 2002 and amended and issued on February 6, 2016, that the primary foreign investor must also have experience and a good track record in providing value-added telecommunications services, or VATS, overseas. The FITE Regulations were recently amended on April 7, 2022 and became effective on May 1, 2022, among which, the previous requirement on experience and good track record has been cancelled. However, this modification is relatively new, uncertainties still exist in relation to its interpretation and implementation. In addition, foreign investors are prohibited from investing in enterprises engaging in internet culture activities except for music.

Because we are an exempted company with limited liability incorporated in the Cayman Islands, we are classified as a foreign enterprise under PRC laws and regulations, and our wholly foreign-owned enterprise in the PRC is a foreign-invested enterprise, or FIE. Accordingly, our subsidiaries may not be eligible to operate VATS business in China. The Group conducts its business in China through the Group VIEs and their affiliates. Our PRC subsidiaries, Shanghai Quyun, Shanghai Zhicao Information Technology Co., Ltd., or Shanghai Zhicao and Hainan Mengbang Network Technology Co., Ltd., or Hainan Mengbang, have entered into a series of contractual arrangements with the Group VIEs and their respective shareholders, which enable us to (i) exercise effective control over the Group VIEs, (ii) receive substantially all of the economic benefits of the Group VIEs, and (iii) have an exclusive option to purchase all or part of the equity interests and assets in the Group VIEs when and to the extent permitted by PRC law. As a result of these contractual arrangements, we have control over and are the primary beneficiary of the Group VIEs and hence consolidate its financial results as the Group VIEs under U.S. GAAP. For a description of these contractual arrangements, see "Item 4. Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders."

We believe that the Group's corporate structure and contractual arrangements comply with the current applicable PRC laws and regulations. Our PRC legal counsel, King & Wood Mallesons, based on its understanding of the relevant laws and regulations, is of the opinion that each of the contracts among our Key WFOEs, Key VIEs and their respective shareholders is valid, binding and enforceable in accordance with its terms. However, as there are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including the *Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors*, or the M&A Rules, and the *Telecommunications Regulations* and the relevant regulatory measures concerning the telecommunications industry, there can be no assurance that the PRC government authorities, such as the MOFCOM or the MIIT, or other authorities that regulate Internet content providers and other participants in the telecommunications industry, would agree that our corporate structure or any of the above 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 Group's corporate structure and contractual arrangements are deemed by the MIIT or the MOFCOM or other regulators having competent authority to be illegal, either in whole or in part, we may lose control of the Group VIEs and have to modify such structure to comply with regulatory requirements. However, there can be no assurance that we can achieve this without material disruption to the Group's business. In addition, our ADSs may significantly decline in value or become worthless if we are unable to assert our contractual control over the assets of the Group VIEs. Further, if the Group's corporate structure and contractual arrangements are found to be in violation of any existing or future PRC laws or regulations, the relevant regulatory authorities would have broad discretion in dealing with such violations, including:

- revoking the Group's business and operating licenses;
- levying fines on us;
- confiscating any of the Group's income that they deem to be obtained through illegal operations;
- · shutting down the Group's services;
- discontinuing or restricting the Group's operations in China;

- imposing conditions or requirements with which the Group may not be able to comply;
- requiring us to change the Group's corporate structure and contractual arrangements;
- restricting or prohibiting the Group's use of the proceeds from overseas offering to finance the Group VIE's business and operations; and
- taking other regulatory or enforcement actions that could be harmful to the Group's business.

Furthermore, new PRC laws, rules and regulations may be introduced to impose additional requirements that may be applicable to our corporate structure and contractual arrangements. See "— Substantial uncertainties exist with respect to whether the controlling of PRC onshore variable interest entities by foreign investors via contractual arrangements will be recognized as 'foreign investment' and how it may impact the viability of the Group's current corporate structure and operations." Occurrence of any of these events could materially and adversely affect the Group's business, results of operations and financial condition. In addition, if the imposition of any of these penalties or requirement to restructure our corporate structure causes us to lose the rights to direct the activities of the Group VIEs or our right to receive its economic benefits, we would no longer be able to consolidate the financial results of such VIEs in the Group's consolidated financial statements. However, we do not believe that such actions would result in the liquidation or dissolution of our company, our wholly-owned subsidiaries in China or the Group VIEs or their subsidiaries. See "Item 4. Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders."

Contractual arrangements in relation to the Group VIEs may be subject to scrutiny by the PRC tax authorities and they may determine that the Group VIEs owe additional taxes, which could negatively affect the Group's results of operations and financial condition and the value of your investment.

Under applicable PRC laws and regulations, arrangements and transactions among related parties may be subject to audit or challenge by the PRC tax authorities. The PRC enterprise income tax law requires every enterprise in China to submit its annual enterprise income tax return together with a report on transactions with its related parties to the relevant tax authorities. The tax authorities may impose reasonable adjustments on taxation if they have identified any related party transactions that are inconsistent with arm's length principles. We may face material and adverse tax consequences if the PRC tax authorities determine that the contractual arrangements among our wholly-owned PRC subsidiaries, Shanghai Quyun, Shanghai Zhicao and Hainan Mengbang, the Group VIEs and their respective shareholders were not entered into on an arm's length basis in such a way as to result in an impermissible reduction in taxes under applicable PRC laws, regulations and rules, and adjust their income in the form of a transfer pricing adjustment. A transfer pricing adjustment could, among other things, result in a reduction of expense deductions recorded by Shanghai Quyun, Shanghai Zhicao, Hainan Mengbang or the Group VIEs for PRC tax purposes, which could in turn increase their tax liabilities without reducing their tax expenses. In addition, if our wholly-owned PRC subsidiaries, Shanghai Quyun, Shanghai Zhicao and Hainan Mengbang, request the shareholders of the Group VIEs to transfer their equity interests in the Group VIEs at nominal or no value pursuant to these contractual arrangements, such transfer could be viewed as a gift and subject the relevant subsidiaries to PRC income tax. Furthermore, the PRC tax authorities may impose late payment fees and other penalties on our PRC subsidiaries, Shanghai Quyun, Shanghai Zhicao and Hainan Mengbang, and the Group VIEs for adjusted but unpaid taxes according to applicable regulations. The Group's financial position could be materially and adversely affected if the tax liabilities

We may lose the ability to use and enjoy assets held by the Group VIEs that are material to the operation of the Group's business if the entity goes bankrupt or becomes subject to a dissolution or liquidation proceeding.

The Group VIEs hold substantially all of the Group's assets. Under the contractual arrangements, the Group VIEs may not and their respective shareholders may not cause it to, in any manner, sell, transfer, mortgage or dispose of its assets or its legal or beneficial interests in the business without our prior consent. However, in the event that the shareholders of the Group VIEs breach these contractual arrangements and voluntarily liquidate the Group VIEs, or the Group VIEs declare bankruptcy and all or part of their assets become subject to liens or rights of third-party creditors, or are otherwise disposed of without our consent, we may be unable to continue some or all of the Group's business activities, which could materially and adversely affect the Group's business, results of operations and financial condition. If any of the Group VIEs undergoes a voluntary or involuntary liquidation proceeding, independent third-party creditors may claim rights to some or all of these assets, thereby hindering our ability to operate the Group's business, which could materially and adversely affect the Group's business, results of operations and financial condition.

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

Under PRC law, legal documents for corporate transactions, including agreements and contracts that the Group's business relies on, are executed using the chop or seal of the signing entity or with the signature of a legal representative whose designation is registered and filed with the relevant local branch of the SAMR. The Group generally executes legal documents by affixing chops or seals, rather than having the designated legal representatives sign the documents.

The Group has three major types of chops — corporate chops, contract chops and finance chops. The Group uses corporate chops generally for documents to be submitted to government agencies, such as applications for changing business scope, directors or company name, and for legal letters. The Group uses contract chops for executing leases and commercial contracts. The Group uses finance chops generally for making and collecting payments, including issuing invoices. Use of corporate chops and contract chops must be approved by our legal department and administrative department, and use of finance chops must be approved by our finance department. The chops of our subsidiaries and the Group VIEs and their subsidiaries are generally held by the relevant entities so that documents can be executed locally. Although we usually utilize chops to execute contracts, the registered legal representatives of our subsidiaries and the Group VIEs and their subsidiaries have the apparent authority to enter into contracts on behalf of such entities without chops, unless such contracts set forth otherwise.

In order to maintain the physical security of the Group's chops, the Group generally has them stored in secured locations accessible only to the designated key employees of our legal, administrative or finance departments. The Group's designated legal representatives generally do not have access to the chops. Although the Group has approval procedures in place and monitor its key employees, including the designated legal representatives of our subsidiaries and the Group VIEs and their subsidiaries, the procedures may not be sufficient to prevent all instances of abuse or negligence. There is a risk that the Group's key employees or designated legal representatives could abuse their authority, for example, by binding our subsidiaries and the Group VIEs and their subsidiaries with contracts against our interests, as the Group would be obligated to honor these contracts if the other contracting party acts in good faith in reliance on the apparent authority of the Group's chops or signatures of its legal representatives. If any designated legal representative obtains control of the chop in an effort to obtain control over the relevant entity, the Group would need to have a shareholder or board resolution to designate a new legal representative and to take legal action to seek the return of the chop, apply for a new chop with the relevant authorities, or otherwise seek legal remedies for the legal representative's misconduct. If any of the designated legal representatives obtains and misuses or misappropriates the Group's chops and seals or other controlling intangible assets for whatever reason, we could experience disruption to the Group's normal business operations. The Group may have to take corporate or legal action, which could involve significant time and resources to resolve while distracting management from the Group's operations, and the Group's business and operations may be materially and adversely affected.

Substantial uncertainties exist with respect to whether the controlling of PRC onshore variable interest entities by foreign investors via contractual arrangements will be recognized as "foreign investment" and how it may impact the viability of the Group's current corporate structure and operations.

On March 15, 2019, the National People's Congress of the PRC adopted the Foreign Investment Law, which came into force on January 1, 2020. The Foreign Investment Law defines the "foreign investor, by itself or together with other investors establishes a foreign invested enterprises in China; (ii) the foreign investor, by itself or together with other investors establishes a foreign invested enterprises in China; (ii) the foreign investor, by itself or together with other investors in China; (iii) the foreign investor, by itself or together with other investors, invests and establishes new projects in China; (iv) the foreign investor invests through other approaches as stipulated by laws, administrative regulations or otherwise regulated by the State Council. The Foreign Investment Law keeps silent on how to define and regulate the VIEs, while adding a catch-all clause that "other approaches as stipulated by laws, administrative regulations or otherwise regulated by the State Council" can fall into the concept of "foreign investment," which leaves uncertainty as to whether the foreign investor's controlling PRC onshore variable interest entities via contractual arrangements will be recognized as "foreign investment." Pursuant to the Foreign Investment Law, PRC governmental authorities will regulate foreign investment by applying the principle of pre-entry national treatment together with a "negative list," which will be promulgated by or promulgated with approval by the State Council. Foreign investors are prohibited from making any investments in the industries which are listed as "prohibited" in such negative list; and, after satisfying certain additional requirements and conditions as set forth in the "negative list," are allowed to make investments in the industries which are listed as "restricted" in such negative list. For any foreign investor that fails to comply with the negative list, the competent authorities are entitled to ban its investment activities, require such investor to take measures to corre

It is uncertain whether any of the businesses that the Group currently operates or plans to operate in the future through the Group VIEs would be on the "negative list" as updated by the governmental authority from time to time and therefore be subject to any foreign investment restrictions or prohibitions. If any of the businesses that we operate were in the "restricted" or "prohibited" category on the to-be-updated "negative list," such determination would materially and adversely affect the value of the ADSs. We also face uncertainties as to whether the to-be-updated "negative list" would mandate further actions, such as MOFCOM market entry clearance, to be completed by companies with existing VIE structure and whether such clearance can be timely obtained, or at all. If we are not able to obtain any approval when required, the Group's VIE structure may be regarded as invalid and illegal under the promulgated Foreign Investment Law, which may materially and adversely affect the Group's business, results of operations and financial condition, for instance, we may not be able to (i) continue the Group's business in China through our contractual arrangements with the Group VIEs, (ii) exert effective control over the Group VIEs, or (iii) consolidate the financial results of, and receive economic benefits from the Group VIEs under existing contractual arrangements.

In addition, our corporate governance practice may be materially impacted and our compliance costs could increase if we were considered as a FIE under the Foreign Investment Law. For instance, the Foreign Investment Law purports to impose stringent ad hoc and periodic information reporting requirements on foreign investors and the applicable FIEs. Any company found to be non-compliant with these information reporting obligations could potentially be subject to fines and/or administrative liabilities, according to the Foreign Investment Law.

The PRC Foreign Investment Law leaves leeway for future laws, administrative regulations or provisions of the State Council to provide for contractual arrangements as a form of foreign investment. It is therefore uncertain whether the Group's corporate structure will be seen as violating foreign investment rules as we are currently using the contractual arrangements to operate certain businesses in which foreign investors are currently prohibited from or restricted to investing. Furthermore, if future laws, administrative regulations or provisions of 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. If we fail to take appropriate and timely measures to comply with any of these or similar regulatory compliance requirements, the Group's current corporate structure, corporate governance and business operations could be materially and adversely affected.

Risks Relating to Doing Business in China

Changes in the political and economic policies of the PRC government may materially and adversely affect the Group's business, results of operations and financial condition and may result in the Group's inability to sustain our growth and expansion strategies. The PRC government may intervene or influence our operations at any time, which could result in a material change in the Group's operations and/or the value of our ADSs. Any actions by the Chinese government to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers could significantly limit or completely hinder the Group's ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or become worthless.

Substantially all of the Group's operations are conducted in the PRC and substantially all of the Group's revenue is sourced from the PRC. Accordingly, the Group's business, results of operations and financial condition are affected to a significant extent by economic, political and legal developments in the PRC.

The PRC economy differs from the economies of most developed countries in many respects, including the extent of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. Although the PRC 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 PRC government continues to play a significant role in regulating industry development by imposing industrial policies. The PRC government also exercises significant control over China's economic growth by allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy, regulating financial services and institutions and providing preferential treatment to particular industries or companies.

While the PRC economy has experienced significant growth in the past three decades, growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall PRC economy, but may also have a negative effect on the Group. The Group's business, results of operations and financial condition could be materially and adversely affected by government control over capital investments or changes in tax regulations that are applicable to the Group. The PRC government also has significant authority to exert influence on the ability of a Chinese-based issuer, such as our company, to conduct its business. The PRC government may intervene or influence the Group's operations at any time, which could result in a material change in the Group's operations and/or the value of our ADSs and Class A ordinary shares. In particular, there have been recent statements by the PRC government indicating an intent to exert more oversight and control over offerings that are conducted overseas and/or foreign investment in China-based issuers. Any such regulatory oversight or control could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of our securities to significantly decline or become worthless. In addition, the PRC government has implemented in the past certain measures to control the pace of economic growth. These measures may cause decreased economic activity, which in turn could lead to a reduction in demand for the Group's services and consequently materially and adversely affect the Group's business, results of operations and financial condition, and cause the value of our securities to significantly decline or become worthless.

There are uncertainties regarding the interpretation and enforcement of PRC laws, rules and regulations. In addition, rules and regulations in China can change quickly with little advance notice.

Substantially all of the Group's operations are conducted in the PRC, and are governed by PRC laws, rules and regulations. Our PRC subsidiaries and the Group VIEs and their subsidiaries are subject to laws, rules and regulations applicable to foreign investment in China. The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but have limited precedential value.

In 1979, the PRC government began to promulgate a comprehensive system of laws, rules and regulations governing economic matters in general. The overall effect of legislation over the past three decades has significantly enhanced the protections afforded to various forms of foreign investment in China. However, China has not developed a fully integrated legal system, and recently enacted laws, rules and regulations may not sufficiently cover all aspects of economic activities in China or may be subject to significant degrees of interpretation by PRC regulatory agencies. In particular, because these laws, rules and regulations are relatively new, and because of the limited number of published decisions and the nonbinding nature of such decisions, and because the laws, rules and regulations often give the relevant regulator significant discretion in how to enforce them, the interpretation and enforcement of these laws, rules and regulations involve uncertainties and can be inconsistent and unpredictable. In addition, rules and regulations in China can change quickly with little advance notice. Uncertainties due to evolving laws and regulations could impede the ability of a China-based issuer, such as us, to obtain or maintain permits or licenses required to conduct business in China. In the absence of required permits or licenses, governmental authorities could impose material sanctions or penalties on us. Moreover, 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 which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until after the occurrence of the violation.

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

The approval of and the filing with the China Securities Regulatory Commission, or the CSRC, or other PRC government authorities may be required in connection with our future offshore offerings under PRC law, which may hinder our ability to continue to offer securities to investors offshore; in addition, the regulation of the CSRC or other PRC regulatory agencies establish complex procedures for acquisitions conducted by foreign investors that could make it more difficult for us to grow through acquisitions.

On August 8, 2006, six PRC regulatory agencies, including the MOFCOM, the State-Owned Assets Supervision and Administration Commission, or the SASAC, the SAIC, the SAIC, the CSRC, and the State Administration of Foreign Exchange, or the SAFE, jointly adopted the *Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors*, or the M&A Rules, which came into effect on September 8, 2006 and were amended on June 22, 2009. The M&A Rules include, among other things, provisions that purport to require that an offshore special purpose vehicle that is controlled by PRC domestic companies or individuals and that has been formed for the purpose of an overseas listing of securities through acquisitions of PRC domestic companies or assets using shares of such special purpose vehicles or shares held by its shareholders as considerations to obtain the approval of the CSRC prior to the listing and trading of such special purpose vehicle's securities on an overseas stock exchange. On September 21, 2006, the CSRC published on its official website procedures regarding its approval of overseas listings by special purpose vehicles. However, substantial uncertainty remains regarding the scope and applicability of the M&A Rules to offshore special purpose vehicles.

These regulations also established additional procedures and requirements that are expected to make merger and acquisition activities in China by foreign investors more time-consuming and complex. For example, the M&A rules require that the MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise if (i) any important industry is concerned, (ii) such transaction involves factors that have or may have impact on the national economic security, or (iii) such transaction will lead to a change in control of a domestic enterprise which holds a famous trademark or PRC time-honored brand. The approval from the MOFCOM shall be obtained in circumstances where overseas companies established or controlled by PRC enterprises or residents acquire affiliated domestic companies. Mergers, acquisitions or contractual arrangements that allow one market player to take control of or to exert decisive impact on another market player must also be notified in advance to the SAMR when the threshold under the Provisions on Thresholds for Prior Notification of Concentrations of Undertakings, or the Prior Notification Rules, issued by the State Council in August 2008 (as amended in September 2018) is triggered. In addition, the security review rules issued by the MOFCOM that became effective in September 2011 specify that mergers and acquisitions by foreign investors that raise "national defense and security" concerns and mergers and acquisitions through which foreign investors may acquire de facto control over domestic enterprises that raise "national security" concerns are subject to strict review by the MOFCOM, and the rules prohibit any activities attempting to bypass a security review, including by structuring the transaction through a proxy or contractual control arrangement. We may grow the Group's business in part by acquiring other companies operating in our industry. Complying with the requirements of the new regulations to complete such transactions could be timeconsuming, and any required approval processes, including approval from the MOFCOM, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand the Group's business or maintain our market share. See "Item 4. Information on the Company — C. Regulations — Regulations Related to Mergers and Acquisitions and Overseas Listings."

Furthermore, it is uncertain when and whether we will be required to obtain permission from the PRC government to maintain our listing status on U.S. exchanges in the future, and even when such permission is obtained, whether it will be later denied or rescinded. On December 24, 2021, the CSRC released the Provisions of the State Council on the Administration of Overseas Securities Offering and Listing by Domestic Companies (Draft for Comments), or the "Draft Administrative Provisions, and the Administrative Measures for the Filing of Overseas Securities Offering and Listing by Domestic Companies (Draft for Comments), or the Draft Filing Measures, both of which had a comment period that expired January 23, 2022. The Draft Administrative Provisions and the Draft Filing Measures, if adopted in their current form, will comprehensively improve and reform the existing regulatory regime for overseas offering and listing conducted by PRC companies both directly or indirectly through an overseas holding company by adopting a filing-based regulatory regime. If the CSRC or any other PRC regulatory body subsequently determines that we need to file with the CSRC or obtain the CSRC's approval for any future offering of securities by us outside of the PRC or if the CSRC or any other PRC government authorities promulgates any interpretation or implements rules that would require us to file with or obtain approvals of the CSRC or other governmental bodies for any such offering, we may face adverse actions or sanctions by the CSRC or other PRC regulatory agencies if we are not exempted from, and are unable to comply with, such requirements, which may result in fines and penalties assessed on the Group's operations in China, restrictions on the Group's operations in China, delays in or restrictions on the repatriation of the proceeds from any such offering into the PRC, restrictions on or prohibition of the payments or remittance of dividends by our subsidiaries in China, or other actions that could have a material and adverse effect on the Group's business, reputation, financial condition, results of operations, prospects, as well as the trading price of the ADSs. The CSRC or other PRC regulatory agencies may also take actions requiring us, or making it advisable for us, to halt any such offering before the settlement and delivery of the securities that we may offer offshore. Any such circumstance could also significantly limit or completely hinder our ability to continue to offer securities to investors offshore and cause the value of such securities to significantly decline. As of the date of this annual report, the Draft Administrative Provisions and the Draft Filing Measures were released for public comment only and it is still uncertain when the final versions of these new provisions and measures will be issued and take effect, how they will be enacted, interpreted or implemented, and whether they will affect us.

PRC laws and regulations mandate complex procedures for some acquisitions of Chinese companies by foreign investors, which could make it more difficult for us to make acquisitions in China.

PRC laws and regulations, such as the M&A Rules, and other relevant rules, established additional procedures and requirements that are expected to make merger and acquisition activities in China by foreign investors more time-consuming and complex, including requirements in some instances that the MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor takes control of a PRC domestic enterprise, or that the approval from the MOFCOM be obtained in circumstances where overseas companies established or controlled by PRC enterprises or residents acquire affiliated domestic companies. PRC laws and regulations also require certain merger and acquisition transactions to be subject to a merger control security review. In August 2011, the MOFCOM promulgated the Rules on Implementation of Security Review System, or MOFCOM Security Review Rules, effective from September 1, 2011, further provide that, when deciding whether a specific merger or acquisition of a domestic enterprise by foreign investors is subject to a security review by the MOFCOM, the principle of substance over form should be applied and foreign investors are prohibited from bypassing the security review requirement by structuring transactions through proxies, trusts, indirect investments, leases, loans, control through contractual arrangements of offshore transaction. Factors that the MOFCOM considers in its review are whether (i) an important industry is involved, (ii) such transaction involves factors that have had or may have an impact on national economic security and (iii) such transaction will lead to a change in control of a domestic enterprise that holds a well-known PRC trademark or a time-honored PRC brand. Furthermore, on December 19, 2020, the NDRC and the MOFCOM promulgated the Measures for Security Review of Foreign Investment, or the Foreign Investment Security Review Measures, which took effect on January 18, 2021. Under the Foreign Investment Security Review Measures, investment in certain key areas which results in acquiring the actual control of the assets is required to obtain approval from designated governmental authorities in advance. As the Foreign Investment Security Review Measures are recently promulgated, there are great uncertainties with respect to its interpretation and implementation. If a business of any target company that we plan to acquire tails into the ambit of security review, we may not be able to successfully acquire such company. In addition, the PRC Anti-Monopoly Law requires that the anti-monopoly law enforcement agency be notified in advance of any concentration of undertaking if certain thresholds are triggered. On October 23, 2020, the SAMR further issued the Interim Provisions on the Review of Concentration of Undertakings, which took effect on December 1, 2020, to further enhance the enforcement on the supervision of concentration of undertakings. Complying with the requirements of the relevant regulations to complete any such transaction could be time-consuming, and any required approval process, including approval from the MOFCOM, or other governmental authorities may delay or inhibit our ability to complete such transactions, which could affect our ability to expand the Group's business.

PRC regulations relating to investments in offshore companies 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 or limit our PRC subsidiaries' ability to increase their registered capital or distribute profits.

The SAFE promulgated the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or SAFE Circular 37, on July 4, 2014, which replaced the former circular commonly known as "SAFE Circular 75" promulgated by the SAFE on October 21, 2005. SAFE Circular 37 requires PRC residents to register with local branches of the SAFE in connection with their direct establishment or indirect control of an offshore entity, for the purpose of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in SAFE Circular 37 as a "special purpose vehicle." Pursuant to SAFE Circular 37, "control" refers to the act through which a PRC resident obtains the right to carry out business operation of, to gain proceeds from or to make decisions on a special purpose vehicle by means of, among others, shareholding entrustment arrangement. SAFE Circular 37 further requires amendment to the registration in the event of any significant changes with respect to the special purpose vehicle, such as change of shareholders of the special purpose vehicle, increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill the required SAFE registration, the PRC subsidiaries of that special purpose vehicle may be prohibited from making profit distributions to the offshore parent and from carrying out subsequent cross-border foreign exchange activities, and the special purpose vehicle may be restricted in its ability to contribute additional capital into its PRC subsidiaries. Moreover, failure to comply with the various SAFE registration requirements described above could result in liability under PRC law for evasion of foreign exchange controls. According to the Notice on Further Simplifying and Improving Policies for the Foreign Exchange Administration of Direct Investment released on February 13, 2015 by the SAFE and amended on December 30, 2019, local banks will examine and handle foreign exchange registration for overseas direct investment, including the initial foreign exchange registration and amendment registration, under SAFE Circular 37 from June 1, 2015.

Mr. Eric Siliang Tan and Mr. Lei Li have completed their initial SAFE registration pursuant to SAFE Circular 37 in 2017, with Innotech Group Holdings Ltd. and News Optimizer (BVI) Ltd. being separately registered as the respective "special purpose vehicle." After transferring all shares in Innotech Group Holdings Ltd. to the trust of which himself is also a beneficiary, Mr. Eric Siliang Tan, as well as all the other beneficiaries of the trust who are PRC residents are required to complete relevant registrations pursuant to SAFE Circular 37. We have notified substantial beneficial owners of our ordinary shares and the beneficiaries of the trust who we know are PRC residents of their filing obligation, including the obligation to make updates under SAFE Circular 37, and the beneficial owners have undertaken to complete relevant registrations as soon as such registration is practical with local SAFE. Nevertheless, we may not be continuously aware of the identities of all of our beneficial owners who are PRC residents. We do not have control over our beneficial owners and there can be no assurance that all of our PRC-resident beneficial owners will comply with SAFE Circular 37 and subsequent implementation rules, and there is no assurance that the registration under SAFE Circular 37 and any amendment will be completed in a timely manner, or will be completed at all. The failure of our beneficial owners who are PRC residents to register or amend their foreign exchange registrations in a timely manner pursuant to SAFE Circular 37 and subsequent implementation rules, or the failure of future beneficial owners of our company who are PRC residents to comply with the registration procedures set forth in SAFE Circular 37 and subsequent implementation rules, may subject such beneficial owners or our PRC subsidiaries to fines and legal sanctions. Failure to register or comply with relevant requirements may also limit our ability to contribute additional capital to our PRC subsidiaries and limit our PRC subsidiaries' ability

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

Pursuant to SAFE Circular 37, PRC residents who participate in equity incentive plans in overseas non-publicly-listed companies due to their position as director, senior management or employees of the PRC subsidiaries of the overseas companies may submit applications to SAFE or its local branches for the foreign exchange registration with respect to offshore special purpose companies. Our directors, executive officers and other employees who are PRC residents and who have been granted options may follow SAFE Circular 37 to apply for the foreign exchange registration before our company becomes an overseas listed company. As an overseas listed company, we and our directors, executive officers and other employees who are PRC residents and who have been granted options are subject to the Notice on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly Listed Company, issued by SAFE in February 2012, according to which, employees, directors, supervisors and other management members participating in any equity incentive plans of an overseas publicly listed company who are PRC residents are required to register with SAFE through a domestic qualified agent, which could be a PRC subsidiary of such overseas listed company, and complete certain other procedures. Failure to complete the SAFE registrations may subject them to fines and legal sanctions and may also limit the ability to make payment under our equity incentive plans or receive dividends or sales proceeds related thereto, or our ability to contribute additional capital into our wholly-foreign owned enterprise's ability to distribute dividends to us. We also face regulatory uncertainties that could restrict our ability to adopt additional equity incentive plans for our directors and employees under PRC law.

We rely to a significant extent on dividends and other distributions on equity paid by our principal operating subsidiaries and the Group VIEs to fund offshore cash and financing requirements. Any limitation on the ability of our PRC operating subsidiaries or the Group VIEs to make payments to us could materially and adversely affect our ability to conduct the Group's business.

We are a holding company and rely to a significant extent on dividends and other distributions on equity paid by our principal operating subsidiaries and on remittances from the Group VIEs for our offshore cash and financing requirements, including the funds necessary to pay dividends and other cash distributions to our shareholders, fund inter-company loans, service any debt we may incur outside of China and pay our expenses. When our principal operating subsidiaries or the Group VIEs incur additional debt, the instruments governing the debt may restrict their ability to pay dividends or make other distributions or remittances to us. Furthermore, the laws, rules and regulations applicable to our PRC subsidiaries and certain other subsidiaries permit payments of dividends only out of their retained earnings, if any, determined in accordance with applicable accounting standards and regulations.

Under PRC laws, rules and regulations, each of our subsidiaries incorporated in China and the Group VIEs is required to set aside at least 10% of its net income each year to fund certain statutory reserves until the cumulative amount of such reserves reaches 50% of its registered capital. These reserves, together with the registered capital, are not distributable as cash dividends. As a result of these laws, rules and regulations, our subsidiaries incorporated in China are restricted in their ability to transfer a portion of their respective net assets to their shareholders as dividends, loans or advances. Certain of our subsidiaries did not have any retained earnings available for distribution in the form of dividends as of December 31, 2021. In addition, registered share capital and capital reserve accounts are also restricted from withdrawal in the PRC, up to the amount of net assets held in each operating subsidiary.

Limitations on the ability of the Group VIEs to make remittance to the wholly-foreign owned enterprise and on the ability of our subsidiaries to pay dividends to us could limit our ability to access cash generated by the operations of those entities, including to make investments or acquisitions that could be beneficial to the Group's businesses, pay dividends to our shareholders or otherwise fund and conduct the Group's businesses.

We may be treated as a resident enterprise for PRC tax purposes under the PRC Enterprise Income Tax Law, and we may therefore be subject to PRC income tax on our global income.

Under the modified Enterprise Income Tax Law and its implementing rules, enterprises established under the laws of jurisdictions outside of China with "de facto management bodies" located in China may be considered PRC tax resident enterprises for tax purposes and may be subject to the PRC enterprise income tax at the rate of 25% on their global income. "De facto management body" refers to a managing body that exercises substantive and overall management and control over the production and business, personnel, accounting books and assets of an enterprise. The SAT issued the *Notice Regarding the Determination of Chinese-Controlled Offshore-Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies*, or Circular 82, on April 22, 2009. Circular 82 provides certain specific criteria for determining whether the "de facto management body" of a Chinese-controlled offshore-incorporated enterprise is located in China. Although Circular 82 only applies to offshore enterprises controlled by PRC enterprises, not those controlled by foreign enterprises or individuals, the determining criteria set forth in 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 offshore enterprises, regardless of whether they are controlled by PRC enterprises. If we were to be considered a PRC resident enterprise, we would be subject to PRC enterprise income tax at the rate of 25% on our global income. In such case, our profitability and cash flow may be materially reduced as a result of our global income being taxed under the Enterprise Income Tax Law. We believe that none of our entities outside of China is a PRC resident enterprise for PRC tax purposes. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body."

Dividends payable to our foreign investors and gains on the sale of ADSs or our ordinary shares by our foreign investors may become subject to PRC tax.

Under the modified Enterprise Income Tax Law and its implementation regulations issued by the State Council, a 10% PRC withholding tax is applicable to dividends payable 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. Similarly, any gain realized on the transfer of ADSs or ordinary shares by such investors is also subject to PRC tax at a current rate of 10%, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions, 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 ordinary shares, and any gain realized from the transfer of our ordinary shares or the ADSs, would be treated as income derived from sources within the PRC and would as a result be subject to PRC taxation. Furthermore, if we are deemed a PRC resident enterprise, dividends payable to individual investors who are non-PRC residents and any gain realized on the transfer of ADSs or ordinary shares by such investors may be subject to PRC tax at a current rate of 20%, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions. If we or any of our subsidiaries established outside China are considered a PRC resident enterprise, it is unclear whether holders of ADSs or our ordinary shares would be able to claim the benefit of income tax treaties or agreements entered into between China and other countries or areas. If dividends payable to our non-PRC investors, or gains from the transfer of ADSs or our ordinary shares by such investors, are deemed as income derived from sources within the PRC and thus are subject to PRC tax, the value of your inv

We and our shareholders face uncertainties with respect to indirect transfers of equity interests in PRC resident enterprises or other assets attributed to a Chinese establishment of a non-Chinese company, or immovable properties located in China owned by non-Chinese companies.

On February 3, 2015, the SAT issued the Bulletin on Issues of Enterprise Income Tax on Indirect Transfers of Assets by Non-PRC Resident Enterprises, or Bulletin 7, which partially replaced and supplemented previous rules under the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-PRC Resident Enterprises, or SAT Circular 698, issued by the SAT, on December 10, 2009. Pursuant to this Bulletin 7, an "indirect transfer" of assets, including equity interests in a PRC resident enterprise, by non-PRC resident enterprises may be re-characterized and treated as a direct transfer of PRC taxable assets, if such arrangement does not have a reasonable commercial purpose and was established for the purpose of avoiding payment of PRC enterprise income tax. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax. According to Bulletin 7, "PRC taxable assets" include assets attributed to an establishment in China, immovable properties located in China, and equity investments in PRC resident enterprises, in respect of which gains from their transfer by a direct holder, being a non-PRC resident enterprise, would be subject to PRC enterprise income taxes. When determining whether there is a "reasonable commercial purpose" of the transaction arrangement, features to be taken into consideration include: whether the main value of the equity interest of the relevant offshore enterprise derives from PRC taxable assets; whether the assets of the relevant offshore enterprise mainly consists of direct or indirect investment in China or if its income mainly derives from China; whether the offshore enterprise and its subsidiaries directly or indirectly holding PRC taxable assets have real commercial nature which is evidenced by their actual function and risk exposure; the duration of existence of the business model and organizational structure; the replicability of the transaction by direct transfer of PRC taxable assets; and the tax situation of such indirect transfer and applicable tax treaties or similar arrangements. In respect of an indirect offshore transfer of assets of a PRC establishment, the resulting gain is to be included with the enterprise income tax filing of the PRC establishment or place of business being transferred, and would consequently be subject to PRC enterprise income tax at a rate of 25%. Where the underlying transfer relates to the immovable properties located in China or to equity investments in a PRC resident enterprise, which is not related to a PRC establishment or place of business of a non-resident enterprise, a PRC enterprise income tax of 10% would apply, subject to available preferential tax treatment under applicable tax treaties or similar arrangements, and the party who is obligated to make the transfer payments has the withholding obligation. Where the payor fails to withhold any or sufficient tax, the transferor is required to declare and pay such tax to the tax authority by itself within the statutory time limit. Late payment of applicable tax will subject the transferor to default interest. Bulletin 7 does not apply to transactions of sale of shares by investors through a public stock exchange where such shares were acquired from a transaction through a public stock exchange. On October 17, 2017, the SAT promulgated the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Circular 37, which was amended and became effective on June 15, 2018, and SAT Circular 698 then was repealed with effect from December 1, 2017. SAT Circular 37, among other things, simplified procedures of withholding and payment of income tax levied on non-resident enterprises.

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

We are subject to restrictions on currency exchange.

Substantially all of the Group's revenue is denominated in Renminbi. The Renminbi is currently convertible under the "current account," which includes dividends, trade and service-related foreign exchange transactions, but not under the "capital account," which includes foreign direct investment and loans, including loans we may secure from our onshore subsidiaries or the Group VIEs. Currently, certain of our PRC subsidiaries may purchase foreign currency for settlement of "current account transactions," including payment of dividends to us, without the approval of the SAFE by complying with certain procedural requirements. However, the relevant PRC governmental authorities may limit or eliminate our ability to purchase foreign currencies in the future for current account transactions. Foreign exchange transactions under the capital account remain subject to limitations and require approvals from, or registration with, the SAFE and other relevant PRC governmental authorities. Since a significant amount of the Group's future revenue and cash flow will be denominated in Renminbi, any existing and future restrictions on currency exchange may limit our ability to utilize cash generated in Renminbi to fund our business activities outside of the PRC or pay dividends in foreign currencies to our shareholders, and may limit our ability to obtain foreign currency through debt or equity financing for our onshore subsidiaries and the Group VIEs.

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 the Group VIEs, or making additional capital contributions to our PRC subsidiaries.

We, as an offshore holding company, are permitted under PRC laws and regulations to provide funding to our PRC subsidiaries, which are treated as foreign-invested enterprises under PRC laws, through loans or capital contributions. However, loans by us to our PRC subsidiaries to finance their activities cannot exceed statutory limits and must be registered with the local counterpart of SAFE and capital contributions to our PRC subsidiaries are subject to the requirement of making necessary filings or registrations through enterprise registration system with relevant governmental authorities in China.

SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming the Administration of Foreign Exchange Settlement of Capital of Foreign-invested Enterprises, or Circular 19, effective on June 1, 2015, in replacement of the Circular on the Relevant Operating Issues Concerning the Improvement of the Administration of the Payment and Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular 142, the Notice from the State Administration of Foreign Exchange on Relevant Issues Concerning Strengthening the Administration of Foreign Exchange Businesses, or Circular 59, and the Circular on Further Clarification and Regulation of the Issues Concerning the Administration of Certain Capital Account Foreign Exchange Businesses, or Circular 45. According to Circular 19, the flow and use of the Renminbi capital converted from foreign currency-denominated registered capital of a foreign-invested company is regulated such that Renminbi capital may not be used for the issuance of Renminbi entrusted loans, the repayment of inter-enterprise loans or the repayment of banks loans that have been transferred to a third party. Although Circular 19 allows Renminbi capital converted from foreign currency-denominated registered capital of a foreign-invested enterprise to be used for equity investments within the PRC, it also reiterates the principle that Renminbi converted from the foreign currency-denominated capital of a foreign-invested company may not be directly or indirectly used for purposes beyond its business scope. Thus, it is unclear whether SAFE will permit such capital to be used for equity investments in the PRC in actual practice. SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, or Circular 16, effective on June 9, 2016, which reiterates some of the rules set forth in Circular 19, but changes the prohibition against using Renminbi capital converted from foreign currency-denominated registered capital of a foreign-invested company to issue Renminbi entrusted loans to a prohibition against using such capital to issue loans to non-associated enterprises. Violations of SAFE Circular 19 and Circular 16 could result in administrative penalties. Circular 19 and Circular 16 may significantly limit our ability to transfer any foreign currency we hold to our PRC subsidiaries, which may adversely affect our liquidity and our ability to fund and expand our business in the PRC.

Due to the restrictions imposed on loans in foreign currencies extended to any PRC domestic companies, we are not likely to make such loans to the Group VIEs and their subsidiaries, each a PRC domestic company. Meanwhile, we are not likely to finance the activities of the Group VIEs and their subsidiaries by means of capital contributions given the restrictions on foreign investment in the businesses that are currently conducted by the Group VIEs and their subsidiaries.

In light of the various requirements imposed by PRC regulations on loans to, and direct investment in, PRC entities by offshore holding companies, we cannot assure you that we will be able to complete the necessary government registrations or obtain the necessary government approvals on a timely basis, if at all, with respect to future loans to our PRC subsidiaries or any of the Group VIEs or future capital contributions by us to our PRC subsidiaries. As a result, uncertainties exist as to our ability to provide prompt financial support to our PRC subsidiaries or the Group VIEs and their subsidiaries when needed. If we fail to complete such registrations or obtain such approvals, our ability to use foreign currency and to capitalize or otherwise fund the Group's PRC operations may be negatively affected, which could materially and adversely affect the Group's liquidity and its ability to fund and expand its business.

Fluctuations in exchange rates could result in foreign currency exchange losses and could materially reduce the value of your investment.

The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions and the foreign exchange policy adopted by the PRC government. On July 21, 2005, the PRC government changed its policy of pegging the value of the Renminbi to the U.S. dollar. Following the removal of the U.S. dollar peg, the Renminbi appreciated more than 20% against the U.S. dollar over the following three years. Between July 2008 and June 2010, this appreciation halted and the exchange rate between the Renminbi and the U.S. dollar remained within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. On November 30, 2015, the Executive Board of the International Monetary Fund completed the regular five-year review of the basket of currencies that make up the Special Drawing Right, or the SDR, and decided that with effect from October 1, 2016, Renminbi is determined to be a freely usable currency and will be included in the SDR basket as a fifth currency, along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2016, the Renminbi has depreciated significantly in the backdrop of a surging U.S. dollar and persistent capital outflows of China. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system, and we cannot assure you that the Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

Substantially all of the Group's revenue and costs are denominated in Renminbi. We are a holding company and we rely on dividends paid by our operating subsidiaries in China for the Group's cash needs. Any significant fluctuation of Renminbi against the U.S. dollar may materially and adversely affect the Group's results of operations and financial position reported in Renminbi when translated into U.S. dollars, and the value of, and any dividends payable in U.S. dollars. To the extent that we need to convert U.S. dollars into Renminbi for the Group's operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount.

The Group could be adversely affected by political tensions between the United States and China.

Political tensions between the United States and China have escalated in recent years due to, among other things, the trade war between the two countries since 2018, the COVID-19 pandemic, the PRC National People's Congress' passage of Hong Kong national security legislation, the imposition of U.S. sanctions on certain Chinese officials from China's central government and the Hong Kong Special Administrative Region by the U.S. government, and the imposition of sanctions on certain individuals from the U.S. by the Chinese government, various executive orders issued by former U.S. President Donald J. Trump, such as the one issued in August 2020 that prohibits certain transactions with ByteDance Ltd., Tencent Holdings Ltd. and the respective subsidiaries of such companies, the executive order issued in November 2020 that prohibits U.S. persons from transacting publicly traded securities of certain "Communist Chinese military companies" named in such executive order, as well as the executive order issued in January 2021 that prohibits such transactions as are identified by the U.S. Secretary of Commerce with certain "Chinese connected software applications," including Alipay and WeChat Pay, as well as the Rules on Counteracting Unjustified Extra-territorial Application of Foreign Legislation and Other Measures promulgated by China's Ministry of Commerce, or MOFCOM, on January 9, 2021, which will apply to situations where the extraterritorial application of foreign legislation and other measures, in violation of international law and the basic principles of international relations, unjustifiably prohibits or restricts the citizens, legal persons or other organizations of China from engaging in normal economic, trade and related activities with a third State (or region) or its citizens, legal persons or other organizations. Rising political tensions between China and the U.S. could reduce levels of trades, investments, technological exchanges and other economic activities between the two major economies, which would have a material adverse effect on global economic conditions and the stability of global financial markets. The measures taken by the U.S. and Chinese governments may have the effect of restricting the Group's ability to transact or otherwise do business with entities within or outside of China and may cause investors to lose confidence in Chinese companies and counterparties, including us. If we were unable to conduct the Group's business as it is currently conducted as a result of such regulatory changes, the Group's business, results of operations and financial condition would be materially and adversely affected.

Furthermore, there have been recent media reports on deliberations within the U.S. government regarding potentially limiting or restricting China-based companies from accessing U.S. capital markets, and delisting China-based companies from U.S. national securities exchanges. In January 2021, after reversing its own delisting decision, the NYSE ultimately resolved to delist China Mobile, China Unicom and China Telecom in compliance with the executive order issued in November 2020, after receiving additional guidance from the U.S. Department of Treasury and its Office of Foreign Assets Control. These delistings have introduced greater confusion and uncertainty about the status and prospects of Chinese companies listed on the U.S. stock exchanges. If any further such deliberations were to materialize, the resulting legislation may have a material and adverse impact on the stock performance of China-based issuers listed in the United States such as us, and we cannot assure you that we will always be able to maintain the listing of our ADSs on a national stock exchange in the U.S., such as the NYSE or the Nasdaq Stock Market, or that you will always be allowed to trade our shares or ADSs.

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

Our independent registered public accounting firm that issues the audit report included in our annual report filed with the SEC, as auditors of companies that are traded publicly in the U.S. and a firm registered with the U.S. Public Company Accounting Oversight Board, or the PCAOB, is required by the laws of the U.S. to undergo regular inspections by the PCAOB to assess its compliance with the laws of the U.S. and professional standards. According to Article 177 of the PRC Securities Law which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of the PRC. Accordingly, without the consent of the competent PRC securities regulators and relevant authorities, no organization or individual may provide the documents and materials relating to securities business activities to overseas parties. Because our auditors are located in the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, our auditors are not currently inspected by the PCAOB.

On May 24, 2013, PCAOB announced that it had entered into a Memorandum of Understanding on Enforcement Cooperation with the CSRC and the Ministry of Finance, which establishes a cooperative framework between the parties for the production and exchange of audit documents relevant to investigations in the U.S. and China. PCAOB continues to be in discussions with the CSRC and the Ministry of Finance to permit joint inspections in the PRC of audit firms that are registered with PCAOB and audit Chinese companies that trade on U.S. exchanges. On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statement reflects the U.S. regulators' heightened interest in this issue. In a statement issued on December 9, 2019, the SEC reiterated concerns over the inability of the PCAOB to conduct inspections of the audit firm work papers with respect to U.S. listed companies that have operations in China, and emphasized the importance of audit quality in emerging markets, such as China. On April 21, 2020, the SEC and the PCAOB issued a new joint statement, reminding the investors that in investing in companies that are based in or have substantial operations in many emerging markets, including China, there is substantially greater risk that disclosures will be incomplete or misleading, and there is also a greater risk of fraud. In the event of investor harm, there is substantially less ability to bring and enforce SEC, DOJ and other U.S. regulatory actions, in comparison to U.S. domestic companies, and the joint statement reinforced past SEC and PCAOB statements on matters including the difficulty to inspect audit work papers in China and its potential harm to investors.

Inspections of other firms that the PCAOB has conducted outside China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections. As a result, we and investors in our ADSs are deprived of the benefits of such PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of the Group's consolidated financial statements.

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

The Holding Foreign Companies Accountable Act, or the HFCAA, was signed into law on December 18, 2020. The HFCAA states that if the SEC determines that we are an issuer that has filed audit reports issued by a registered public accounting firm that has not been subject to inspection for the PCAOB, or a covered issuer, for three consecutive years beginning in 2021, the SEC shall prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States.

The SEC and the PCAOB have adopted new rules to implement the HFCAA. Specifically, on November 5, 2021, the SEC announced the approval of the PCAOB's new rule related to the PCAOB's responsibilities under the HFCAA, which provides a framework for the PCAOB to use when determining, as contemplated under the HFCAA, whether it is unable to inspect or investigate completely registered public accounting firms located in a foreign jurisdiction because of a position taken by one or more authorities in that jurisdiction. On December 2, 2021, the SEC announced the adoption of final amendments to implement the submission and disclosure requirement of the HFCAA following its interim final amendments announced in March 2021. The adopting release establishes the SEC's procedures for identifying covered issuers and for prohibiting the trading of covered issuers' securities. The SEC will identify covered issuers as early as possible after companies file their annual reports for fiscal years beginning after December 18, 2020 and on a rolling basis, and will impose a trading prohibition on an issuer after it is identified as a covered issuer for three consecutive years. The final amendments also include requirements to disclose information, including the auditor name and location, the percentage of shares of the issuer owned by governmental entities, whether governmental entities in the applicable foreign jurisdiction with respect to the auditor has a controlling financial interest with respect to the issuer, the name of each official of the Chinese Communist Party who is a member of the board of the issuer, and whether the articles of incorporation of the issuer contains any charter of the Chinese Communist Party. Furthermore, pursuant to the HFCAA, the PCAOB issued a report on December 16, 2021 notifying the SEC of its determination that it is unable to inspect or investigate completely registered public accounting firms headquartered in mainland China or Hong Kong. The PCAOB identified our auditor as one of the registered public accounting firms that the PCAOB is unable to inspect or investigate completely. In March 2022, the SEC issued its first "conclusive list of issuers identified under the HFCAA" indicating that those companies are now formally subject to the delisting provisions if they remain on the list for three consecutive years. We anticipate being added to the list shortly after the filing of this annual report on Form 20-F.

Enactment of the HFCAA and other efforts to increase the U.S. regulatory access to audit information could cause investor uncertainty as to Chinabased issuers' ability to maintain their listings on the U.S. national securities exchanges, including us, and the market price of the Class A ordinary shares and/or ADSs could be adversely affected. We cannot assure you that we will not be identified by the SEC as an issuer whose audit report is prepared by auditors that the PCAOB is unable to inspect or investigate. We cannot assure you that, once we have a "non-inspection" year, we will be able to take remedial measures in a timely manner. Whether the PCAOB will be able to conduct inspections of our auditor before the issuance of our financial statements on Form 20-F for the year ending December 31, 2023, which is due by April 30, 2024, or at all, is subject to substantial uncertainty and depends on a number of factors out of our and our auditor's control. If our auditor is unable to be inspected and we are unable to meet the PCAOB inspection requirement in time, we could be delisted from NASDAQ and our ADSs will not be permitted for trading "over-the-counter" either. If our shares and ADSs are prohibited from trading in the United States, there is no certainty that we will be able to list on a non-U.S. exchange or that a market for our shares will develop outside of the United States. Such a prohibition would substantially impair your ability to sell or purchase our ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of our ADSs. Also, such a prohibition would significantly affect our ability to raise capital on terms acceptable to us, or at all, which would have a material adverse impact on our business, financial condition, and prospects.

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

If additional remedial measures are imposed on the "big four" PRC-based accounting firms, including our independent registered public accounting firm, in administrative proceedings brought by the SEC alleging such firms' failure to meet specific criteria set by the SEC with respect to requests for the production of documents, we could be unable to timely file future financial statements in compliance with the requirements of the Exchange Act.

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

In late 2012, this impasse led the SEC to commence administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the Chinese accounting firms, including our independent registered public accounting firm. In January 2014, the administrative law judge reached an initial decision to impose penalties on the firms including a temporary suspension of their right to practice before the SEC. The accounting firms filed a petition for review of the initial decision. On February 6, 2015, before a review by the commissioners of the SEC had taken place, the firms reached a settlement with the SEC. Under the settlement, the SEC accepts that future requests by the SEC for the production of documents will normally be made to the CSRC. The firms will receive matching Section 106 requests, and are required to abide by a detailed set of procedures with respect to such requests, which in substance require them to facilitate production via the CSRC. If they fail to meet specified criteria, the SEC retains authority to impose a variety of additional remedial measures on the firms depending on the nature of the failure. Remedies for any future noncompliance could include, as appropriate, an automatic six-month bar on a single firm's performance of certain audit work, commencement of a new proceeding against a firm, or in extreme cases the resumption of the current proceeding against all four firms. Under the terms of the settlement, the underlying proceeding against the four China-based accounting firms was deemed dismissed with prejudice four years after entry of the settlement. The four-year mark occurred on February 6, 2019.

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 any such future proceedings against these audit firms may cause investor uncertainty regarding China-based, United States listed companies and the market price of the ADSs may be adversely affected.

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

Risks Relating to the ADSs

The trading price of the ADSs may be volatile, which could result in substantial losses to you.

The trading prices of the ADSs have been, and are likely to continue 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 listed companies based in China. 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 other Chinese companies' securities after their offerings, including technology companies and mobile content platform companies, may affect the attitudes of investors toward Chinese companies listed in the United States, which consequently may impact the trading performance of the ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have conducted any inappropriate activities. Furthermore, securities markets may from time to time experience significant price and volume fluctuations that are not related to the Group's operating performance, which may have a material and adverse effect on the trading price of the ADSs.

In addition to the above factors, the price and trading volume of the ADSs may be highly volatile due to multiple factors, including the following:

- regulatory developments affecting us or our industry;
- announcements of studies and reports relating to the quality of our credit offerings or those of our competitors;
- changes in the economic performance or market valuations of other mobile content platform companies;
- actual or anticipated fluctuations in the Group's quarterly results of operations and changes or revisions of the Group's expected results;
- changes in financial estimates by securities research analysts;
- conditions in the markets for mobile content and targeted advertising and marketing services;
- announcements by the Group or our competitors of new product and service offerings, acquisitions, strategic relationships, joint ventures, capital raisings 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 the ADSs; and
- sales or perceived potential sales of additional ordinary shares or ADSs.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about the Group's business, the market price for the ADSs and trading volume could decline.

The trading market for the ADSs will depend in part on the research and reports that securities or industry analysts publish about us or the Group's business. If research analysts do not establish and maintain adequate research coverage or if one or more of the analysts who covers us downgrades the ADSs or publishes inaccurate or unfavorable research about the Group's business, the market price for the ADSs would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which, in turn, could cause the market price or trading volume for the ADSs to decline.

Because we do not expect to pay cash dividends in the foreseeable future, you may not receive any return on your investment unless you sell your Class A ordinary shares or ADSs for a price greater than that which you paid for them.

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of the Group's business. As a result, we do not expect to pay any cash dividends in the foreseeable future. See "Item 8. Financial Information — A. Consolidated Statements and Other Financial Information — Dividend Policy." Therefore, you should not rely on an investment in the ADSs as a source for any future dividend income.

Our board of directors has complete discretion as to whether to distribute dividends. 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 the ADSs will likely depend entirely upon any future price appreciation of the ADSs. There is no guarantee that the ADSs will appreciate or even maintain the price at which you purchased the ADSs. You may not realize a return on your investment in ADSs and you may even lose your entire investment in ADSs.

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

Sales of the ADSs in the public market, or the perception that these sales could occur, could cause the market price of the ADSs to decline significantly. As of December 31, 2021, we had 43,920,018 Class A ordinary shares and 32,937,193 Class B ordinary shares outstanding. All ADSs representing our Class A ordinary shares sold in our initial public offering and follow-on public offering are freely transferable by persons other than our "affiliates" without restriction or additional registration under the U.S. Securities Act of 1933, as amended, or the Securities Act. All of the other Class A ordinary shares outstanding are available for sale subject to volume and other restrictions as applicable under Rule 144 and Rule 701 under the Securities Act. To the extent a large number of shares are converted to ADSs and sold into the market, the market price of the ADSs could decline significantly.

Certain holders of our ordinary 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 ADSs in the public market could cause the price of the ADSs to decline significantly.

You, as holders of ADSs, may have fewer rights than holders of our ordinary shares and must act through the depositary to exercise those rights.

Holders of ADSs do not have the same rights of our shareholders and may only exercise the voting rights with respect to the underlying Class A ordinary shares in accordance with the provisions of the deposit agreement. Under our amended and restated memorandum and articles of association, the minimum notice period required to convene a general meeting will be seven calendar days. When a general meeting is convened, you may not receive sufficient notice of a shareholders' meeting to permit you to withdraw your Class A ordinary shares to allow you to cast your vote with respect to any specific matter. In addition, the depositary and its agents may not be able to send information to you or carry out your voting instructions in a timely manner. We will make all reasonable efforts to cause the depositary to extend voting rights to you in a timely manner, but there can be no assurance that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your ADSs. Furthermore, the depositary and its agents will not be responsible for any failure to carry out any instructions to vote, for the manner in which any vote is cast or for the effect of any such vote. As a result, you may not be able to exercise your right to vote and you may lack recourse if your ADSs are not voted as you requested. In addition, in your capacity as an ADS holder, you will not be able to call a shareholders' meeting.

Your right to participate in any future rights offerings may be limited, which may cause dilution to your holdings.

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 U.S. 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 in the future and may experience dilution in your holdings.

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

The depositary will pay cash distributions on the ADSs only to the extent that we decide to distribute dividends on our Class A ordinary shares or other deposited securities, and we do not have any present plan to pay any cash dividends in the foreseeable future. See "Dividend Policy." To the extent that there is a distribution, the depositary has agreed to pay to you the cash dividends or other distributions it or the custodian receives on our Class A ordinary shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of Class A ordinary shares your ADSs represent. However, the depositary may, at its discretion, decide that it is inequitable or impractical to make a distribution available to 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.

We will continue to incur increased costs as a result of being a public company, which could lower our profits or make it more difficult to run the Group's business.

As a public company, we have incurred significant legal, accounting and other expenses that we did not incur as a private company to ensure that we comply with the various requirements on corporate governance practices imposed by the Sarbanes-Oxley Act of 2002 as well as rules subsequently implemented by the SEC and the NASDAQ Global Select Market. For example, we have increased the number of independent directors and adopted policies regarding internal control and disclosure controls and procedures. We have also incurred additional costs associated with our public company reporting requirements. We expect that these rules and regulations will continue to cause us to incur elevated legal and financial compliance costs, devote substantial management effort to ensure compliance and make some corporate activities more time-consuming and costly. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate with any degree of certainty the amount of additional costs we may incur or the timing of such costs.

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

You may 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 dual-class structure of our ordinary shares may adversely affect the trading market for the ADSs.

S&P Dow Jones has announced changes to its eligibility criteria for inclusion of shares of public companies on certain indices, including the S&P 500, to exclude companies with multiple classes of shares from being added to such indices. In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual class structure of our ordinary shares may prevent the inclusion of the ADSs representing our Class A ordinary shares in such indices and may cause shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any such exclusion from indices could result in a less active trading market for the ADSs. Any actions or publications by shareholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of the ADSs.

Our amended and restated memorandum and articles of association contain anti-takeover provisions that could discourage a third party from acquiring us, which could limit our shareholders' opportunity to sell their shares, including Class A ordinary shares represented by ADSs, at a premium.

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

Certain judgments obtained against us may not be enforceable.

We are an exempted company with limited liability incorporated under the laws of the Cayman Islands. Substantially all of our assets are located outside the United States. In addition, substantially all of our directors and executive officers and the experts named in this annual report reside outside the United States, and most of their assets are located outside the United States. As a result, it may be difficult or impossible for you to bring an action against us or against them in the United States, in the event that you believe that your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, there are significant legal and other obstacles to obtaining information needed for such actions. For example, in China, according to Article 177 of the PRC Securities Law which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigation or evidence collection activities within the territory of the PRC. Accordingly, without the consent of the competent PRC securities regulators and relevant authorities, no organization or individual may provide the documents and materials relating to securities business activities to overseas parties. See also "—Risks Relating to the ADSs—You may face difficulties in protecting your interests, and your ability to protect your rights through U.S. courts may be limited, because we are incorporated under Cayman Islands law" for risks associated with investing in us as a Cayman Islands company. Furthermore, the laws of the Cayman Islands, China or other relevant jurisdiction may render you unable to enforce a judgment against our assets or the assets of our directors and officers and/or their assets.

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

We are an exempted company with limited liability incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our memorandum and articles of association, the Companies Act of the Cayman Islands (as amended) and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are governed by the memorandum and articles of association of the Company, the Companies Act and the common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands (as compared to the U.S. laws) as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands (except for those decisions handed down from the Judicial Committee of the Privy Council to the extent that these have been appealed from the Cayman Islands courts). The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands have a less developed body of securities laws than the United States. Some states in the United States, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, if shareholders want to proceed against the Company outside of the Cayman Islands, they will need to demonstrate that they have standing to initiate a shareholder derivative action in a federal court of the United States.

Shareholders of Cayman Islands exempted companies like us have no general rights under Cayman Islands law to inspect corporate records or to obtain copies of lists of shareholders of these companies. Our directors have discretion under the amended and restated memorandum and articles of association to determine whether or not, and under what conditions, our corporate records may be inspected by our shareholders, but are not obliged to make them available to our shareholders. This may make it more difficult for you to obtain the information needed to establish any facts necessary for a shareholder resolution or to solicit proxies from other shareholders in connection with a proxy contest.

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

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

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

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with applicable U.S. state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the U.S. federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. Accordingly, ADS holders, including holders that acquired ADSs in a secondary transaction, are subject to these provisions of the deposit agreement to the extent permitted by applicable law. It is advisable that you consult legal counsel regarding the jury waiver provision before investing in the ADSs.

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

Nevertheless, if this jury trial waiver provision is not enforced, to the extent a court action proceeds, it would proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

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

Because we qualify as a foreign private issuer under the Exchange Act, we are exempted from certain provisions of the securities rules and regulations in the United States that are applicable to United States domestic issuers, including: (i) the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K; (ii) the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act; (iii) the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and (iv) the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

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

We are an emerging growth company and may take advantage of certain reduced reporting requirements.

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

The JOBS Act also provides that an emerging growth company does not need to comply with any new or revised financial accounting standards until such date that a private company is otherwise required to comply with such new or revised accounting standards. However, we have elected to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted for public companies. This decision to opt out of the extended transition period under the JOBS Act is irrevocable.

We may be or may become a passive foreign investment company, or PFIC, which could result in adverse United States tax consequences to United States investors.

Based on the past and projected composition of our income and assets, and the valuation of our assets, including goodwill, we do not believe we were a passive foreign investment company, or a PFIC, for our most recent taxable year, and we do not expect to become a PFIC in the current taxable year or the foreseeable future, although there can be no assurance in this regard.

In general, we will be a PFIC for any taxable year in which:

- at least 75% of our gross income is passive income, or
- at least 50% of the value (generally determined based on a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income, which generally includes cash.

The determination of whether we are a PFIC is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in our asset or income composition. Because we have calculated the value of our goodwill by taking into account the market value of our ADSs, a decrease in the price of our ADSs may also result in our becoming a PFIC.

In addition, there is uncertainty as to the treatment of the Group's corporate structure and ownership of the Group VIEs for United States federal income tax purposes. For United States federal income tax purposes, we consider ourselves to own the equity of the Group VIEs. If it is determined, contrary to our view, that we do not own the equity of the Group VIEs for United States federal income tax purposes (for instance, because the relevant PRC authorities do not respect these arrangements), we may be treated as a PFIC.

If we are a PFIC for any taxable year during which you hold the ADSs or Class A ordinary shares, our PFIC status could result in adverse United States federal income tax consequences to you if you are a United States Holder, as defined under "Item 10. Additional Information — E. Taxation — Certain United States Federal Income Tax Considerations." For example, if we are or become a PFIC, you may become subject to increased tax liabilities under United States federal income tax laws and regulations, and will become subject to burdensome reporting requirements. See "Item 10. Additional Information — E. Taxation — Certain United States Federal Income Tax Considerations — Passive Foreign Investment Company." There can be no assurance that we will not be a PFIC for the current or any future taxable year.

As a company incorporated in the Cayman Islands, we are permitted to adopt certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ Global Select Market corporate governance listing standards; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the NASDAQ Global Select Market corporate governance listing standards.

We are a company incorporated in the Cayman Islands, and the ADSs are listed on the NASDAQ Global Select Market. The NASDAQ Global Select Market rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the NASDAQ Global Select Market corporate governance listing standards.

For instance, we are not required to: (i) have a majority of the board be independent; (ii) have a compensation committee or a nominating and corporate governance committee consisting entirely of independent directors; (iii) have regularly scheduled executive sessions with only independent directors each year; or (iv) hold annual shareholders meetings.

We intend to rely on some of these exemptions. As a result, you may not be provided with the benefits of certain corporate governance requirements of the NASDAQ Global Select Market.

ITEM 4. INFORMATION ON THE COMPANY

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

The Group launched its flagship mobile application, *Qutoutiao*, in June 2016, the Group's mobile literature application, *Midu Novels*, in May 2018, and *Midu Lite*, which combines a loyalty program with the standard offerings from *Midu Novels*, in May 2019. We primarily operate the Group's business through certain of the Group VIEs, Shanghai Jifen, Big Rhinoceros Horn and Anhui Zhangduan Internet Technology Co., Ltd., or Anhui Zhangduan, and their subsidiaries. To facilitate financing offshores, we incorporated Qtech Ltd. in July 2017. Through a series of transactions, Qtech Ltd. then became our ultimate holding company. On July 5, 2018, Qtech Ltd. was renamed to Qutoutiao Inc.

We currently conduct the Group's business primarily through the following subsidiaries, the Key VIEs and their subsidiaries:

- Shanghai Jifen, a Key VIE, primarily engages in the operation of our *Qutoutiao* mobile application;
- · Big Rhinoceros Horn, a Key VIE, primarily engaged in the operation of our Midu Novels and Midu Lite mobile application;
- Anhui Zhangduan, a Key VIE, primarily engages in content management;
- Beijing Qukandian Internet Technology Co., Ltd., or Beijing Qukandian, a subsidiary of Shanghai Jifen, primarily engages in content procurement;
- Shanghai Dianguan Internet Technology Co., Ltd., or Shanghai Dianguan, our subsidiary that primarily provides advertising and marketing service;
- Shanghai Quyun, our subsidiary, primarily engages in technology R&D;
- Shanghai Chenxing, a subsidiary of Shanghai Quyun, primarily engages in technology R&D;
- Shanghai Zhicao, our subsidiary, primarily engages in technology R&D;
- Shanghai Heitu Internet Technology Co., Ltd., or Shanghai Heitu, a subsidiary of Shanghai Jifen, primarily engages in the operation of online games;
- Shanghai Zheyun Internet Technology Co., Ltd., or Shanghai Zheyun, a subsidiary of Shanghai Jifen, primarily engages in the operation of certain innovative tool applications;
- Hubei Rapid Information Technology Co., Ltd., or Hubei Rapid, a Key VIE, primarily engages in the operation of online video business;

- Beijing Supreme Pole International Sports Development Co., Ltd., or Beijing Supreme Pole, a subsidiary of the Group VIE, Beijing Churun Technology Co., Ltd., or Beijing Churun, primarily engages in the operation of live-streaming business; and
- Huaian Beixia Information Technology Co., Ltd., or Huaian Beixia, a Key VIE, primarily engages in providing advertising and marketing services.

On September 14, 2018, our ADSs commenced trading on NASDAQ Global Select Market under the symbol "QTT." We issued and sold an aggregate of 13,800,000 ADSs (including 1,800,000 ADSs sold upon the full exercise of the underwriters' option to purchase additional ADSs) in our initial public offering, representing 3,450,000 Class A ordinary shares, raising approximately US\$85.8 million in net proceeds after deducting underwriting commissions and the offering expenses payable by us. On April 5, 2019, we completed a follow-on public offering of an aggregate of 10,000,000 ADSs, comprising 3,327,868 ADSs issued and sold by us and 6,672,132 ADSs sold by certain selling shareholders, representing an aggregate of 2,500,000 Class A ordinary shares. We raised approximately US\$31.0 million in net proceeds, after deducting underwriting discounts and commissions and the offering expenses payable by us. We did not receive any of the proceeds from the sale of ADSs by the selling shareholders.

On December 10, 2021, we effected a change of the ratio of our ADSs to Class A ordinary shares from the then ADS ratio of four (4) ADSs to one (1) Class A ordinary share to a new ADS ratio of two (2) ADS representing five (5) Class A ordinary shares.

Our principal executive offices are located at Building No. 8, Shanghai Pudong Software Park, 519 Yi De Road, Pudong New Area, Shanghai, 200124, People's Republic of China. Our telephone number at this address is +86-21-5889-0398. Our registered office in the Cayman Islands is located at the offices of Walkers Corporate Limited, 190 Elgin Avenue, George Town, Grand Cayman KY1-9008, Cayman Islands. Our agent for service of process in the United States is Cogency Global Inc., located at 122 East 42nd Street, 18th Floor, New York, N.Y. 10168, United States.

B. <u>Business Overview</u>

Overview

The Group operates a mobile content platforms in China with a mission to bring fun and value to its users. The Group's eponymous mobile application, *Qutoutiao*, meaning "fun headlines" in Chinese, applies artificial intelligence-based algorithms to deliver customized feeds of articles and short videos to users based on their unique profiles, interests and behaviors. *Qutoutiao* has attracted a large group of users, many of whom are from lower-tier cities in China. They enjoy *Qutoutiao*'s fun and entertainment-oriented content as well as its social-based user loyalty program. Since its beginning as a news aggregator, *Qutoutiao* has evolved and developed significantly on the content side and now also has a rich offering in short video content, online games and live-streaming. While the newer content categories have not been monetized meaningfully for the time being, they play an important role in completing the comprehensive content ecosystem *Qutoutiao* has been trying to build, and therefore have long-term strategic value. Midu, first launched in May 2018 as *Midu Novels* and with an alternative version *Midu Lite* launched one year later, pioneered provision of free online literature supported by advertising. It has been one of the market leaders of the free online literature industry since inception. The Group has also been developing standalone short video applications and mobile games among the many other initiatives in motion since early 2019 to further diversify the range of products its users can enjoy and the ways in which it can bring value to its users. The Group's mobile applications have gained a certain level of success and popularity among Chinese mobile internet users since launch, with combined average MAUs of approximately 97.6 million, combined average DAUs of approximately 25.0 million and average daily time spent per DAU of approximately 43.2 minutes in the three months ended December 31, 2021.

The Group represents the new generation of technology-driven content platforms. Historically, users were accustomed to consuming content passively as the media dictated content curation with little or no personalization. However, as the volume and the diversity of content available on the Internet have grown exponentially, users are demanding content personalization which is only achievable through technology. We believe the Group's technology brings relevant information and entertainment to users, stimulates their desire to read, and ultimately improves the knowledge exchange in society.

Since the Group's inception, it has strategically targeted users from lower-tier cities in China because of the enormous long-term growth opportunities in this underserved market, given the significant under-penetration of mobile phones as well as the significant under-usage of mobile applications. We believe that mobile users in lower-tier cities tend to have a slower pace of life and spend more time on the Internet given limited offline entertainment venues. Moreover, they enjoy rapidly growing disposable income and bear much lower financial burden due to lower housing prices and living expenses. These factors have given rise to a significant need for mobile entertainment while also creating high monetization potentials. Users from lower-tier cities tend to have different interests and preferences in comparison to users from tier-1 and tier-2 cities. *Qutoutiao*'s light entertainment-oriented and easily digestible content is designed to resonate with such users and provides the Group with an advantage to capture this underserved market.

The Group is among the first batch of companies in the mobile content industry in operating an innovative user account system and gamified user loyalty program. Registered users can earn loyalty points by referring new users to register on *Qutoutiao*, by consuming content or by engaging in activities on *Qutoutiao*. Although loyalty points only translate into trivial monetary amounts, they foster users' loyalty and emotional connection to *Qutoutiao* as compared to other platforms. The gamified loyalty point system not only helps the Group keep users more engaged and enhance user stickiness, but also enables the Group to track users' long-term behaviors and optimize content recommendation, as almost all of the Group's DAUs are logged-on users.

Covering a broad range of topics, *Qutoutiao* is focused on humor, stories and other light entertainment content that delight and inspire. The Group's content is generally sourced from professional media under licensing arrangements or uploaded by freelancers registered on the Group's platform.

The Group introduced a separate mobile application, *Midu Novels*, in May 2018 which offers users free literature online. We further introduced *Midu Lite* in May 2019, which includes a loyalty program in addition to the standard offerings of *Midu Novels*. They both feature an innovative free-to-read model that appeals to the online literature reading population, especially those who are keen to read but have a low willingness to pay, who account for the vast majority of online readers in China, and thus having been turned away by the paid-only model of the traditional online literature industry. Supported by advertising, the Group is able to offer its users a comprehensive selection of literature covering a wide range of genres for free. While *Midu Novels* have been very effective in targeting the existing reading population, *Midu Lite* has drawn in readers having little or no experience with online literature who subsequently develop a passion for reading. Therefore, the two applications together have achieved broader coverage of the market from a product perspective, and form the two strategic pillars with equal importance in our long-term vision for the online literature market.

The Group has also diversified its content offerings into online games and live-streaming. The Group will keep improving the quality of content currently on offer and further expanding into more content categories, to create a comprehensive light entertainment content ecosystem. This not only enhances user engagement and retention, but also diversifies the Group's monetization channels.

The Group currently generates revenues primarily by providing advertising and marketing services. New monetization channels such as online games and live-streaming are still at their early stages, and will contribute a more meaningful percentage of revenues over time. The Group has maintained a strong focus on R&D since its founding and materially enhanced its proprietary advertising platform's monetization efficiency. This has been achieved by enhanced algorithms and the conversion to an oCPC system.

The Group's net revenues have slightly decreased from RMB5,570.1 million in 2019 to RMB5,285.2 million in 2020, and further decreased to RMB4,339.6 million (US\$681.0 million) in 2021 primarily due to the tightening regulatory environment in internet and technology sector which, to a certain extent, resulted in constrained budgets of advertisers. We have made significant progress on cost optimization and budgeting process to improve operating margin. The Group has incurred net losses attributable to Qutoutiao Inc. of RMB2,688.7 million in 2019, RMB1,104.4 million in 2020 and RMB1,239.6 million (US\$194.5 million) in 2021. Non-GAAP net losses attributable to Qutoutiao Inc., which represented net losses attributable to Qutoutiao Inc. before share-based compensation expenses, were RMB2,416.7 million in 2019, RMB641.2 million in 2020 and RMB1,039.4 million (US\$163.1 million) in 2021.

The Group's Mobile Applications

The Group primarily delivers content through *Qutoutiao*, which is the Group's flagship mobile application and means "fun headlines" in Chinese. *Qutoutiao* aggregates articles and videos uploaded from content providers and presents real-time customized feeds to users based on each user's profile, behavior and social relationships.

Feeds are presented to users on both the main page of *Qutoutiao* and topic pages. Both the main page and topic pages are customized for each user using the Group's content recommendation engine. Topic pages include, among others, videos, entertainment, humor, anecdote, relationship, family, health, food and pets. A user may also search content or follow specific content providers. Users may save their favorite content pages as well as indicate the content pages that they dislike.

The Group promotes social interaction among users to engage them more closely with the content they have viewed as well as with each other. Users may post comments and engage in discussions with other users by responding to comments. A user can also share content through a variety of means, including emails, messaging applications or social networks.

The Group launched its mobile literature application, *Midu Novels*, in May 2018, which offers users free literature supported by advertising. Unlike the traditional paid-only model in the online literature industry which charges users fees for most content offered, users of *Midu Novels* can enjoy their favorite literature under an innovative free-to-read model. The Group's users have access to a comprehensive selection of literature covering a wide range of genres, including romance, fantasy, science fiction, history and other genres for free. The Group classifies the content genres with multi-dimensional reading tags which the Group's users can choose to follow. The Group is able to offer its users free literature as it primarily monetizes through advertisements that its advertising customers place on *Midu Novels*. The Group's AI-powered content recommendation engine coupled with its strong data analytics capabilities also enable the Group to improve user experience and increase the time its users spend on *Midu Novels* by making personalized recommendation and delivering to them literature that caters to their interest.

The Group launched *Midu Lite* in May 2019, which combines a loyalty program with the standard offerings from *Midu Novels*. The differentiated product design has led to *Midu Lite* attracting an incremental reading population whose needs have not been well addressed by *Midu Novels* previously. As a result, we have observed minimal user overlap between the two versions.

The Group has also been exploring opportunities in short videos, which the Group offers through both the *Qutoutiao* application and standalone short video applications. It is a large and attractive market and an important part of any content ecosystem.

The table below sets forth key operating metrics relating to the Group's mobile applications. For more information on the key operating metrics, see "Item 5. Operating and Financial Review and Prospects — A. Operating Results — Key Operating Metrics."

	For the Three Months Ended							
	March 31,	June 30,	September 30,	December 31,	March 31,	June 30,	September 30,	December 31,
			2020				2021	
	(in millions, except for daily time spent data)							
Combined Average MAUs during the								
period	138.3	136.5	120.5	124.7	133.3	132.3	118.5	97.6
Combined Average DAUs during the								
period	45.6	43.0	39.7	32.3	31.7	29.1	26.5	25.0
New Installed Users	109.2	132.2	67.3	50.3	101.8	94.0	103.8	72.6
Average daily time spent per DAU during the period (minutes)	62.4	55.2	55.3	50.3	47.1	47.3	51.9	43.2

	For the Three Months Ended							
	March 31,	<u>June 30,</u>	September 30,	December 31,	March 31,	<u>June 30,</u>	September 30,	December 31,
			2020				2021	
		(in RMB)						
Average net revenue per DAU per								
day	0.34	0.37	0.31	0.44	0.45	0.46	0.41	0.39
User Engagement Expenses per								
DAU per day	0.12	0.12	0.07	0.05	0.06	0.06	0.07	0.07
User Acquisition Expenses per								
New Installed User	4.60	3.30	5.73	7.89	5.78	7.29	7.30	8.26

User Account Systems and Loyalty Programs

The Group offers user loyalty programs on its mobile applications. Registered users can earn loyalty points if they become active users, refer others who later register and become active users, or engage in various activities while logged in.

Accumulated loyalty points, if exceeding certain threshold, can be withdrawn by the user in the form of cash by directly crediting the user's electronic wallet. The Group has the sole discretion in determining the withdraw threshold and the exchange rate between loyalty points and the monetary value available to be withdrawn. Similar programs have long been in place for various industries such as airlines, hospitality and credit cards. They have proven to be effective in enhancing user loyalty and engagement all around the world. The Group's loyalty programs serve exactly the same purpose by strengthening users' connection to the Group's products and services. Consuming content, rather than earning loyalty points, is the main purpose for the Group's users, the same as in other industries such as airlines, hospitality and credit cards where earning loyalty points is a secondary consideration after the services-in-demand. However, there could occasionally be cases of abuse by a small number of users, and the Group has put in place mechanisms for detection and prevention. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — The Group's ability to prevent the misuse of its user loyalty programs while ensuring their efficacy in user acquisition and engagement will have a material effect as to the Group's business, results of operations and financial condition."

We have set forth in the table below the percentage of DAUs of the Group's mobile applications that primarily attract users through loyalty programs and the percentage of DAUs of mobile applications that primarily attract users through content for each period presented.

	For the Three Months Ended							
	March 31,	<u>June 30,</u>	September 30,	December 31,	March 31,	<u>June 30,</u>	September 30,	December 31,
			2020				2021	
DAUs of loyalty program								
inclined apps	55.9%	47.4%	39.4%	48.1%	45.1%	44.1%	46.7%	40.6%
DAUs of other apps	44.1%	52.6%	60.6%	51.9%	54.9%	55.9%	53.3%	59.4%

Referral-based Loyalty Points

The Group's registered users earn loyalty points when they invite others to download and register on its mobile applications. After an invited user registers with the Group, the existing registered user is eligible to receive loyalty points or cash credits. The Group is thus able to leverage the embedded social relationships of each user and prompt its users to voluntarily invite their families and friends to become the Group's registered users.

Engagement-based Loyalty Points

A user is eligible to receive loyalty points for engaging in various activities on the Group's mobile applications. Such activities include viewing and sharing content, providing valuable comments and encourage inactive users to continuously re-engage with the Group's mobile applications. The Group also creates fun tasks such as daily missions to tap into the competitive reward psyche of users.

The Group's Content

The Group strives to become the light entertainment content platform of choice for a growing base of users. We believe that light entertainment-oriented and easily digestible content resonates with mobile users, and the Group primarily delivers content that can be viewed by users during a short period of time. The articles on the Group's platform generally contain both images and short texts and can be read within one minute; and a majority of the videos on the Group's platform run less than two minutes. In the three months ended December 2021, the average daily time spent per DAU for the Group's mobile applications was approximately 43.2 minutes. The Group aims to deliver quality and relevant content to users, and content sourcing, management and recommendation are among core focuses of the Group's operations.

Content Sourcing

The Group sources content from approximately 4,995 professional media outlets under a licensing arrangement and from more than two million freelancers registered on the Group's platform. The Group operates an online content upload system for content providers to prepare and upload content. Fees paid to content providers relates to the amount of views associated with such content.

A content provider that is new to the Group's online content upload system is required to go through a registration and approval process. Each content provider is required to sign an agreement electronically in the registration process. The agreement provides, among other things, that (i) the Group is authorized to deliver content submitted by the content provider free of charge; (ii) the content provider acknowledges that it will not deliver illegal or inappropriate content through the Group's platform; and (iii) the Group has the right to screen, sort and monitor content, and it may remove any illegal or inappropriate content without notifying the content provider. The Group has the right to freeze an account for any violations of the rules, such as plagiarism or submission of inappropriate content.

After its registration with the Group, a content provider can prepare and upload content electronically through the online content upload system. The system also allows each content provider to track its performance on a real time basis, including information such as the number of views, comments, shares and saves for its content.

The Group's mobile literature applications, *Midu Novels* and *Midu Lite*, primarily source content from traditional PC-based online literature platforms which grant the Group permits to publish their literature content on the Group's platforms for a fee. The Group has also built an in-house editor team that works with authors directly, which combines human experiences with data analytics in guiding and producing quality literary works. The Group curates quality literature content that caters to its users' interests based on the Group's analysis of users' profiles and their reading histories. As of December 31, 2021, the Group offers more than 206,000 pieces of literature on *Midu Novels* and *Midu Lite*.

Content Management

As a gatekeeper for the Group's platform, the Group's content management system is designed to ensure both the quality and appropriateness of information presented to users, which include content and comment postings. Content may be declined for quality reasons, such as videos or pictures of low resolution or duplicative content. The Group also declines content and comment postings that appear to violate relevant laws and regulations or are otherwise inappropriate for the Group's platform. The Group undertakes an efficient and thorough screening process that involves both algorithm-based screening and manual review. The Group has also implemented a complaint procedure that enables the Group to identify inappropriate content utilizing its users' feedback.

- Algorithm-based Screening. The Group applies algorithms to screen texts as well as images and videos. The Group's system screens texts
 based on pre-set keywords, and it utilizes artificial intelligence to identify inappropriate images and videos. The screening system
 automatically declines content that does not meet the standards of the Group's platform and flags suspicious content for manual review by
 the Group's content management team.
- Manual Review. The Group's content management team, which consisted of 314 employees as of December 31, 2021, is responsible for
 monitoring all information before delivery through the Group's platform. The content management team reviews suspicious content
 identified in the algorithm-based screening process and makes the final decision as to whether to decline such content. Given the
 complexity and diversity of information submitted to the Group's platform, the Group's content management team also reviews all content
 that has not earlier been flagged up in the algorithm-based screening process.
- *Complaint Procedure.* A user may submit a complaint about a particular piece of content through the Group's mobile applications. The user is prompted to identify the basis for the complaint, such as duplication to pre-existing content, violation of law, factual mistake, low quality or plagiarism. The user also needs to provide a written commentary to support the complaint. The Group removes the relevant content if it concludes that the complaint is valid. In addition, while the complaint is under review, the Group may also temporarily block the relevant content from being further delivered until the Group can investigate the complaint and reach a conclusion.

Content Recommendation

The Group's platform intelligently delivers personalized light entertainment content to users. The content recommendation process involves the following components.

• *Content Tagging*. Each piece of content is multi-tagged with references to the key topics it covers. Before submitting an article or video, the content provider may provide up to six tags. Such tags range from general topics such as "entertainment news" to specific topics such as the name of an actor. The Group utilizes both algorithm-based screening and manual review to further refine such tags. Furthermore, the Group's smart video tagging technology uses deep learning that further increases the accuracy of tags. The Group's technology also automatically selects and displays to users the most appropriate "cover images" for videos. We believe the Group's technology has the potential to improve the quality and relevance of video content shown to its users, thereby enhancing user experience.

- Interest and Social Graphs. Through an automated process, the Group develops interests and social graphs for each user based on the user's profile, behavior and social relationships. User profile data are provided by users when registering for an account on the Group's mobile applications. In addition, the Group is also able to gain a fairly accurate picture of a user's profile, including age, gender and location, based on the user's behavior on the Group's platform. The user's behavior also provides the Group with a granular view of the topics and content characteristics that could be of interest to the user. In addition, the interest and social graphs take into account the user's social relationships with other users and such other users' interests and behaviors.
- Recommendation. The Group's content recommendation engine suggests content based on each user's interest and social graphs, and
 continuously receives behavioral data inputs to update and refine its recommendations in real time to identify content that is most likely of
 interest to each user.

Monetization

The Group places advertisements on its main pages, topic pages as well as content pages. We believe that the Group's differentiated user base represents an attractive demographic target for businesses.

The Group has an in-house advertising platform, which is a full-fledged and technology driven advertising exchange capable of not only monetizing internet media traffic generated in-house but also that originating from third-party media platforms which operates a programmatic advertising system. It has a programmatic advertising system that utilizes a bidding system for advertising customers to bid for the targeted audience on mainly the Group's platform. The Group's programmatic advertising system considers a wide range of parameters to determine which advertisement to show, including price bid, predicted click-through rate, predicted user conversion metrics and content relevance, to dynamically maximize the Group's advertising customer's return on investment (ROI) as well as its revenue potential. The Group's advertising technology aims to maximize its revenue potential by rewarding the more relevant advertisement with a more prominent position, despite the potentially lower price bid of such advertisement. The Group actively monitors the advertisements placed to help ensure their relevance.

Customers for the Group's programmatic advertising system are comprised of advertising agents and end advertisers. The Group has its own sales personnel who are responsible for supporting and monitoring the performance of advertising agents and to attract advertising customers to use the Group's programmatic advertising system directly. The Group enters into standard agreements with advertising agents generally for a term of one year. The Group's advertising agents are responsible for identifying end advertisers, confirming payments and setting up accounts on the Group's programmatic advertising system for advertising customers. The Group provides ongoing training to advertising agents to help them become familiarized with the functionalities and capabilities of the Group's programmatic advertising system. These advertising agents are responsible for collecting and submitting the relevant documentation and licenses from advertising customers for the Group's approval to open accounts on the Group's programmatic advertising system, and are also liable for any infringement of third-party rights or violation of regulatory requirements caused by advertisements placed by their end advertisers.

Through collaboration with third-party merchandise suppliers, the Group offers an online marketplace on Qutoutiao in which users merchandise offered by third-party merchandise suppliers. The Group does not carry any inventory, and each merchandise supplier merchandise directly to users. A user pays the purchase price for a merchandise to the Group. The Group deducted its commission related to the merchandise and remit the remainder to the relevant merchandise supplier.

Technology

The Group has focused on and will continue to invest in its technological infrastructure. The Group's business is supported by the following key technologies.

- Interest and Social Graphing. Through an automated process, the Group develops interest and social graphs for each user based on such person's profile, behavior and social relationships. The Group assesses the user's desired content characteristics through technologies including natural language processing, image analysis, and content tagging. The interest and social graphs take into account the user's social relationships with other users and such other users' interests, including their behaviors. The Group continuously refines each user's graphs based on the user's behavior over time through artificial intelligence.
- Content Recommendation Engine. The Group's content recommendation engine recommends content based on user behavior, and
 continuously receives behavioral data inputs to update and refine its recommendations in real time to identify content that is most likely of
 interest to each user. The Group's content recommendation engine is capable of processing large quantities of data, and currently can
 handle several billion inputs per day. In addition, new content is aggregated and recommended in real time from among millions of new
 contents added, reducing the possibility that the Group's users missing the content that may interest them when they next update their view
 in the Group's mobile application.

- Advertising. The Group's advertising technology enables advertising customers to bid for audience and automatically deliver relevant, targeted promotional links to users. The Group's system rewards more relevant advertisements with more prominent positions, despite the potentially lower priced bids of such advertisements. The Group's audience segmentation technology helps ensure the relevance of advertisements shown to users by analyzing their interests through browsing activity, viewed content and commenting history. In addition, the Group has the ability to predict click-through rates for advertisements using logistic regression, gradient boosting decision tree and linear and nonlinear modeling algorithms. Enhanced precision of these click-through rate projections can help maximize the cost effectiveness of customers' advertising budgets. The Group's oCPC system further takes into consideration customers' overall return requirements by assessing their desired end results in the context of their budgets and the availabilities of relevant advertising inventories, providing a holistic solution to their marketing needs rather than a simple product amid their marketing strategy.
- Content Screening Technology. The Group's text screening system screens information based on pre-set keywords. The Group utilizes artificial intelligence to identify inappropriate or objectionable content from images, speeches and videos, significantly increasing efficiency over manual review. The Group also applies deep learning methods to analyze complex visual content. Through big data and continuous training, the Group's system is able to monitor and identify objectionable visual content with a high degree of accuracy. The screening system automatically declines content that does not meet the standards of the Group's platform and flags suspicious content for manual review by the Group's content management team.
- Fraud Detection. The Group's fraud detection technology focuses on ensuring that the Group's user loyalty programs are not abused by fraudulent users or activities. The Group's anti-fraud system employs self-encoding and deep learning methods such as sophisticated neural networks in analyzing users' behaviors as well as the locations of and the data from their devices to detect fraud. The Group's anti-fraud system assigns a fraud score to users based on the inputs it receives, with higher scores signifying a greater suspicion of fraudulent activity. The Group also utilizes artificial intelligence methods including decision trees, random decision forests, naive Bayes classifier, Gaussian mixed model, and logistic regression to maximize the predictive accuracy of the Group's anti-fraud system while minimizing the need for manual review.

Marketing and Promotion

The Group grows its user base through advertisements and paid-for traffic on mobile channels. We intend to continue to implement innovative and cost-effective marketing initiatives. Historically, the Group also expanded its user base through word-of-mouth referrals by existing users. For more information on the Group's user loyalty programs, see "— User Account Systems and Loyalty Programs — Referral-based Loyalty Points."

Competition

The industry the Group operates in is highly competitive and rapidly changing due to the fast growing market and technological developments. The Group's ability to compete successfully depends on many factors, including the quality and relevance of the Group's content, the robustness of the Group's technology platform, user experience, brand recognition and reputation, the value of the Group's services to advertising customers and its relationship with content providers.

The Group competes with other mobile content platform companies for user traffic. The Group's primary competitors include content aggregators such as Jinritoutiao (operated by Bytedance), Kuaibao (operated by Tencent) and Yidianzixun (an affiliate of Phoenix News). We believe the Group has differentiated itself from other content aggregators because of its focus on light entertainment content and users from lower-tier cities. To a lesser extent, the Group also competes with mobile news portals such as Tencent News, SINA News, Sohu News, NetEase News and Phoenix News. We believe such mobile news portals tend to concentrate on current affairs such as political and economic news. As such, their content offerings tend to differ from the Group's. The Group also competes with other mobile literature applications, such as iReader, QQ Reading, Qimao Free Novels and Fanqie Novels, as well as mobile literature applications that have a business model similar to the Group's. To a much lesser extent, the Group competes with traditional PC-based online literature platforms. We believe the Group has differentiated itself from other online literature applications and platforms because it is able to offer high quality online literature for free with effective recommendation algorithms helping readers to discover books they enjoy, and the Group can efficiently monetize the traffic through its proprietary programmatic advertising system.

Intellectual Property

We regard the Group's intellectual property as critical to its success. Such intellectual properties include trademarks, patents, domain names, copyrights, know-how and proprietary technologies. We currently rely on trademarks, copyrights, trade secret law and confidentiality, invention assignment and non-compete agreements with the Group's employees and others to protect the Group's proprietary rights. As of December 31, 2021, the Group had registered 920 trademarks, including trademark for "Qutoutiao," and owned 17 patents in the PRC. The Group was the registered holder of 297 domain names in the PRC, and had been granted 495 software copyrights and 30 artwork copyrights as of the same date.

Insurance

The Group provides social security insurance including pension insurance, unemployment insurance, work-related injury insurance and medical insurance for the Group's employees. The Group also purchased employer's liability insurance and additional commercial health insurance to increase insurance coverage of its employees. In addition, we maintain directors and officers liability insurance for our directors and officers. The Group does not maintain property insurance policies covering its equipment and other property that are essential to its business operation to safeguard against risks and unexpected events. The Group does not maintain business interruption insurance or general third-party liability insurance, nor does it maintain product liability insurance or key-man insurance. We consider the Group's insurance coverage to be sufficient for its business operations in China.

C. Regulations

Licenses and Permissions Requirements

The below table sets forth the material permissions and/or licenses the Group has obtained for its main operations in China. Except as disclosed in "Item 3. Key Information—D. Risk Factors—Risk Related to Our Business and Industry—The Group's inability to fully comply with Audio-visual Program Provisions may expose it to administrative sanctions, which would materially and adversely affect the Group's business, results of operations and financial condition" and "—The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications," the Group has received all material permissions and approvals that are, or may be, required for the Group's main operations in China, including the main operations of the Key VIEs. No material permission or approval for the Group has been denied by relevant authorities in China. Given the uncertainties of interpretation and implementation of relevant laws and regulations and the enforcement practice by relevant government authorities, we may be required to obtain additional licenses, permits, filings or approvals for the functions and services of our platform in the future, and may not be able to maintain or renew our current licenses, permits, filings or approvals. In addition, rules and regulations in China can change quickly with little advance notice. Uncertainties due to evolving laws and regulations could impede the ability of a China-based issuer, such as us, to obtain or maintain permits or licenses required to conduct business in China. In the absence of required permits or licenses, governmental authorities could impose material sanctions or penalties on us.

Company Name	Name of Permission/License	Governing Government Authority	Grant Date	Expiration Date
Shanghai Jifen	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	April 23, 2019	September 25, 2022
Shanghai Jifen	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	November 7, 2019	November 7, 2022
Shanghai Jifen	Registration in the National Internet Audio-visual Platforms Information Management System	National Radio and Television Administration	November 24, 2021	September 25, 2022
Shanghai Jifen	Radio and Television Programme Production Business Permit	Radio and Television Station of Shanghai	April 1, 2021	March 31, 2023
Shanghai Jifen	Internet News Information Services License	Cyberspace Administration of China	July 30, 2019	July 29, 2022
Big Rhinoceros Horn	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	December 25, 2021	March 18, 2024
Big Rhinoceros Horn	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	December 17, 2021	December 17, 2024
Big Rhinoceros Horn	Publication Operation License	Shanghai Municipal Bureau of Press and Publication	March 31, 2021	March 31, 2026
Big Rhinoceros Horn	Radio and Television Programme Production Business Permit	Radio and Television Station of Shanghai	April 1, 2021	March 31, 2023

Anhui Zhangduan	Value-added Telecommunications Service License (the "ICP License")	Anhui Provincial Communications Administration	March 29, 2019	June 20, 2022
Anhui Zhangduan	Internet Cultural Business License (the "ICB License") Value-added	Anhui Provincial Department of Culture and Tourism	May 22, 2020	May 21, 2023
Shanghai Heitu	Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	October 18, 2019	October 18, 2024
Shanghai Heitu	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	April 25, 2019	April 25, 2022*
Shanghai Zheyun	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	May 17, 2019	May 17, 2024
Shanghai Zheyun	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	March 6, 2019	March 6, 2022*
Hubei Rapid	Value-added Telecommunications Service License (the "ICP License")	Hubei Provincial Communications Administration	May 9, 2019	May 9.2024
Hubei Rapid	Internet Cultural Business License (the "ICB License")	Suizhou Municipal Administration of Culture and Tourism	March 15, 2022	March 14, 2025
Beijing Supreme Pole	Value-added Telecommunications Service License (the "ICP License")	Beijing Communications Administration	November 25, 2020	September 28, 2025
Beijing Supreme Pole	Internet Cultural Business License (the "ICB License")	Beijing Municipal Administration of Culture and Tourism	June 11, 2019	June 10, 2022
Beijing Supreme Pole	License for Publication of Audio-Visual Programs through Information Network	National Radio and Television Administration	October 31, 2021	October 31, 2024
Beijing Supreme Pole	Publication Operation License	Beijing Municipal Bureau of Press and Publication	January 23, 2016	April 30, 2022*
Shanghai Ququanquan Information Technology Co., Ltd.	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	September 30, 2020	September 30, 2025
Shanghai Tuohuan Information Technology Co., Ltd.	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	June 15, 2020	June 15, 2025
Shanghai Xunkai Information Technology Co., Ltd.	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	June 15, 2020	June 15, 2025
Shanghai Tuile	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	October 31, 2018	July 27, 2023
Shanghai Tuile	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	April 14, 2021	April 14, 2024

Shanghai Tuile	Publication Operation License	Shanghai Municipal Bureau of Press and Publication	April 29, 2021	March 31, 2022*
Shanghai Xike	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	October 12, 2019	November 30, 2023
Shanghai Xike	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	April 14, 2021	April 14, 2024
Shanghai Xike	Radio and Television Programme Production Business Permit	Radio and Television Station of Shanghai	April 1, 2021	March 31, 2023
Hubei Qingluo Information Technology Co., Ltd.	Value-added Telecommunications Service License (the "ICP License")	Hubei Provincial Communications Administration	December 13, 2019	December 13, 2024
Hubei Qingluo Information Technology Co., Ltd.	Internet Cultural Business License (the "ICB License")	Suizhou Municipal Administration of Culture and Tourism	March 29, 2022	March 28, 2025
Shanghai Manchuan Information Technology Co., Ltd.	Value-added Telecommunications Service License (the "ICP License")	Shanghai Communications Administration	November 9, 2020	November 9, 2025
Shanghai Manchuan Information Technology Co., Ltd.	Internet Cultural Business License (the "ICB License")	Shanghai Municipal Administration of Culture and Tourism	August 28, 2020	August 28, 2023
Shanghai Manchuan Information Technology Co., Ltd.	Radio and Television Programme Production Business Permit	Radio and Television Station of Shanghai	April 1, 2021	March 31, 2023

Note:

Summary of Significant Rules and Regulations

The following is a summary of the most significant rules and regulations that affect the Group's business activities in China or the rights of our shareholders to receive dividends and other distributions from us.

Foreign Investment Law

On March 15, 2019, the National People's Congress of the PRC adopted the Foreign Investment Law, which came into force on January 1, 2020. On December 26, 2019, the State Council issued the Implementation Rules of the Foreign Investment Law, which came into effect on January 1, 2020, to clarify and elaborate relevant provisions of the Foreign Investment Law. The Foreign Investment Law defines the "foreign investment" as the investment activities in China conducted directly or indirectly by foreign investors in the following manners: (i) the foreign investor, by itself or together with other investors establishes a foreign invested enterprises in China; (ii) the foreign investor acquires shares, equities, asset tranches, or similar rights and interests of enterprises in China; (iii) the foreign investor, by itself or together with other investors, invests and establishes new projects in China; (iv) the foreign investor invests through other approaches as stipulated by laws, administrative regulations or otherwise regulated by the State Council. The Foreign Investment Law keeps silent on how to define and regulate the VIEs, while adding a catch-all clause that "other approaches as stipulated by laws, administrative regulations or otherwise regulated by the State Council" can fall into the concept of "foreign investment," which leaves uncertainty as to whether the foreign investor's controlling PRC onshore variable interest entities via contractual arrangements will be recognized as "foreign investment." Pursuant to the Foreign Investment Law, PRC governmental authorities will regulate foreign investment by applying the principle of pre-entry national treatment together with a "negative list," which will be promulgated by or promulgated with approval by the State Council. Foreign investors are prohibited from making any investments in the industries which are listed as "prohibited" in such negative list; and, after satisfying certain additional requirements and conditions as set forth in the "negative list," are allowed to make investments in the industries which are listed as "restricted" in such negative list. For any foreign investor that fails to comply with the negative list, the competent authorities are entitled to ban its investment activities, require such investor to take measures to correct its non-compliance and impose other penalties.

^{*} Holder of such permission/license is in the process of renewing the relevant permission/license.

Regulations on Value-added Telecommunications Services

The Telecommunications Regulations of the PRC, or the Telecom Regulations, implemented on September 25, 2000 and amended on July 29, 2014 and February 6, 2016, are the primary PRC law governing telecommunication services and set out the general framework for the provision of both "basic telecommunication services" and "value-added telecommunication services" by domestic PRC companies. "Value-added telecommunication services" is defined as telecommunications and information services provided through public networks, and, according to the Telecom Regulations, operators of value-added telecommunications services shall obtain operating licenses prior to commencing operations from the Ministry of Industry and Information Technology, or the MIIT, or its provincial level counterparts.

The *Catalogue of Telecommunications Business*, or the Catalogue, which was issued as an attachment to the Telecom Regulations and recently revised and promulgated on June 6, 2019, further identifies information services and online data processing and transaction processing services as value-added telecommunications services. The Group engages in business activities that are value-added telecommunications services as defined and described by the Telecom Regulations and the Catalogue.

On March 1, 2009, the MIIT issued the *Measures on the Administration of Telecommunications Business Operating Permits*, or the Telecom License Measures, which initially became effective on April 10, 2009 and was amended on July 3, 2017, effective on September 1, 2017, to supplement the Telecom Regulations. The Telecom License Measures provide that there are two types of telecommunications operating licenses, or the ICP Licenses for operators in China, one for basic telecommunications services and one for value-added telecommunications services. A distinction is also made to licenses for value-added telecommunications services as to whether a license is granted for "intra-provincial" or "trans-regional" (inter-provincial) activities. The license will detail the permitted activities of the enterprise to which it was granted. An approved telecommunication services operator must conduct its business (whether basic or value-added) in accordance with the specifications recorded in its ICP License.

The Group's current and future business activities include providing information services and content to users through its mobile applications including *Qutoutiao*, *Midu Novels*, *Midu Lite* and providing online data processing and transaction processing services, all of which will be regarded as value-added telecommunications services under the Catalogue. Certain of the Group VIEs have been granted the ICP Licenses which authorize relevant companies' provision of information services through the Internet. Please refer to "— Licenses and Permissions Requirements" for more details. All of the licenses are also subject to annual inspection.

Regulations on Foreign Direct Investment in Value-Added Telecommunications Companies

Investment activities in China by foreign investors are principally governed by the Special Administrative Measures (Negative List) for Foreign Investment Access, or the Negative List and the Industry Guidelines on Encouraged Foreign Investment, or the Encouraging Catalog, which were promulgated and were amended from time to time by the MOFCOM and the NDRC. The Negative List and Encouraging Catalog classify the industries into three categories with regard to foreign investment: (i) "encouraged," (ii) "restricted" and (iii) "prohibited."

The current effective negative list is the Special Administrative Measures (Negative List) for Foreign Investment Access (2021 Version), or the 2021 Negative List, which became effective on January 1, 2022. Industries that are not listed in the 2021 Negative List are permitted areas for foreign investments and are generally open to foreign investment unless specifically restricted by other PRC regulations. Some restricted industries are limited to equity or contractual joint ventures, while in some cases Chinese partners are required to hold majority interests in such joint ventures. In addition, projects in the restricted category may be subject to higher-level government approval requirements. Foreign investors are not allowed to invest in industries in the prohibited category.

In addition, foreign direct investment in telecommunications companies in China is governed by the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises, or the FITE Regulations, which were issued by the State Council on December 11, 2001, became effective on January 1, 2002 and amended and issued on February 6, 2016 and on April 7, 2022 (became effective on May 1, 2022). Pursuant to the FITE Regulations and the 2021 Negative List, subject to undertakings for opening telecommunication industries made by China for joining World Trade Organization, the ultimate foreign equity ownership in a value-added telecommunications services provider cannot exceed 50%, except for e-commerce, domestic multiparty communications, store-and-forward and call centers. Furthermore, the prior FITE Regulations used to require that, for a foreign investor to own any equity interest in a value-added telecommunication business in China, it must satisfy a number of stringent performance and operational experience requirements, including demonstrating a good track record and experience in operating a value-added telecommunications business, and obtain approvals from the MIIT and the MOFCOM or their authorized local counterparts, which retain considerable discretion in granting approvals. Although the previous requirement of good track record and experience has been cancelled in the newly modified FITE Regulation since May 1, 2022, this modification is relatively new and uncertainties exists in relation to its interpretation and implementation.

On July 13, 2006, the MIIT issued the Notice of the Ministry of Information Industry on Intensifying the Administration of Foreign Investment in Value-added Telecommunications Services, or the MIIT Notice, which reiterates certain provisions of the FITE Regulations. In addition to the provisions stated in FITE Regulations, the MIIT Notice further provide that a domestic company that holds a license for the provision of Internet information services, or an ICP license, is prohibited from leasing, transferring or selling the ICP license to foreign investors in any form, and from providing any assistance, including providing resources, sites or facilities, to foreign investors to conduct value-added telecommunications businesses illegally in China. The MIIT Notice also requires each ICP license holder to have appropriate facilities for its approved business operations and to maintain such facilities in the regions covered by its license, and specifically, with regard to the domain names and trademarks, the MIIT Notice required that trademarks and domain names that are used in the provision of Internet content services must be owned by the ICP license holder or its shareholders. One of the Group VIEs, Shanghai Jifen, which holds the ICP license, owns the Group's major domain names, and holds or has applied for registration in the PRC of trademarks related to the Group's business and owns and maintains facilities that we believe are appropriate for the Group's business operations.

In view of these restrictions on foreign direct investment in the value-added telecommunications sector, the Group established various domestic consolidated affiliated entities to engage in value-added telecommunications services. For a detailed discussion of the Group VIEs and their subsidiaries, please refer to "Item 4. Information on the Company — D. Organizational Structure." Due to a lack of interpretative materials from the relevant PRC governmental authorities, there are uncertainties regarding whether PRC governmental authorities would consider the Group's corporate structure and contractual arrangements to constitute foreign ownership of a value-added telecommunications business. For details, please refer to "Item 3 Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — If the PRC government deems that the contractual arrangements in relation to the Group VIEs do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. In addition, our ADSs may significantly decline in value or become worthless if we are unable to assert our contractual control over the assets of the Group VIEs." In order to comply with PRC regulatory requirements, the Group operates a portion of its business through the Group VIEs and their subsidiaries, with which we have contractual relationships but in which we do not have an actual ownership interest. If the Group's current ownership structure is found to be in violation of current or future PRC laws, rules or regulations regarding the legality of foreign investment in the PRC Internet sector, we could be subject to severe penalties.

Regulations on the Provision of Internet Content

Regulation on Internet Information Services

The *Administrative Measures on Internet Information Services*, or the Internet Content Measures, which was promulgated by the State Council on September 25, 2000 and amended on January 8, 2011, set out guidelines on the provision of Internet information services. The Internet Content Measures classifies Internet information services into commercial Internet information services and non-commercial Internet information services, and commercial Internet information services refer to services that provide information or services to Internet users with charge. A provider of commercial Internet information services must obtain an ICP License, and, prior to the application for such ICP License from the MIIT or its local branch at the provincial or municipal level, entities providing online information services regarding news, publishing, education, medicine, health, pharmaceuticals and medical equipment must procure the consent of the national authorities responsible for such areas. As a provider of commercial Internet information services, Shanghai Jifen, Big Rhinoceros Horn and other relevant entities have been granted the ICP Licenses as mentioned above, which authorize relevant companies' provision of information services via the Internet.

On January 8, 2021, the CAC issued the *Administrative Measures on Internet Information Services* (*Draft for Public Comments*), or the Draft Measures, which states that the provider of Internet information services for cultural, publishing and audio-visual programs shall obtain permission from relevant departments and the entities that engage in Internet news and information services shall submit an application to the network information department. As of the date of this annual report, the Draft Measures has not been enacted.

In addition to the approval and license requirements, various ministries and agencies in the PRC, including the MIIT, the News Office of the State Council, the Ministry of Culture and Tourism and the General Administration of Press and Publication, have promulgated multiple measures relating to internet content, all of which specifically prohibit internet activities that result in the dissemination of any content that infringes the legal rights of others, is found to contain pornography, promotes gambling or violence, instigates crimes, undermines public morality or the cultural traditions of the PRC, or compromises state security or secrets. For example, the Internet Content Measures specifies a list of prohibited content. Internet information providers are prohibited from producing, copying, publishing or distributing information that is humiliating or defamatory to others or that infringes the legal rights of others. Internet information providers that violate these measures may face criminal charges or administrative sanctions, such as fines, revoking any relevant business operation licenses. Internet information providers must monitor and control the information posted on their websites. If any prohibited content is found, they must remove the content immediately, keep a record of such content and report to the relevant authorities. On December 15, 2019, the CAC promulgated the Provisions on Ecological Governance of Network Information Content, which became effective on March 1, 2020, to further regulate the network information and content. On November 29, 2021, the Office of the Ministry of Culture and Tourism issued the Opinions on Strengthening the Protection of Minors in the Network Cultural Market, which propose the entities to strengthen the construction of online content, explore the establishment of the review and judgment standards of the content unsuitable for minors to access, continue to improve the ability to identify illegal content models and improve the professionalism and effectiveness of manual audit to block and clean up the harmful content timely and effectively such as cult, pornography, illegal missionary, dangerous behavior, negative values and so on, Regulation on Internet News Dissemination

Pursuant to the *Provisions for the Administration of Internet News Information Services* promulgated by the CAC, which was issued on May 2, 2017 and became effective on June 1, 2017, an Internet news license shall be obtained from CAC by the service provider for the provision of internet news information services to the public in a variety of ways, including offering platforms for such dissemination. "News information" as mentioned therein includes reports and comments relating to social and public affairs such as politics, economy, military affairs and foreign affairs, as well as relevant reports and comments on social emergencies. The service providers shall meet various qualifications and requirements as listed in such regulation, and further, to provide Internet-based news information services, the service providers are also required to complete formalities for ICP License or filing with the competent telecommunications authorities in accordance with the law. In practice, Internet news information service providers that are not state-owned, such as our company, are required to introduce a state-owned shareholder in order to apply for the Internet news license.

In addition to the above, such regulation also stipulates that no organization may establish Internet-based news information service agencies in the form of Sino-foreign joint ventures, Sino-foreign cooperative ventures or wholly foreign-owned enterprises. Any cooperation involving Internet-based news information services and between Internet-based news information service agencies and foreign-invested enterprises, or FIEs, shall be reported to the national CAC for security assessment.

The Group is required to obtain an Internet news license from CAC for the dissemination of news through the Group's mobile application. On July 30, 2019, Shanghai Jifen Culture Communications Co., Ltd., or Shanghai Jifen, one of the Group VIEs, obtained an Internet News License from CAC.

Regulation on Online Transmission of Audio-visual Programs

On April 13, 2005, the State Council promulgated Decisions on the Entry of the Non-state owned Capital into the Cultural Industry, according to which non-state-owned capital and foreign investors are generally not allowed to conduct the business of transmitting audio-visual programs via information network.

On December 20, 2007, the NRTA (previously known as SART, GAPPRFT and SARFT) and MIIT jointly issued the *Administrative Provisions for the Internet Audio-Video Program Service*, or the Audio-visual Program Provisions, which came into effect on January 31, 2008 and was amended on August 28, 2015. The Audio-visual Program Provisions define "Internet audio-visual programs services" as the production, edition and integration of audio-video programs, the supply of audio-video programs to the public via the Internet, and the provision of upload and audio-video programs transmission services to a third party. Entities engaging in Internet audio-visual programs services must obtain an internet audio-visual program transmission license, which will only be issued to state-owned or state-controlled entities. According to the *Categories of the Internet Audio-Video Program Services* modified by the NRTA on March 10, 2017, "aggregation of Internet audio-visual programs", which means "editing and arranging the Internet audio-visual programs on the same website and providing searching and watching services to public users", falls into the definition of the aforementioned "Internet audio-visual programs services."

On March 30, 2009, the NRTA promulgated the Notice on Strengthening the Administration of the Content of Internet Audio-Visual Programs, which reiterates the pre-approval requirements for the internet audio-visual programs, including those on mobile network (if applicable), and prohibits internet audio-visual programs containing violence, pornography, gambling, terrorism, superstition, or other prohibited elements.

The NRTA issued the Supplemental Notice on Improving the Administration of Online Audio-visual Content Including Internet Drama and Micro Films on January 2, 2014. This notice emphasizes that entities producing online audio-visual content, such as internet drama and micro films, must obtain a Radio and Television Program Production and Operation License, and that online audiovisual content service providers cannot release any internet drama or micro films that were produced by any entity lacking such license. For internet drama or micro films produced and uploaded by individual users, the online audio-visual service providers transmitting such content will be deemed responsible as a producer. Further, under this notice, online audio-visual service providers can only transmit content uploaded by individuals whose identity has been verified and such content shall comply with the relevant content management rules. This notice also requires that online audio-visual content, including internet drama and micro films, to be filed with the relevant authorities before release.

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

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

According to the *Administrative Provisions on Online Audio-Visual Information Services*, promulgated jointly by the CAC, the MCT and the NRTA on November 18, 2019 and became effective on January 1, 2020, online audio-visual information service providers shall authenticate user's real identity information based on organization code, identity card number, mobile phone number, etc. Online audio-visual information service providers shall not serve users who fail to provide their real identity information. Online audio-visual information service providers shall strengthen the management of the audio-visual information posted by users, deploy and apply identification technologies for illegal and non-real audio and video; if any user is found to produce, post or disseminate content prohibited by laws or regulations, the transmission of such information shall be ceased, and disposal measures such as deletion shall be taken to prevent the information from spreading, and such service providers shall save relevant records, and report to the CAC, the MCT, the NRTA, etc.

Although the Group has been taking measures to ensure compliance, it may not be able to fully comply with Audio-visual Program Provisions. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — The Group's inability to fully comply with Audio-visual Program Provisions may expose it to administrative sanctions, which would materially and adversely affect the Group's business, results of operations and financial condition."

Regulations Related To Online Live Streaming Services

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

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

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

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

According to Circular 78 issued by the NRTA on November 12, 2020, platforms providing online show live streaming or e-commerce live streaming services shall register their information and business operations by November 30, 2020 on the National Internet Audio-visual Platforms Information Management System. The overall ratio of front-line content analysts to live streaming rooms shall be 1:50 or higher on such platforms. The training for content analysts shall be strengthened and content analysts who have passed the training shall be registered in the system. A platform shall report the number of its live streaming rooms, streamers and content analysts to the provincial branch of the NRTA on a quarterly basis. If celebrities or persons of non-PRC nationality intend to open live streaming rooms on a platform, it shall also report to competent authorities in advance. Online show live streaming platforms shall tag content and streamers by category. A streamer cannot change the category of the programs offered in his or her live streaming room without prior approval from the platform.

In order to further strengthen the standardized management of the online live streaming industry, the CAC, the National Office of Anti-Pornography and Anti-Illegal, the MIIT, the Ministry of Public Security, or the MPS, the MCT, the SAMR and the NRTA jointly issued the Circular on the Guiding Opinions on Strengthening Standardized Management of Online Live Streaming on February 9, 2021, which further states that live streaming platforms which provide online audio-visual program services must obtain the Audio-Visual Permit (or complete the registration on the National Internet Audio-visual Platforms Information Management System) and complete the ICP filing procedure.

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

As of the date of this annual report, the Group has completed the registration on the National Internet Audio-visual Platforms Information Management System with our *Qutoutiao* app. Uncertainty remains as to the interpretation of the online live streaming regulations, which may require the Group to take further actions and/or subject it to penalties. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications."

Regulations on Internet Publishing

On February 4, 2016, the SAPPRFT and MIIT jointly issued the *Internet Publishing Rules*, which took effect on March 10, 2016. "Online publications" is defined, under the Internet Publishing Rules, as digital works that are edited, produced, or processed to be published and provided to the public through the Internet, including (a) original digital works, such as articles, pictures, maps, games, and comics; (b) digital works with content that is consistent with the type of content that, prior to the Internet age, typically was published in media such as books, newspapers, periodicals, audio-visual products, and electronic publications; (c) digital works in the form of online databases compiled by selecting, arranging, and compiling other types of digital works; and (d) other types of digital works identified by the SAPPRFT. Under the Internet Publishing Rules, Internet operators distributing such online publications through information network are required to obtain an Internet publishing license from SAPPRFT. Wholly foreign-owned enterprises, Sino-foreign equity joint ventures and Sino-foreign cooperative enterprises are prohibited from engaging in the provision of Internet publishing services. In addition, project cooperation between an Internet publishing service provider and a wholly foreign-owned enterprise, Sino-foreign equity joint venture, or Sino-foreign cooperative enterprise within China or an overseas organization or individual involving Internet publishing services shall be subject to examination and approval by the NRTA in advance. A company that fails to comply with these rules may be ordered to close the website or pay fines or be subject to other penalties imposed by relevant authorities.

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

Uncertainty remains as to the interpretation of the Internet Publishing Rules which may require the Group to take further actions and/or subject it to penalties. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — The Group may be adversely affected by the complexity, uncertainties and changes in PRC regulation of Internet businesses and companies, including limitations on its ability to own key assets such as its mobile applications."

Regulations on Online Advertising Services

On April 24, 2015, the SCNPC enacted the *Advertising Law of the PRC*, which was amended on October 26, 2018, and April 29, 2021, or the New Advertising Law, to increase the potential legal liability of providers of advertising services, and to include provisions intended to strengthen identification of false advertising and the power of regulatory authorities. On July 4, 2016, the SAIC issued the *Interim Measures of the Administration of Online Advertising*, or the SAIC Interim Measures, which took effect on September 1, 2016, to further regulate Internet advertising activities.

The New Advertising Law and the SAIC Interim Measures both provide that advertisements posted or published through the Internet may not affect users' normal usage of a network, and advertisements published in the form of pop-up windows on the Internet must display a "close" sign prominently and ensure one-key closing of the pop-up windows. The SAIC Interim Measures provide that all online advertisements must be marked "Advertisement" so that viewers can easily identify them as such.

With regard to the content of the advertisement, according to the above laws and regulations, any advertisement that contains false or misleading information to deceive or mislead consumers shall be deemed false advertising. The New 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. Also, according to the SAIC Interim Measures, no advertisement of such special products or services which are subject to examination by an advertising examination authority shall be published unless it has passed such examination.

On November 26, 2021, the SAMR has publicly solicited opinions on the Measures for the Administration of Online Advertising (Draft for Comments), or the Draft Internet Advertising Measures, which states that platform operators providing Internet information services shall take measures to prevent and stop false and illegal advertisements, improve the technical measures for discovering and disposing of advertising promotion for illegal and criminal activities and embedding malicious codes or illegal information in advertising services. The Draft Internet Advertising Measures also provides that Internet advertisement publishers should not publish advertisements on vehicles or intelligence household electronic appliances without the users' permission or request. The Draft Internet Advertising Measures further strengthens the one-click-to-close requirement and prohibits advertisements for certain items on Internet media that targets minors, including, among others, advertisements related to online games that are harmful to the physical or mental health of minors. The SAMR solicited comments on this Draft Internet Advertising Measures, but it has not been formally adopted.

The New Advertising Law, the SAIC Interim Measures and Draft Internet Advertising Measures require the Group to monitor the advertising content shown on the Group's mobile applications to ensure that such content is true, accurate and in full compliance with applicable laws and regulations. However, we cannot assure you that all of the content contained in such advertisements is true and accurate as required by the advertising laws and regulations. For details, please see "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — Advertisements on the Group's mobile applications may subject us to penalties and other administrative actions."

Regulation on Mobile Internet Applications Information Services

On June 28, 2016, the CAC issued the *Provisions on the Administration of Mobile Internet Applications Information Services*, or the APP Provisions, which became effective on August 1, 2016. Under the APP Provisions, mobile application providers and application store service providers are prohibited from engaging in any activity that may endanger national security, disturb the social order, or infringe the legal rights of third parties, and may not produce, copy, issue or disseminate through mobile applications any content prohibited by laws and regulations. The APP Provisions also require application providers to procure relevant approval to provide services through such applications, and shall strictly fulfill their responsibilities of information security management, including (i) verifying real identities with the registered users through mobile phone numbers; (ii) establishing and improving the verification and management mechanism for the information content, adopting proper sanctions and measures such as warning, limiting functions, suspending updates, and closing accounts for releasing illegal information content; (iii) keeping records and report to competent authorities; (iv) protecting and safeguarding users' "rights to know and rights to choose" during installation or use; (v) protecting intellectual property rights concerned and (vi) keeping records of user log information for 60 days.

Regulation on Online Cultural Products

On February 17, 2011, the MOC issued the new *Provisional Regulations for the Administration of Online Culture*, or the New Online Culture Regulations, which took effect on April 1, 2011 and was recently amended on December 15, 2017, to replace the previous regulations which were issued by MOC on May 10, 2003. The New Online Culture Regulations apply to entities engaging in activities related to "Internet cultural products", which include those cultural products that are produced specially for Internet use, such as online music and entertainment, online games, online plays, online performances, online works of art and Web animations, and those cultural products that, through technical means, produce or reproduce music, entertainment, games, plays and other art works for Internet dissemination.

Pursuant to the New Online Culture Regulations, commercial entities are required to apply to the relevant local branch of the MOC for an Online Culture Operating Permit if they engage in any of the following types of activities:

- the production, duplication, importation, release or broadcasting of Internet cultural products;
- the dissemination of online cultural products on the Internet or transmission thereof via Internet or mobile phone networks to users' terminals such as computers, fixed-line or mobile phones, television sets, gaming consoles and Internet surfing service sites such as Internet cafés for the purpose of browsing, using or downloading such products; or
- the exhibition or holding of contests related to Internet cultural products.

The New Online Culture Regulations further classifies Internet cultural activities into commercial Internet cultural activities and non-commercial Internet cultural activities. Entities engaging in commercial Internet cultural activities must apply to the relevant authorities for an Internet Cultural Business License, or ICB License, while non-commercial cultural entities are only required to report to related culture administration authorities within 60 days of the establishment of such entity. According to the 2021 Negative List, foreign investors are prohibited from investing in an entity holding an ICB License (except for music). Consequently, foreign investors are prohibited from investing in businesses that carry out and operate the short video and live streaming and online game via platform(s), as these businesses are deemed as businesses subject to foreign-investment prohibition by virtue of the platform's need to obtain an ICB License (except for music).

The MOC issued the *Notice of Adjusting the Scope of Internet Cultural Business License and Further Regulating the Approval* on May 14, 2019. Under such notice, the MOC will no longer accept new application for certain scopes including "game products (including issuance of virtual currencies in online games)" while the permits which have already been approved with such scope are still valid until expiration.

Certain of the Group VIEs have obtained the Internet Cultural Business Licenses. Please refer to "Item 4. Information on the Company — C. Regulations — Licenses and Permissions Requirements" for more details. All of the permits are also subject to annual inspection.

Regulation on Cybersecurity and Censorship

Internet security in China is regulated and restricted from a national security standpoint. On July 1, 2015, the SCNPC promulgated the new *National Security Law*, which took effect on the same date and replaced the former National Security Law promulgated in 1993. According to the new National Security Law, the state shall ensure that the information system and data in important areas are secure and controllable. In addition, according to the new National Security Law, the state shall establish national security review and supervision institutions and mechanisms, and conduct national security reviews of key technologies and IT products and services that affect or may affect national security. There are uncertainties on how the new National Security Law will be implemented in practice.

The SCNPC enacted the *Decisions on the Maintenance of Internet Security* on December 28, 2000, which was amended in August 27, 2009. Such decision makes it unlawful to: (i) gain improper entry into a computer or system of strategic importance; (ii) disseminate politically disruptive information; (iii) leak state secrets; (iv) spread false commercial information; or (v) infringe intellectual property rights. The Ministry of Public Security has promulgated measures as below that prohibit the use of the Internet in ways which, among other things, result in a leakage of State secrets or distribution of socially destabilizing content. The Ministry of Public Security has supervision and inspection rights in this regard. If an ICP license holder violates these measures, the PRC government may revoke its ICP license and shut down its websites.

On December 16, 1997, the Ministry of Public Security issued the *Administration Measures on the Security Protection of Computer Information Network with International Connections*, amended on January 8, 2011, which prohibits using the Internet to leak state secrets or to spread socially destabilizing materials. If an ICP license holder violates these measures, the PRC government may revoke its ICP license and shut down its websites. Pursuant to the *Ninth Amendment to the Criminal Law* issued by the SCNPC on August 29, 2015 and becoming effective on November 1, 2015, any ICP provider that fails to fulfill the obligations related to Internet information security administration as required by applicable laws and refuses to rectify upon orders, will be subject to criminal liability for (i) any dissemination of illegal information in large scale; (ii) any severe effect due to the leakage of the client's information; (iii) any serious loss of evidence of criminal activities; or (iv) other severe situations, and any individual or entity that (i) sells or provides personal information to others unlawfully, or (ii) steals or illegally obtains any personal information, will be subject to criminal liability in severe situations.

On November 7, 2016, the SCNPC promulgated the *PRC Cybersecurity Law*, which took effect on June 1, 2017. The PRC Cybersecurity Law applies to the construction, operation, maintenance, and use of networks as well as the supervision and administration of Internet security in the PRC. The PRC Cybersecurity Law defines "networks" as systems that are composed of computers or other information terminals and relevant facilities used for the purpose of collecting, storing, transmitting, exchanging, and processing information in accordance with certain rules and procedures. "Network operators," who are broadly defined as owners and administrator of networks and network service providers, shall meet their cyber security obligations and shall take technical measures and other necessary measures to protect the safety and stability of their networks. Under the Cybersecurity Law, network operators are subject to various security protection-related obligations, including:

- complying with security protection obligations in accordance with tiered requirements with respect to maintenance of the security of Internet systems, which include formulating internal security management rules and developing manuals, appointing personnel who will be responsible for Internet security, adopting technical measures to prevent computer viruses and activities that threaten Internet security, adopting technical measures to monitor and record status of network operations, holding Internet security training events, retaining user logs for at least six months, and adopting measures such as data classification, key data backup, and encryption for the purpose of securing networks from interference, vandalism, or unauthorized visits, and preventing network data from leakage, theft, or tampering;
- verifying users' identities before signing agreements or providing services such as network access, domain name registration, landline telephone or mobile phone access, information publishing, or real-time communication services;
- clearly indicating the purposes, methods and scope of the information collection, the use of information collection, and obtain the consent of those from whom the information is collected when collecting or using personal information;
- · strictly preserving the privacy of user information they collect, and establish and maintain systems to protect user privacy; and
- strengthening management of information published by users. When the network operators discover information prohibited by laws and regulations from publication or dissemination, they shall immediately stop dissemination of that information, including taking measures such as deleting the information, preventing the information from spreading, saving relevant records, and reporting to the relevant governmental agencies

On November 15, 2018, the Cyberspace Administration issued the Provisions on Security Assessment of the Internet Information Services with Public Opinion Attributes or Social Mobilization Capacity, which came into effect on November 30, 2018. The provisions require internet information providers to conduct security assessments on their internet information services if their services include forums, blogs, microblogs, chat rooms, communication groups, public accounts, short-form videos, online live-streaming, information sharing, mini programs or other functions that provide channels for the public to express opinions or have the capability of mobilizing the public to engage in specific activities. Internet information providers must conduct self-assessment on, among other things, the legality of new technology involved in the services and the effectiveness of security risk prevention measures, and file the assessment report with the local competent cyberspace administration authority and public security authority.

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

On April 13, 2020, the CAC, together with 11 other government agencies, jointly issued the Cybersecurity Review Measures, or the Review Measures. The Review Measures, under which the scope of application, reporting procedures, evaluation factors and legal responsibilities are stipulated, was implemented on June 1, 2020 to replace the *Measures for Security Review of Cyber Products and Services (for Trial Implementation)* issued by the CAC on May 2, 2017. According to the Review Measures, if any operator of critical information infrastructure, or the CIIOs, which, according to the Answers to Questions on the Review Measures published by the CAC on April 27, 2020, shall include operators of telecommunication, purchases any network product or service which may bring potential risks to or may affect national security, shall apply for a cybersecurity review to be conducted by Cybersecurity Review Office.

In July 2020, the SCNPC released a draft data security law, or the Draft Data Security Law, for public comment. The Draft Data Security Law provides for data security and privacy obligations on entities and individuals carrying out data activities. The Draft Data Security Law also introduces a national security review procedure for those data activities which may affect national security and imposes export restrictions on certain data information.

On June 10, 2021, the Standing Committee of the National People's Congress, or the SCNPC, promulgated the PRC Data Security Law, which has come into effect on September 1, 2021. The PRC Data Security Law imposes data security and privacy protection obligations on entities and individuals carrying out data activities, including but not limited to the collection, storage, use, processing, transmission, provision, and public disclosure of data. Furthermore, the PRC Data Security Law propose to establish a data classification and hierarchical protection system to protect data by classification and level, depending on the importance of the data in economic and social development, and the damage caused to national security, public interests, or the legitimate rights and interests of individuals and organizations if the data is falsified, damaged, disclosed, illegally obtained or illegally used. The law also provides a national security review procedure for data activities that may affect national security and imposes export restrictions on certain data and information.

The Administrative Provisions on Security Vulnerability of Network Products, or the Provisions on Security Vulnerability, was jointly promulgated by the MIIT, the CAC and the Ministry of Public Security on July 12, 2021 and became effective on September 1, 2021. Network product providers, network operators as well as organizations or individuals engaging in the discovery, collection, release and other activities of network product security vulnerability are subject to the Provisions. Network product providers, network operators and network product security vulnerability collection platforms shall establish a sound unimpeded channels to receive information of security vulnerability. Cyber product providers shall perform the obligations to manage security vulnerabilities of cyber products, ensure that security vulnerabilities of their products are timely repaired and released in a reasonable manner and guide users of their products to take preventive measures. In response to the PRC Cybersecurity Law, network product providers are required to report relevant information of security vulnerability of network products with the MIIT within two days and to provide technical support for network product users. Network operators shall take measures to examine and fix security vulnerability after discovering or acknowledging that their networks, information systems or equipment have security loopholes. According to the Provisions on Security Vulnerability, the breaching parties may be subject to monetary fine as regulated in accordance with the PRC Cybersecurity Law. Since the Provisions on Security Vulnerability is relatively new, uncertainties still exist in relation to its interpretation and implementation.

On July 30, 2021, the State Council of the PRC promulgated the Provisions on Protection of the Security of Critical Information Infrastructure, which took effect on September 1, 2021. Pursuant to the Provisions on Protection of the Security of Critical Information Infrastructure, critical information infrastructure shall mean any important network facilities or information systems of the important industry or field such as public communication and information service, energy, communications, water conservation, finance, public services, e-government affairs and national defense science, which may endanger national security, people's livelihood and public interest in case of damage, function loss or data leakage. In addition, relevant administration departments of each critical industry and sector, which are referred to as the "Protection Departments," shall be responsible for formulating eligibility criteria and identifying the critical information infrastructure operator in the respective industry or sector. The operators shall be informed about the final determination as to whether they are categorized as critical information infrastructure operators.

On November 14, 2021, the CAC issued the Draft Network Data Security Management Regulations for public comments, pursuant to which, data processors carrying out the following activities must, in accordance with the relevant national regulations, apply for a cybersecurity review: (i) the merger, reorganization or spin-off of internet platform operators that possess a large number of data resources related to national security, economic development and public interests that affects or may affect national security; (ii) listing in a foreign country of data processors that process the personal information of more than one million users; (iii) listing in Hong Kong of data processors and such listing affects or may affect national security; and (iv) other data processing activities that affect or may affect national security. The scope of and threshold for determining what "affects or may affect national security" is still subject to uncertainty and further elaboration by the CAC. It further requires that a data processor which processes important data or is listed overseas shall complete an annual data security assessment either self-conducted or conducted by a data security service organization engaged, and before January 31 of each year, submit the annual data security assessment report of the previous year to the local cyberspace affairs administration department. As of the date of this annual report, the Network Data Security Management Regulations was released for public comment only, and no interpretation or implementation rules for this proposed regulation have been issued by the CAC or any other PRC regulatory authorities. It remains uncertain when the Network Data Security Management Regulations will be adopted and become effective and whether it will be adopted as it was initial proposed.

On December 28, 2021, the CAC and other 12 PRC regulatory authorities jointly issued the revised Cybersecurity Review Measures, which became effective from February 15, 2022. The revised Cybersecurity Review Measures require that, (i) any procurement of network products and services by critical information infrastructure operators, which affects or may affect national security, (ii) any data processing activities by network platform operators, which affects or may affect national security, or (iii) any network platform operators which has personal information of more than one million users and is going to be listed abroad, shall be subject to cybersecurity review. Furthermore, the relevant PRC governmental authorities may initiate cybersecurity review if they determine certain network products, services, or data processing activities affect or may affect national security. If the Group were found to be in violation of applicable laws and regulations of the PRC during such review, it could be subject to administrative penalties, such as warnings, fines, service suspension or removal of the Group's apps from the relevant app stores. Therefore, cybersecurity review could have a material and adverse impact on the Group's business, results of operations and financial condition. Since the measures were recently promulgated, there exists uncertainties with respect to their interpretation and implementation.

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

On December 31, 2021, the CAC, the MIIT, the Ministry of Public Security, and the SAMR jointly promulgated the Administrative Provisions on Internet Information Service Algorithm Recommendation, which took effect on March 1, 2022. The Administrative Provisions on Internet Information Service Algorithm Recommendation, among others, implements classification and hierarchical management for algorithm recommendation service providers based on various criteria, requires algorithm recommendation service providers to inform users of their provision of algorithm recommendation services in a conspicuous manner, and publicize the basic principles, purpose intentions, and main operating mechanisms of algorithm recommendation services in an appropriate manner, and requires such service providers to provide users with options that are not specific to their personal profiles, or convenient options to cancel algorithmic recommendation services. In addition, the Administrative Provisions on Internet Information Service Algorithm Recommendation states that an algorithm recommendation service provider with public opinion attribute or social mobilization ability shall, within ten working days from the date of provision of services, fill in such information as the service provider's name, service form, application field, algorithm type, algorithm self-assessment report and content to be disclosed via the internet information service algorithm record-filing system to go through record-filing formalities.

The Group has been making constant efforts to comply with the above PRC laws and regulations on cybersecurity and censorship, Any failure or delay in the completion of the cybersecurity review procedures or any other non-compliance with the related laws and regulations may result in fines or other penalties, including suspension of business, website closure, removal of the Group's app from app stores, and revocation of licenses, as well as reputational damage or legal proceedings or actions against the Group, which may have an material adverse effect on the Group's business, financial condition or results of operations. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — We may be subject to cybersecurity review by regulatory authorities of the PRC in the future."

Regulation on Privacy Protection

On December 28, 2012, the SCNPC enacted the *Decision to Enhance the Protection of Network Information*, or the Information Protection Decision, to enhance the protection of User Personal Information in electronic form. The Information Protection Decision provides that Internet services providers must expressly inform their users of the purpose, manner and scope of the Internet services providers' collection and use of User Personal Information, publish the Internet services providers' standards for their collection and use of User Personal Information, and collect and use User Personal Information only with the consent of the users and only within the scope of such consent. The Information Protection Decision also mandates that Internet services providers and their employees must keep strictly confidential User Personal Information that they collect, and that Internet services providers must take such technical and other measures as are necessary to safeguard the information against disclosure.

Under the Several Provisions on Regulating the Market Order of Internet Information Services, issued by the MIIT on December 29, 2011 and became effective on March 15, 2012, an Internet information service provider may not collect any user personal information or provide any such information to third parties without the consent of a user, unless otherwise provided by laws or regulations. And the Internet information service provider must expressly inform the users of the method, content and purpose of the collection and processing of such user's personal information and may only collect and use such information as necessary for the provision of its services. An Internet information service provider is also required to properly maintain the user's personal information, and in case of any leak or possible leak of the user's personal information, the Internet information service provider must take immediate remedial measures and, in severe circumstances, make an immediate report to the relevant telecommunications regulatory authority.

On July 16, 2013, the MIIT issued the *Order for the Protection of Telecommunication and Internet User Personal Information*, or the Order. Most of the requirements under the Order that are relevant to Internet services providers are consistent with the requirements already established under the provisions discussed above, except that under the Order the requirements are often more strict and have a wider scope. If an Internet services provider wishes to collect or use personal information, it may do so only if such collection is necessary for the services it provides. Further, it must disclose to its users the purpose, method and scope of any such collection or use, and must obtain consent from the users whose information is being collected or used. Internet services providers are also required to establish and publish their protocols relating to personal information collection or use, keep any collected information strictly confidential, and take technological and other measures to maintain the security of such information. Internet services providers are also required to cease any collection or use of the user personal information, and de-register the relevant user account, when a given user stops using the relevant Internet service. Internet services providers are further prohibited from divulging, distorting or destroying any such personal information, or selling or providing such information unlawfully to other parties. The Order states, in broad terms, that violators may face warnings, fines, and disclosure to the public and, in the most severe cases, criminal liability.

The draft Measures on Security Assessment of Cross-Border Transfer of Personal Information and Important Data released in April 2017, which requires the personal information should be stored within the PRC. If it is necessary to transmit data abroad due to business needs, security assessment shall be conducted. Furthermore, for the transmission of personal information abroad, an explanation on the purpose, scope, content and receiver of the data to be transmitted abroad, and the country or region where the receiver is located shall be given to the owner of the personal information, and the transmission shall be consented by such owners.

The draft Measures on Security Assessment of Cross-Border Transfer of Personal Information released in June 2019. According to the measures, prior to the intended cross boarder data transmission, an official security assessment carried out by the PRC government authorities should had been completed and a number of other specified criteria should had been met.

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

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

On November 28, 2019, the CAC, MIIT, the MPS and the SAMR jointly issued the Measures to Identify Illegal Collection and Usage of Personal Information by Apps, which lists six types of illegal collection and usage of personal information, including, but not limited to "not publishing rules on the collection and usage of personal information," "not providing privacy rules," and "collecting and using users' personal information without consent."

On May 28, 2020, the NPC adopted the Civil Code of the PRC, effective on January 1, 2021. According to the Civil Code, individuals have the right of privacy. No organization or individual shall process any individual's private information or infringe an individual's right of privacy, unless otherwise prescribed by law or with the consent of such individual or such individual's guardian. In addition, personal information is protected by the PRC laws. Any processing of personal information shall be subject to the principles of legitimacy, legality and necessity. An information processor must not divulge or falsify the personal information collected and stored by it, or provide the personal information of an individual to others without the consent of such individual.

On January 5, 2015, the SAIC promulgated the *Measures on Punishment for Infringement of Consumer Rights* and recently amended on October 23, 2020, pursuant to which business operators collecting and using personal information of consumers must comply with the principles of legitimacy, propriety and necessity, specify the purpose, method and scope of collection and use of the information, and obtain the consent of the consumers whose personal information is to be collected. Business operators may not: (i) collect or use personal information of consumers without their consent; (ii) unlawfully divulge, sell or provide personal information of consumers to others; (iii) send commercial information to consumers without their consent or request, or when a consumer has explicitly declined to receive such information.

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

On March 12, 2021, the CAC, the MIIT, the MPS and the SAMR jointly issued the Rules on the Scope of Necessary Personal Information for Common Types of Mobile Internet Applications, or the Necessary Personal Information Rules, which came into effect on May 1, 2021. According to the Necessary Personal Information Rules, mobile app operators shall not deny users' access to its basic functions and services on the basis that such user disagrees with the provision of their personal information that is not necessary. The Necessary Personal Information Rules further provides relevant scopes of necessary personal information for different types of mobile apps.

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

On August 20, 2021, the SCPNC adopted the *Personal Information Protection Law*, or the Personal Information Protection Law, which became effective on November 1, 2021. The law aims at protecting the personal information rights and interests, regulating the processing of personal information, and promoting the reasonable use of personal information. The law requires personal information processors to be responsible for its processing of personal information and take necessary measures to ensure the security of the personal information processed.

On October 26, 2021, the CAC published the Provisions on the Administrative of Account Names Information of Internet Users (Draft for Comments) for public comments. Pursuant to these provisions, internet user account service platforms shall, among others, establish, improve and strictly implement account name information management system, information content security system, and personal information protection system, and establish an account name information dynamic check patrol system for the verification of real identity information, improve their technical measures for purposes of account information legal compliance, and support account name authenticity checks.

On October 29, 2021, the Measures for the Security Assessment of Cross-border Data Transmission (Draft for Comment) was proposed by the CAC for public comments until November 28, 2021, which requires that any data processor providing important data collected and generated during operations within the PRC or personal information that should be subject to security assessment according to law to an overseas recipient shall conduct security assessment. As of the date of this annual report, the above measures had not been formally adopted.

Regulations Related to Intellectual Property Rights

Trademarks

On August 23, 1982, the SCNPC promulgated the *Trademark Law of the PRC*, or the Trademark Law, which was amended in 1993, 2001, 2013 and 2019. The *Implementation Regulation for the Trademark Law* promulgated by the State Council came into effect on September 15, 2002 and was further amended on April 29, 2014.

Under the Trademark Law and the implementing regulation, the Trademark Office of the State Administration for Market Regulation, or the Trademark Office, is responsible for the registration and administration of trademarks. The Trademark Office handles trademark registrations. China has adopted a "first-to-file" principle for trademark registration. If two or more applicants apply for registration of identical or similar trademarks for the same or similar commodities, the application that was filed first will receive preliminary approval and will be publicly announced. Registered trademarks are valid for ten years from the date the registration is approved. A registrant may apply to renew a registration within twelve months before the expiration date of the registration. If the registrant fails to apply in a timely manner, a grace period of six additional months may be granted. If the registrant fails to apply before the grace period expires, the registered trademark shall be deregistered. Renewed registrations are valid for ten years.

In addition to the above, the SAIC has established a Trademark Review and Adjudication Board for resolving trademark disputes. According to the Trademark Law, within three months since the date of the announcement of a preliminarily validated trademark, if a titleholder is of the view that is such trademark in application is identical or similar to its registered trademark for the same type of commodities or similar commodities which violates relevant provisions of the Trademark Law, such titleholder may raise an objection to the Trademark Office within the aforesaid period. In such event, the Trademark Office shall consider the facts and grounds submitted by both the dissenting party and the party being challenged and shall decide on whether the registration is allowed within 12 months upon the expiration of the announcement after investigation and verification, and notify the dissenting party and the person challenged in writing.

As of December 31, 2021, the Group had registered 920 trademarks in the PRC, including the trademark for "Qutoutiao," and filed 1,337 trademark applications in the PRC.

Patents

The National People's Congress adopted *the Patent Law of the People's Republic of China* in 1984 and amended it in 1992, 2000, 2008 and 2020, respectively. Under the newly issued version of the Patent Law, which became effective on June 1, 2021, a patentable invention or utility model must meet three conditions: novelty, inventiveness and practical applicability. A patentable design shall not be an existing design, nor shall any entity or individual has filed an application for the same design with the competent authorities prior to the filing date and recorded in the patent documents published after the filing date. Patents cannot be granted for scientific discoveries, rules and methods for intellectual activities, methods used to diagnose or treat diseases, animal and plant breeds, means of nuclear transformation or substances obtained by means of nuclear transformation, etc. The Patent Office under the State Intellectual Property Office is responsible for receiving, examining and approving patent applications. A patent is valid for a twenty-year term for an invention, a ten-year term for a utility model and a fifteen-year term for a design, starting from the application date. Except under certain specific circumstances provided by law, any third-party user must obtain consent or a proper license from the patent owner to use the patent, or else the use will constitute an infringement of the rights of the patent holder.

As of December 31, 2021, the Group had owned 17 patents and filed 81 patent applications in the PRC.

Copyrights

On September 7, 1990, The National People's Congress promulgated *the Copyright Law*, which took effect on June 1, 1991 and was amended in 2001, 2010 and 2020 (the 2020 amendment became effective on June 1, 2021). The Copyright Law extends copyright protection to Internet activities, products disseminated over the Internet and software products. In addition, there is a voluntary registration system administered by the China Copyright Protection Center.

In order to further implement the *Computer Software Protection Regulations*, promulgated by the State Council on December 20, 2001 and amended on January 30, 2013, the National Copyright Administration, or the NCA, issued the *Computer Software Copyright Registration Procedures* on February 20, 2002, which specify detailed procedures and requirements with respect to the registration of software copyrights. The China Copyright Protection Center shall grant registration certificates to the Computer Software Copyrights applicants which meet the requirements of both the Software Copyright Registration Procedures and the Computer Software Protection Regulations.

As of December 31, 2021, the Group had been granted 495 software copyrights and 30 artwork copyrights in the PRC.

Domain Names

The MIIT promulgated the *Measures on Administration of Internet Domain Names*, or the Domain Name Measures, on August 24, 2017, which took effect on November 1, 2017 and replaced the *Administrative Measures on China Internet Domain Name* promulgated by MIIT on November 5, 2004. According to the Domain Name Measures, the MIIT is in charge of the administration of PRC Internet domain names. The domain name registration follows a first-to-file principle. Applicants for registration of domain names shall provide the true, accurate and complete information of their identifications to domain name registration service institutions. The applicants will become the holder of such domain names upon the completion of the registration procedure.

As of December 31, 2021, the Group was the registered holder of 297 domain names in the PRC.

Regulations on Foreign Exchange

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

Pursuant to the *Circular of the SAFE on Further Improving and Adjusting Foreign Exchange Administration Policies for Direct Investment*, or the SAFE Circular 59 promulgated by SAFE on November 19, 2012, which became effective on December 17, 2012 and was further amended on May 4, 2015, October 10, 2018 and December 30, 2019, approval is not required for opening a foreign exchange account and depositing foreign exchange into the accounts relating to the direct investments. SAFE Circular 59 also simplified foreign exchange-related registration required for the foreign investors to acquire the equity interests of PRC companies and further improve the administration on foreign exchange settlement for FIEs.

On February 13, 2015, the SAFE promulgated the *Circular on Simplifying and Improving the Foreign Currency Management Policy on Direct Investment*, or the SAFE Circular 13, effective from June 1, 2015, which was recently amended on December 30, 2019. The SAFE Circular 13 cancels the administrative approvals of foreign exchange registration of direct domestic investment and direct overseas investment and simplifies the procedure of foreign exchange-related registration. Pursuant to SAFE Circular 13, investors should register with banks for direct domestic investment and direct overseas investment.

The SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming the Administration of Foreign Exchange Settlement of Capital of Foreign-invested Enterprises, or Circular 19, effective on June 1, 2015 which was amended on December 30, 2019. According to Circular 19, the flow and use of the Renminbi capital converted from foreign currency denominated registered capital of a foreign-invested company is regulated such that Renminbi capital may not be used for the issuance of Renminbi entrusted loans except for which permitted under business operation scope, the repayment of inter-enterprise loans or the repayment of banks loans that have been transferred to a third party.

SAFE promulgated the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Foreign Exchange Settlement Management Policy of Capital Account, or Circular 16, effective on June 9, 2016, which reiterates some of the rules set forth in Circular 19, but changes the prohibition against using Renminbi capital converted from foreign currency-denominated registered capital of a foreign-invested company to issue Renminbi entrusted loans to a prohibition against using such capital to issue loans to non-associated enterprises.

On October 23, 2019, SAFE promulgated the Circular of the State Administration of Foreign Exchange on Further Promoting the Facilitation of Cross-Border Trade and Investment, or SAFE Circular 28, which became effective on the same day. SAFE Circular 28 allows non-investment foreign-invested enterprises to use their capital funds to make equity investments in China as long as such investments do not violate the currently effective Negative List and the target investment projects are genuine and in compliance with laws. In addition, SAFE Circular 28 stipulates that qualified enterprises in certain pilot areas may use their capital income from registered capital, foreign debt, and overseas listing for the purpose of domestic payments without providing authenticity certifications to the relevant banks in advance for those domestic payments.

Regulations on Dividend Distribution

The principal laws and regulations regulating the dividend distribution of dividends by FIEs in the PRC include the *Company Law of the PRC*, as amended in 2018 and Foreign Investment Law promulgated by SCNPC on March 15, 2019 and recently came into effect on January 1, 2020 and its implementation regulations that took effect on the same day.

Under the current regulatory regime in the PRC, FIEs in the PRC may pay dividends only out of their retained earnings, if any, determined in accordance with PRC accounting standards and regulations. A PRC company is required to set aside as statutory reserve funds at least 10% of its after-tax profit, until the cumulative amount of such reserve funds reaches 50% of its registered capital unless laws regarding foreign investment provide otherwise. A PRC company shall not distribute any profits until any losses from prior fiscal years have been offset. Profits retained from prior fiscal years may be distributed together with distributable profits from the current fiscal year.

As of December 31, 2021, our wholly foreign-owned subsidiaries, Shanghai Quyun and Shanghai Zhicao, had incurred losses and would not be able to pay dividends to our offshore entities until they generate accumulated profits and meet the requirements for statutory reserve funds.

Regulations on Taxation

Enterprise Income Tax

On March 16, 2007, the SCNPC promulgated the *Law of the PRC on Enterprise Income Tax* which was recently amended on December 29, 2018, and on December 6, 2007, the State Council enacted the *Regulations for the Implementation of the Law on Enterprise Income Tax* (collectively, the "EIT Law"), which was recently amended on April 23, 2019. Under the EIT Law, both resident enterprises and non-resident enterprises are subject to tax in the PRC. Resident enterprises are defined as enterprises that are established in China in accordance with PRC laws, or that are established in accordance with the laws of foreign countries but are actually or in effect controlled from within the PRC. Non-resident enterprises are defined as enterprises that are organized under the laws of foreign countries and whose actual management is conducted outside the PRC, but have established institutions or premises in the PRC, or have no such established institutions or premises but have income generated from and inside the PRC. Under the EIT Law and relevant implementing regulations, a uniform corporate income tax rate of 25% is applied. However, if non-resident enterprises have not formed permanent establishments or premises in the PRC but there is no actual relationship between the relevant income derived in the PRC and the established institutions or premises set up by them, enterprise income tax is set at the rate of 10% with respect to their income sourced from inside the PRC.

Value-added Tax

The *Provisional Regulations of the PRC on Value-added Tax*, or the VAT Regulations, were promulgated by the State Council on December 13, 1993 and were most recently amended on November 19, 2017. The *Detailed Rules for the Implementation of the Provisional Regulations of the PRC on Value-added Tax* (Revised in 2011) were promulgated by the Ministry of Finance on December 25, 1993 which was recently amended on October 28, 2011 (collectively with the VAT Regulations, the "VAT Law"). According to the VAT Law, all enterprises and individuals engaged in the sale of goods, the provision of processing, repair and replacement services, and the importation of goods within the territory of the PRC must pay value-added tax. For taxpayers selling or importing goods other than those specifically listed in the VAT Law, the value-added tax rate is 17%.

On November 16, 2011, the MOF and the SAT promulgated the *Pilot Plan for Imposition of Value-Added Tax to Replace Business Tax*, to lay out main content of the pilot scheme for the reform of levying value-added tax in place of business tax. Further on March 23, 2016, the MOF and the SAT jointly promulgated the *Notice on Fully Promoting the Pilot Plan for Replacing Business Tax by Value-Added Tax*, which became effective on May 1, 2016 and was most recently amended on March 20, 2019. Pursuant to the above mentioned notices, VAT is generally imposed in lieu of business tax in the modern service industries, including the VATS, on a nationwide basis. VAT of a rate of 6% applies to revenue derived from the provision of some modern services. Unlike business tax, a taxpayer is allowed to offset the qualified input VAT paid on taxable purchases against the output VAT chargeable on the modern services provided.

On November 19, 2017, the State Council promulgated the Decision of State Council on Abolition of the Provisional Regulations of the PRC on Business Tax and Revision of the Provisional Regulations of the PRC on Value-added Tax, which took effective on the same date, to formally abolish the Provisional Regulations of the People's Republic of China on Business Tax and amend the VAT Regulations accordingly.

On March 20, 2020, Shanghai Chenxing and Shanghai Luoshi performed record-filing for VAT tax invoice of software products and licenses of software products and were subject to the VAT rate of 13%. Besides that, as of December 31, 2021, our PRC subsidiaries, the Group VIEs and their subsidiaries were generally subject to the VAT rate of 6%.

Withholding Tax

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

Pursuant to an Arrangement Between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income, or the Double Tax Avoidance Arrangement, and other applicable PRC laws, if a Hong Kong resident enterprise is determined by the competent PRC tax authority to have satisfied the relevant conditions and requirements under such Double Tax Avoidance Arrangement and other applicable laws, the 10% withholding tax on the dividends the Hong Kong resident enterprise receives from a PRC resident enterprise may be reduced to 5%. However, based on the Circular on Certain Issues with Respect to the Enforcement of Dividend Provisions in Tax Treaties, or the SAT Circular 81, issued on February 20, 2009 by the SAT, if the relevant PRC tax authorities determine, in their discretion, that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such PRC tax authorities may adjust the preferential tax treatment.

Regulations on Employment

Labor Law and Labor Contract Law

The *Labor Law*, which was promulgated on July 5, 1994 and most recently amended on December 29, 2018, and the *Labor Contract Law of the PRC*, or the Labor Contract Law, which took effect on January 1, 2008 and was amended on December 28, 2012, are primarily regulating rights and obligations of employer and employee relationships, including the establishment, performance and termination of labor contracts. Pursuant to the Labor Contract Law, labor contracts shall be concluded in writing if labor relationships are to be or have been established between employers and the employees. Employers are prohibited from forcing employees to work above certain time limit and employers shall pay employees for overtime work in accordance to national regulations. In addition, employee wages shall be no lower than local standards on minimum wages and shall be paid to employees timely. Violations of the Labor Contract Law and the Labor Law may result in the imposition of fines and other administrative and criminal liability in the case of serious violations.

Regulations on Social Insurance and Housing Fund

Under the *Social Insurance Law of the PRC* that was promulgated by the SCNPC on October 28, 2010, came into force as of July 1, 2011 and recently amended on December 29, 2018 and the Interim Regulations on the Collection and Payment of Social Insurance Premiums that was promulgated by the State Council on and came into force as of January 22, 1999 and was recently amended on March 24, 2019, employers are required to pay basic endowment insurance, unemployment insurance, basic medical insurance, employment injury insurance, maternity insurance and other social insurance for its employees at specified percentages of the salaries of the employees, up to a maximum amount specified by the local government regulations from time to time. Where an employer fails to fully pay social insurance premiums, relevant social insurance collection agency shall order it to make up for any shortfall within a prescribed time limit, and may impose a late payment fee at the rate of 0.05% per day of the outstanding amount from the due date. If such employer still fails to make up for the shortfalls within the prescribed time limit, the relevant administrative authorities shall impose a fine of 1 to 3 times the outstanding amount upon such employer.

In accordance with the *Regulations on the Management of Housing Fund* which was promulgated by the State Council in 1999 and amended in 2002 and 2019, employers must register at the designated administrative centers and open bank accounts for depositing employees' housing funds. Employer and employee are also required to pay and deposit housing funds, with an amount no less than 5% of the monthly average salary of the employee in the preceding year in full and on time.

Regulations on Employee Share Incentive Plans

Pursuant to the *Notice of Issues Related to the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Listed Company*, or SAFE Circular 7, which was issued by the SAFE on February 15, 2012, employees, directors, supervisors, and other senior management participating in any share incentive plan of an overseas publicly-listed company who are PRC citizens or who are non-PRC citizens residing in China for a continuous period of not less than one year, subject to a few exceptions, are required to register with SAFE through a domestic agency as regulated in SAFE Circular 7.

In addition, the SAT has issued certain circulars concerning employee stock options and restricted shares, including the *Circular on Issues Concerning the Individual Income Tax on Share-option Incentives*, or the Circular 461, which was promulgated and took effective on August 24, 2009. Under Circular 461 and other relevant laws and regulations, employees working in the PRC who exercise stock options or are granted restricted shares will be subject to PRC individual income tax. The PRC subsidiaries of an overseas listed company are required to file documents related to employee stock options and restricted shares with relevant tax authorities and to withhold individual income taxes of employees who exercise their stock option or purchase restricted shares. If the employees fail to pay or the PRC subsidiaries fail to withhold income tax in accordance with relevant laws and regulations, the PRC subsidiaries may face sanctions imposed by the tax authorities or other PRC governmental authorities.

Regulations Related to Mergers and Acquisitions and Overseas Listings

M&A Rules

On August 8, 2006, six PRC governmental and regulatory agencies, including MOFCOM and the China Securities Regulatory Commission, or the CSRC, promulgated the *Rules on Acquisition of Domestic Enterprises by Foreign Investors*, or the M&A Rules, governing the mergers and acquisitions of domestic enterprises by foreign investors that became effective on September 8, 2006 and was revised on June 22, 2009. The M&A Rules, among other things, requires that offshore special purpose vehicles 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 using shares of such special purpose vehicles or shares held by its shareholders as considerations to obtain the approval of the CSRC prior to publicly listing and trading of such special purpose vehicle's securities on an overseas stock exchange.

SAFE Circular 37

Under the Circular of the State Administration of Foreign Exchange on Issues Concerning the Foreign Exchange Administration over the Overseas Investment and Financing and Round-trip Investment by Domestic Residents via Special Purpose Vehicles, or the SAFE Circular 37, issued by the SAFE and effective on July 4, 2014, PRC residents are required to register with the local SAFE branch prior to the establishment or control of an offshore special purpose vehicle, or the SPV, which is defined as offshore enterprises directly established or indirectly controlled by PRC residents for offshore equity financing with the enterprise assets or interests they hold in China. An amendment to registration or subsequent filing with the local SAFE branch by such PRC resident is also required if there is any change in basic information of the offshore company or any material change with respect to the capital of the offshore company. At the same time, the SAFE has issued the Operation Guidance for the Issues Concerning Foreign Exchange Administration over Round-trip Investment regarding the procedures for SAFE registration under the SAFE Circular 37, which became effective on July 4, 2014 as an attachment of Circular 37.

Under the relevant rules, failure to comply with the registration procedures set forth in the SAFE Circular 37 may result in bans on the foreign exchange activities of the relevant onshore company, including the payment of dividends and other distributions to its offshore parent or affiliates, and may also subject relevant PRC residents to penalties under PRC foreign exchange administration regulations.

Mr. Eric Siliang Tan and Mr. Lei Li have completed their initial SAFE registration pursuant to SAFE Circular 37 in 2017, with Innotech Group Holdings Ltd. and News Optimizer (BVI) Ltd. being separately registered as the respective "special purpose vehicle." After transferring all shares in Innotech Group Holdings Ltd. to the trust of which himself is also a beneficiary, Mr. Eric Siliang Tan, as well as all the other beneficiaries of the trust who are PRC residents are required to complete relevant registrations pursuant to SAFE Circular 37. We have notified substantial beneficial owners of our ordinary shares and the beneficiaries of the trust who we know are PRC residents of their filing obligation, including the obligation to make updates under SAFE Circular 37, and the beneficial owners have undertaken to complete relevant registrations as soon as such registration is practical with local SAFE. Nevertheless, we may not be aware of the identities of all of our beneficial owners who are PRC residents, and we do not have control over our beneficial owners and there can be no assurance that all of our PRC-resident beneficial owners will comply with SAFE Circular 37 and subsequent implementation rules, and there is no assurance that the registration under SAFE Circular 37 and any amendment will be completed in a timely manner, or will be completed at all. See "Item. 3 Key Information — D. Risk Factors — Risks Relating to Our Industry and Business — PRC regulations relating to investments in offshore companies 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 or limit our PRC subsidiaries' ability to increase their registered capital or distribute profits."

Regulations on Overseas Listing

On July 6, 2021, Opinions on Strictly Cracking Down Illegal Securities Activities in Accordance with the Law was jointly issued by the General Office of the Communist Party of China Central Committee and the General Office of the State Council, which steps-up scrutiny of overseas listings by companies and calls for strengthening cooperation in cross-border regulation, improving relevant laws and regulations on cyber security, cross-border data transmission and confidential information management, including the confidentiality requirement and file management related to the issuance and listing of securities overseas, enforcing the primary responsibility of the enterprises for information security of China-based overseas listed companies and promoting the construction of relevant regulatory systems to deal with the risks and incidents faced by China-based overseas-listed companies. As these opinions are recently issued, official guidance and related implementation rules have not been issued yet and the interpretation of these opinions remains unclear at this stage. We cannot assure you that any new rules or regulations promulgated in the future will not impose additional requirements on us.

On December 24, 2021, the CSRC published the draft Regulations of the State Council on the Administration of Overseas Issuance and Listing of Securities by Domestic Companies (Draft for Comments)) (the "Administrative Provisions") and the draft Measures for the Record-Filing of Overseas Issuance and Listing of Securities by Domestic Companies (Draft for Comments) (the "Filing Measures"), or collectively, the Draft Overseas Listing Regulations for public comments, which set out the new regulatory requirements and filing procedures for domestic companies seeking direct or indirect listing in overseas markets.

The Draft Overseas Listing Regulations, among others, lay out specific requirements for filing. In addition, it stipulates that domestic companies that seek to offer and list securities in overseas markets shall strictly comply with laws, regulations and relevant provisions concerning national security in spheres of foreign investment, cybersecurity, and data security, and earnestly fulfill their obligations to protect national security. Domestic companies seeking to list abroad must carry out relevant security review procedures if their businesses involve such supervision. Moreover, an overseas offering and listing is prohibited under circumstances if (i) it is prohibited by PRC laws, (ii) it may constitute a threat to or endanger national security as reviewed and determined by competent PRC authorities, (iii) it has material ownership disputes over equity, major assets, or core technology, (iv) in past three years, the Chinese operating entities, and their controlling shareholders or actual controllers have committed relevant prescribed criminal offenses or are under investigations for suspicion of criminal offenses or major violations, (v) the directors, supervisors, or senior executives have been subject to administrative punishment for severe violations, or are under investigations for suspicion of criminal offenses or major violations, or (vi) it has other circumstances as prescribed by the State Council.

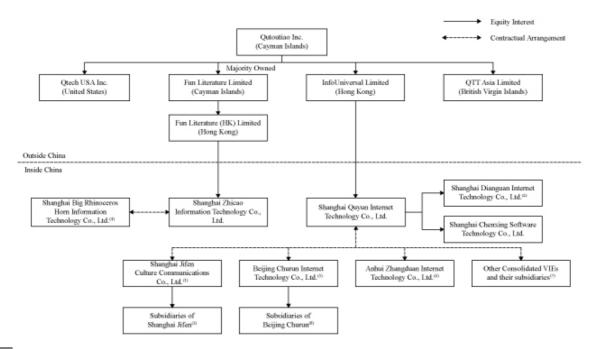
The Draft Overseas Listing Regulations further stipulate that a fine between RMB 1 million and RMB 10 million may be imposed if an applicant fails to fulfill the filing requirements with the CSRC or conducts an overseas offering or listing in violation of the Draft Overseas Listing Regulations, and in cases of severe violations, a parallel order to suspend relevant businesses or halt operations for rectification may be issued, and relevant business permits or operational license revoked.

According to Relevant Officials of the CSRC Answered Reporter Questions ("CSRC Answers") on December 24, 2021, new initial public offerings and refinancing by existent overseas listed Chinese companies will be required to go through the filing procedure, the filings for other existent overseas listed companies will be separately arranged and will be allowed a sufficient transition period.

As of the date of this annual report, it remains uncertain when the final Draft Overseas Listing Regulations will be adopted and whether they will be adopted in the current draft form. If the Draft Overseas Listing Regulations are adopted in the current form, we may be required to file required documents with the CSRC regarding our future securities offerings and may be subject to additional compliance requirements.

D. Organizational Structure

The following diagram illustrates the Group's corporate structure with our principal subsidiaries, the Key VIEs and their subsidiaries as of the date of this annual report. Except as otherwise specified, equity interests depicted in this diagram are held as to 100%. The relationships between Shanghai Quyun, Shanghai Zhicao, the Key VIEs and their respective shareholders as illustrated in this diagram are governed by contractual arrangements and do not constitute equity ownership.



- (1) Mr. Eric Siliang Tan, Mr. Lei Li, Tianjin Shanshi Technology L.P., Shanghai Xihu Cultural Transmission Co., Ltd. and Shanghai Xinpai Management Consulting Co., Ltd., an affiliate of The Paper, hold 44.55%, 14.85%, 19.80%, 19.80% and 1% equity interest in Shanghai Jifen, respectively.
 - Both Tianjin Shanshi Technology L.P. and Shanghai Xihu Cultural Transmission Co., Ltd. are controlled by Mr. Eric Siliang Tan.
- (2) Shanghai Dianguan operates our in-house advertising platform.
- (3) Include Beijing Qukandian, Shanghai Xike, Shanghai Tuile Information Technology Service Co., Ltd., Tianjin Quwen Internet Technology Co., Ltd., Shanghai Heitu and Shanghai Zheyun.
- (4) Shanghai Jifen held 100% equity interest in Big Rhinoceros Horn. Shanghai Jifen entered into contractual arrangements with Shanghai Zhicao. Under such contractual arrangements, Shanghai Zhicao effectively controls Shanghai Big Rhinoceros Horn.
- (5) Mr. Zhongliang Pan and Mr. Mengdie Hua held 60% and 40% equity interest in Beijing Churun, respectively.
- (6) Ms. Wanting Xu and Ms. Min Gao held 60% and 40% equity interest in Anhui Zhangduan, respectively.
- (7) Mainly include Hubei Rapid Information Technology Co., Ltd., or Rapid Information, and Huaian Beixia. Ms. Linhong Wang and Ms. Jun Sun held 60% and 40% equity interest in Rapid Information, respectively. Mr. Hongfei Peng held 100% equity interest in Huaian Beixia.
- (8) Mainly include Beijing Supreme Pole.

Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders

PRC laws and regulations place certain restrictions on foreign investment in and ownership of internet-based businesses. Accordingly, we conduct the Group's operations mainly through Shanghai Jifen, Big Rhinoceros Horn and Anhui Zhangduan and their subsidiaries. We effectively control Shanghai Jifen, Big Rhinoceros Horn, Anhui Zhangduan, Beijing Churun, Rapid Information and Huaian Beixia, or the Key VIEs, through a series of contractual arrangements with the Key VIEs, their respective shareholders and Shanghai Quyun or Shanghai Zhicao, as applicable, as described in more detail below, which collectively enables us to:

- exercise effective control over the Key VIEs and their subsidiaries;
- receive substantially all the economic benefits of the Key VIEs; and
- have an exclusive option to purchase all or part of the equity interests and assets of the Key VIEs when and to the extent permitted by PRC law.

As a result of these contractual arrangements, we are the primary beneficiary of the Key VIEs and their subsidiaries. We have consolidated their financial results in our consolidated financial statements in accordance with U.S. GAAP. In the opinion of King & Wood Mallesons, our PRC legal counsel:

- the ownership structures of Shanghai Quyun and Shanghai Zhicao, or our Key WFOEs, and the Key VIEs in China, do not violate any applicable PRC law, regulation, or rule currently in effect; and
- the contractual arrangements among our Key WFOEs, the Key VIEs and their respective shareholders governed by PRC laws are valid, binding and enforceable in accordance with their terms and applicable PRC laws, rules, and regulations currently in effect, and will not violate any applicable PRC law, regulation, or rule currently in effect.

However, we have been further advised by our PRC legal counsel, King & Wood Mallesons, that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws, rules and regulations. In particular, in January 2015, the MOFCOM published a discussion draft of the proposed Foreign Investment Law, or the 2015 Draft, for public review and comments. The 2015 Draft was replaced by the draft *Foreign Investment Law (2018)*, which was published by the SCNPC in December 2018 and further amended in January 2019. The new Foreign Investment Law was approved by the National People's Congress on March 15, 2019 and came into effect on January 1, 2020. Among other things, the 2015 Draft expands the definition of foreign investment and introduces the principle of "actual control" in determining whether a company is considered a foreign-invested enterprise, or an FIE. Under the 2015 Draft, VIEs would also be deemed as FIEs, if they are ultimately "controlled" by foreign investors, and be subject to restrictions on foreign investments. However, the relevant terms with regard to the VIE structure in the 2015 Draft have been removed in their entirety in the newly effective Foreign Investment Law and there are significant uncertainties as to how the control status of the Key VIEs would be determined under the Foreign Investment Law, and furthermore, whether any of the businesses that we currently operate or plan to operate in the future through any of the Key VIEs would be subject to any foreign investment restrictions or prohibitions under the "negative list" then effective.

Accordingly, the PRC regulatory authorities may in the future take a view that is contrary to the 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 the Group's business do not comply with PRC government restrictions on foreign investment in the aforesaid business the Group engages in, the Group could be subject to severe penalties including being prohibited from continuing operations. Our ADSs may significantly decline in value or become worthless if we are unable to effectively assert contractual control over the assets and operations of the Key VIEs. See "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Corporate Structure."

All the agreements under our contractual arrangements are governed by PRC laws and provide for the resolution of disputes through arbitration in China. For additional information, see "Item 3. Key Information — D. Risk Factors — Risks Relating to Our Corporate Structure — Any failure by the Group VIEs or their respective shareholders to perform their obligations under our contractual arrangements with them would have a material adverse effect on the Group's business." Such arbitration provisions have no effect on the rights of our shareholders to pursue claims against us under United States federal securities laws.

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

Agreements that Provide Us with Effective Control over the Key VIEs and Their Subsidiaries

Equity Interest Pledge Agreements. Pursuant to the equity interest pledge agreements, each shareholder of the Key VIEs has pledged all of such shareholder's equity interest in such Key VIE as a security interest to respectively guarantee such Key VIE and its shareholders' performance of their obligations under the relevant contractual arrangement, which include the voting rights proxy agreement, loan agreement, exclusive technology and consulting service agreement and exclusive option agreement. If the Key VIEs or any of their respective shareholders breaches their contractual obligations under these agreements, our Key WFOEs, as pledgee, will be entitled to certain rights regarding the pledged equity interests. In the event of such breaches, our Key WFOEs' rights include being paid in priority with the equity interest of the relevant Key VIE based on the monetary valuation that such equity interest is converted into or from the proceeds from auction or sale of the equity interest. Each of the shareholders of the Key VIEs agrees that, during the term of the equity interest pledge agreements, such shareholder shall not transfer the equity interest, place or permit the existence of any security interest or other encumbrance on the equity interest or any portion thereof, without the prior written consent of the relevant Key VIE, except for the performance of the relevant contractual agreement. Our Key WFOEs are entitled to receive dividends distributed on the equity interest only with prior written consent of the Key WFOEs, as applicable. The equity interest pledge agreements remain effective until all obligations under the relevant contractual agreements have been fully performed and all secured indebtedness have been fully paid.

Voting Rights Proxy Agreements. Pursuant to the voting rights proxy agreements, each shareholder of the Key VIEs has irrevocably authorized the Key WFOEs, as applicable, to exercise the following rights relating to all equity interests held by such shareholder in the relevant Key VIE during the term of the voting rights proxy agreement: to act on behalf of such shareholder as its exclusive agent and attorney with respect to all matters concerning its shareholding in the relevant Key VIE, including without limitation: (1) proposing and attending shareholders' meetings of the relevant Key VIE; (2) exercising all the shareholder's voting rights such shareholder is entitled to under the laws of China and the relevant Key VIE's articles of association, including but not limited to designate and appoint on behalf of such shareholder the directors and other senior management members of the relevant Key VIE. Under most of the voting rights proxy agreements, during the period that each of our Key WFOEs and the Key VIEs remains in operation, the voting rights proxy agreements shall be irrevocable and continuously effective.

Spousal Consent Letters. Pursuant to the spousal consent letters, each spouse unconditionally and irrevocably waives any rights or entitlements whatsoever to such shares and assets that may be granted to him or her pursuant to applicable laws and undertakes not to make any assertion of rights to such shares and assets. Each spouse agrees and undertakes that he or she will take all necessary actions to ensure the proper performance of the contractual arrangements, and will be bound by the contractual arrangements in case he or she obtains any equity of the Key VIEs due to any reason.

Agreements that Allow Us to Receive Economic Benefits from the Key VIEs and Their Subsidiaries

Exclusive Technology and Consulting Service Agreements. Under the exclusive technology and consulting service agreements, the Key VIEs appoint our Key WFOEs, as applicable, as their exclusive services provider to provide the Key VIEs with comprehensive technical support, business support and relevant consulting services during the term of the exclusive technology and consulting service agreements. In return, our Key WFOEs are entitled to receive a monthly service fee from the relevant Key VIEs at an amount to be determined at the sole discretion of our Key WFOEs. Our Key WFOEs shall have exclusive and proprietary ownership, rights and interests in any and all intellectual properties arising out of or created during the performance of the exclusive technology and consulting service agreements, unless terminated in accordance with the provisions of the exclusive technology and consulting service agreements or in accordance with written decision of our Key WFOEs, the terms of the exclusive technology and consulting agreements are indefinite.

Agreements that Provide Us with the Option to Purchase the Equity Interest in the Key VIEs

Loan Agreement. Our Key WFOEs have entered into loan agreements with each shareholder of the relevant Key VIEs. Pursuant to the loan agreements, our Key WFOEs have granted an interest-free loan to each shareholder of the relevant Key VIEs, the amount of which are to be separately agreed to between our Key WFOEs and the relevant Key VIEs in writing, which may only be used by such shareholder for the purpose of capital contribution to such Key VIE as to its business development. Our Key WFOEs also have agreed to provide the relevant Key VIEs with unconditional financial support pursuant to the loan agreement. The shareholders of the Key VIEs pledge all of its share equity in the relevant Key VIE as security for the outstanding loans. Unless otherwise agreed by all the parties of the loan agreement, the term of the loan is the earlier of ten years, the end of our Key WFOEs' operation or the end of the relevant Key VIEs' operation. Our Key WFOEs also have the right to accelerate the date of maturity of such loans at their sole discretion. Upon maturity, our Key WFOEs or their designated third party may purchase the equity interests in the relevant Key VIEs held by the shareholders of such Key VIE at a price equal to the lowest allowable amount for a similar transaction pursuant to relevant PRC laws, rules and regulations instead of cash repayment. The loan agreements also prohibit the shareholders of the Key VIEs from entering into any transactions that could materially affect the assets, liabilities, interests or operations of such Key VIE or its subsidiaries without prior written consent from the relevant Key WFOE.

Exclusive Option Agreements. Pursuant to the exclusive option agreements, each of the Key VIEs' shareholders has irrevocably granted the relevant Key WFOE an unconditional and exclusive right to purchase, or designate one or more persons agreed by the board of directors of the relevant Key WFOE to purchase the equity interests in such Key VIE then held by its shareholders once or at multiple times at any time in part or in whole at the relevant Key WFOE's sole and absolute discretion to the extent permitted by PRC laws. The purchase price of the optioned interests shall be the minimum price permitted under PRC laws when the relevant Key WFOE exercises equity interest purchase option. The shareholders of the Key VIEs have agreed the consideration received from the exercise of such equity interest purchase option shall be used to settle the outstanding loans under the loan agreements as described above and/or transferred back to the relevant WFOE as permitted under relevant PRC laws. Under most of the exclusive option agreements, the Key VIEs and their respective shareholders have agreed that, without the relevant Key WFOE's prior written consent, such Key VIE shall not, among others, in any manner supplement, change or amend its articles of association; increase or decrease its registered capital, change its structure of registered capital in other manners; sell, transfer, mortgage or dispose of in any other manner any legal or beneficial interest in the equity interests in such Key VIE held by such shareholders, or allow the encumbrance thereon; entry into, inherit, or tolerant any existence of any loan or other debtor-creditor relationship with any third party; enter into any material contract outside the ordinary course of business; merge with any other persons or make any investments exceeding US\$2 million; or distribute dividends. The exclusive option agreements shall remain effective until all the equity interest held by the shareholders in such Key VIE has been transferred to our Key WFOEs or the person d

Supplemental Agreement to the Contractual Arrangements in Connection with The Paper

In August 2018, Shanghai Quyun and Shanghai Jifen and its shareholders entered into a supplemental agreement as to the contractual arrangements as described above, pursuant to which Shanghai Jifen issued equity interests representing 1% of its enlarged share capital to Shanghai Xinpai, an affiliate of The Paper, in September 2019. As Shanghai Xinpai is not a party to the existing contractual arrangements, it is not bound by such arrangements nor does it have any obligation to perform or assume any liability under the contractual arrangements. In contrast to what we have been granted by other shareholders of Shanghai Jifen under the contractual arrangements, the voting rights over these 1% equity interests are held by Shanghai Xinpai itself and we have not been granted the authorization of the voting rights over such 1% equity interests. Accordingly, we are not able to request Shanghai Xinpai to sell or pledge such 1% equity interests in the way agreed under existing contractual arrangements.

Despite the above, The Paper will not absorb the losses allocation, if any, from Shanghai Jifen. Unless otherwise instructed and approved by the competent governmental authority, The Paper may not transfer its equity interests in Shanghai Jifen to any third party. Based on the foregoing, we believe Shanghai Quyun, our wholly-owned PRC subsidiary, still controls and is the primary beneficiary of Shanghai Jifen as it continues to have a controlling financial interest in Shanghai Jifen pursuant to ASC 810-10-25-38A.

Cash Transfers Through Our Organization

The following table sets forth a summary of cash transfers that have occurred between our subsidiaries and the Group VIEs for the years ended December 31, 2019, 2020 and 2021, respectively:

	Year e	Year ended December 31,			
	2019	2020	2021		
	(RM	IB in thousands	s)		
Cash paid by the Group VIEs to our subsidiaries under service agreements	_	(297,510)	(756,962)		
Cash received by the Group VIEs from our subsidiaries under service agreements	67,419		188,798		
Cash received by the Group VIEs from our subsidiaries for intra-Group financing	2,859,506	462,233	137,515		

We are subject to restrictions on currency exchange. In particular, the PRC government imposes controls on the convertibility of Renminbi into foreign currencies and, in certain cases, currency remittance out of the PRC. Since the Group receives substantially all of its revenues in Renminbi and cash flow will be denominated in Renminbi, any existing and future restrictions on currency exchange may limit the Group's ability to utilize cash generated in Renminbi to fund the Group's business activities outside of the PRC or pay dividends in foreign currencies to our shareholders, including holders of the ADSs, and may limit our ability to obtain foreign currency through debt or equity financing for our PRC subsidiaries and the Group VIEs. In addition, there are certain limitations on the ability of our PRC subsidiaries and the Group VIEs to distribute earnings to our offshore holding companies and the U.S. investors. In particular, each of our PRC subsidiaries, the Group VIEs and their subsidiaries are required to set aside at least 10% of its net income each year to fund certain statutory reserves until the cumulative amount of such reserves reaches 50% of its registered capital. These reserves, together with the registered capital, are not distributable as cash dividends. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Our Corporate Structure—We rely to a significant extent on dividends and other distributions on equity paid by our principal operating subsidiaries and the Group VIEs to fund offshore cash and financing requirements. Any limitation on the ability of our PRC operating subsidiaries or the Group VIEs to make payments to us could materially and adversely affect our ability to conduct the Group's business."

E. Facilities

The Group's corporate headquarters are located in Shanghai, China, where it leased approximately 8,816 square meters of office space as of December 31, 2021. The Group also maintained other leased offices in Beijing, Wuhu City in Anhui Province, Guangzhou in Guangdong Province and Tianjin totaling approximately 6,664 square meters. We believe that the Group has the adequate facilities, to accommodate its operational needs.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

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

A. Operating Results

Overview

The Group operates a mobile content platforms in China with a mission to bring fun and value to its users. The Group's eponymous mobile application, *Qutoutiao*, meaning "fun headlines" in Chinese, applies artificial intelligence-based algorithms to deliver customized feeds of articles and short videos to users based on their unique profiles, interests and behaviors. *Qutoutiao* has attracted a large group of users, many of whom are from lower-tier cities in China. They enjoy *Qutoutiao*'s fun and entertainment-oriented content as well as its social-based user loyalty program. Midu, first launched in May 2018 as *Midu Novels* and with an alternative version *Midu Lite* launched one year later, pioneered the provision of free online literature supported by advertising. It has grown tremendously and has been one of the leaders of the free online literature industry since inception. The Group's mobile applications have gained a certain level of success and popularity among Chines mobile internet users since launch, with combined average MAUs of approximately 97.6 million, combined average DAUs of approximately 25.0 million and average daily time spent per DAU of approximately 43.2 minutes in the three months ended December 31, 2021.

The Group's sizable user base has provided it with strong monetization potentials. The Group currently generates revenue primarily by providing advertising and marketing services. The Group places advertisements on the main pages, topic pages as well as content pages of its mobile applications. The Company has an in-house advertising platform with a technology driven system that has powered the Group's advertising solutions while reducing the use of third-party advertising platforms.

The Group also sells advertising and marketing solutions to advertising agents or advertising customers directly. The Group's differentiated user base represents an attractive demographic target for businesses. The Group launched its integrated and customized marketing solution services to its customers in 2019 to enhance the Group's monetization ability.

The Group also generates revenue by providing agent and platform service between the advertising customers and third-party advertising platforms. The Group provides a variety of content formats offered by its mobile applications to capture additional monetization opportunities. The additional content formats include paid content such as memberships to the Group's online literature platforms, online games, live-streaming, and short videos.

The Group's net revenues have slightly decreased from RMB5,570.1 million in 2019 to RMB5,285.2 million in 2020, and further decreased to RMB4,339.6 million (US\$681.0 million) in 2021 primarily due to the tightening regulatory environment in internet and technology sector which, to a certain extent, resulted in constrained budgets of advertisers. The Group has incurred net losses attributable to Qutoutiao Inc. of RMB2,688.7 million in 2019, RMB1,104.4 million in 2020, and RMB1,239.6 million (US\$194.5 million) in 2021. Non-GAAP net losses attributable to Qutoutiao Inc., which represented net losses attributable to Qutoutiao Inc. before share-based compensation expenses, were RMB2,416.7 million in 2019, RMB641.2 million in 2020, and RMB1,039.4 million (US\$163.1 million) in 2021.

Key Factors Affecting Our Results of Operations

We believe the most significant drivers for the Group's revenues are user engagement and its ability to monetize. On the other hand, we believe the most significant drivers behind the Group's costs and expenses are those related to its user acquisition and engagement efforts, and to a lesser extent R&D and content procurement.

User Base and Level of Engagement

The size of the Group's revenue is affected by the size of its user base and the level of engagement of its users, which contribute to the Group's ability to attract advertising customers to its advertising and marketing services. A change in the number of DAUs and the amount of time they spend on the Group's platform will lead to change in the number of advertisements served and potential clicks and impressions from users. User engagement in turn will depend on the quality and attractiveness of content on the Group's platform and the Group's continued ability to fine tune its understanding of users to deliver content that is most likely to interest them. The Group's ability to maintain high user engagement will also be affected by its planned introduction of new content formats, users' reception to them and the growth in the volume of such content. Users' engagement with these new content formats will not only help drive demand for the Group's advertising and marketing services but also create further monetization opportunities.

The Group's Ability to Monetize

The Group's current financial condition and results of operations depend substantially on the demand for its advertising and marketing solutions. Demand for the Group's advertising and marketing solutions will be affected by the size of the Group's user base and their continued engagement. Such demand will also be dependent on the Group's ability to enhance the efficacy of its advertising and marketing solutions through technology and an even deeper understanding of the Group's user base. The Group operates a proprietary programmatic advertising system and directly sells its advertising and marketing solutions to advertising customers.

The Group's user base, which has attracted a large number of advertising agents and advertising customers, has provided a solid basis for us to achieve a high monetization capability. To endeavor towards such a goal, the Group has taken certain steps, such as improving the efficiency of its platform, to drive advertising conversion, which involves algorithm improvement driven by data collection and analytics and conversion to an oCPC system over the course of 2019. The Group has been forming partnerships with advertising customers from an expanding range of industries and offering an increasing variety of formats such as brand advertising in order to provide more comprehensive solutions for the Group's customers. The Group has also managed to diversify its revenue streams by generating income from non-advertising activities such as live-streaming and membership fees, thanks to the diversification of content formats available from the Group's mobile applications.

Cost of User Acquisition and Engagement

The Group offers loyalty programs on its mobile applications. The cost of users' loyalty points associated with the Group's user loyalty programs is recognized as sales and marketing expenses. A majority of such cost of users' loyalty points is currently associated with engagement-based loyalty points to promote user engagement and retention, with the remainder related to referral-based loyalty points to acquire new users. The Group designs its user loyalty programs to ensure the cost of the loyalty points provided is appropriate in relation to the overall economics of the Group's business model. The Group's ability to operate loyalty programs effectively will have an effect on its results of operations. The Group also engages a variety of other online and offline marketing channels to acquire users and promote brand awareness in combination with its user loyalty programs. These efforts may also affect the Group's overall user acquisition and engagement costs in the future.

Content Procurement

The Group encourages its content providers to actively contribute quality content that will resonate with the Group's users by implementing a system in which fees paid to them are related to the number of views of the content they contribute. These fees are accounted for as part of the Group's cost of revenues. The Group's ability to balance its content procurement cost while ensuring content providers continue to contribute content that is attractive to users will affect the Group's results of operations going forward. The Group will also need to manage the relevant content cost while taking into account its revenue potential to ensure value are realized. Furthermore, as additional content formats are introduced, the Group has entered into different content procurement arrangements with content providers, affecting its content procurement cost structure.

Seasonality

The Group generates most of its revenues from providing advertising and marketing services. The advertising industry in China experiences seasonality. Historically, advertising spending and user activities on the Group's platform tend to be the lowest in the first quarter of each calendar year due to long holidays around the Lunar New Year, during which users tend to spend more time with family and celebrations offline and less time online, including on the Group's mobile applications. In addition, advertising customers, such as those in the e-commerce industry, may also reduce its advertising spending during the holidays around the Lunar New Year due to reduced consumer spending or reduced or suspended production and logistics activities by manufacturers or other service providers. We believe this seasonality affects the Group's quarterly results especially its results of operations in the first quarter of each year. For example, the Group's net revenues in the first quarter may be lower than those of other quarters, and may experience a slower rate of growth or even decline from the last quarter in the prior year. On the other hand, the Group's cost of revenues and operating expenses as a percentage of its net revenues may be higher in the first quarter as compared to other quarters, which may lead to lower profit margin.

Impact of the COVID-19 Pandemic

The COVID-19 pandemic has impacted and may continue to impact the Group's results of operations. The COVID-19 pandemic has negatively affected the global and Chinese economy as well as the advertising market in China since the beginning of 2020, and put constraint on the advertising budget of the Group's advertising customers, which has had and may continue to have an adverse impact on our business and results of operations.

We have been closely monitoring the impact of COVID-19 on macro economy and advertising market in general, as well as the impact on the Group's business, results of operations and financial condition. The extent to which COVID-19 may continue to impact the Group's results is uncertain and difficult to predict and will depend on future developments, including the duration, severity and reach of the COVID-19 pandemic, and actions taken to contain the outbreak or treat its impacts. For additional details, see "Item 3. Key Information—D. Risk Factors—Any catastrophe, including natural catastrophes and outbreaks of health pandemics and other extraordinary events, could disrupt the Group's business operation. For example, the COVID-19 pandemic may have a material adverse effect on the Group's business, results of operations and financial condition, as well as the trading price of the ADSs."

Key Operating Metrics

We regularly review a number of key operating metrics to evaluate the Group's business and measure our performance. The table below sets forth key operating metrics relating to the Group's mobile applications.

	For the Three Months Ended							
	March 31,	June 30,	September 30,	December 31,	March 31,	June 30,	September 30,	December 31,
			2020				2021	
			(in	millions, except for	daily time sper	nt data)		
Combined Average MAUs during the								
period	138.3	136.5	120.5	124.7	133.3	132.3	118.5	97.6
Combined Average DAUs during the								
period	45.6	43.0	39.7	32.3	31.7	29.1	26.5	25.0
New Installed Users	109.2	132.2	67.3	50.3	101.8	94.0	103.8	72.6
Average daily time spent per DAU								
during the period (minutes)	62.4	55.2	55.3	50.3	47.1	47.3	51.9	43.2
Average net revenues per DAU per day								
(RMB)	0.34	0.37	0.31	0.44	0.45	0.46	0.41	0.39
User Engagement Expenses per DAU								
per day	0.12	0.12	0.07	0.05	0.06	0.06	0.07	0.07
User Acquisition Expenses per New								
Installed User	4.60	3.30	5.73	7.89	5.78	7.29	7.30	8.26

We view combined average MAUs and combined average DAUs as measures of the size of active user base and user engagement. Combined average MAUs and combined average DAUs generally experienced a downward quarterly trend in 2020 and 2021 primarily because the Group paid closer attention to the quality and profile of the Group's user base than to its absolute size and growth. Since the Group's had a lower level of combined average MAUs and combined average DAUs in 2021 than in 2020, its advertising and marketing revenue decreased on a year-over-year basis.

We monitor the number of new installed users closely to maintain a sizable user base. The decrease in the number of new installed users in 2020, especially the second half of 2020, was primarily due to the shift of our strategy to focus more on acquiring higher quality users rather than simply growing the number of our users. The generally flat trend in the number of new installed users during 2020 and 2021 was primarily due to the fact that the Group paid closer attention to quality and profile of the user base than to its absolute size and growth.

We monitor average daily time spent per DAU to measure the level of user engagement on the Group's platform. The decrease in average daily time spent per DAU on a quarter-over-quarter basis was primarily due to changes in user preferences and our content strategy.

We monitor average net revenues per DAU per day, or ARPU, to measure the Group's ability to monetize. In general, the Group generally had a higher level of ARPU in 2021 compared with 2020 primarily due to the churn of our user base which resulted in the exit of users who were on the platform primarily to earn loyalty points and therefore generated less than average ARPU for us.

We use user engagement expenses per DAU per day to measure our user engagement efforts and reliance on loyalty programs. As we have improved the quality of the content on our mobile applications and refined the algorithms to push personalized content, we reduced our reliance on the loyalty programs, which led to relatively stable level of user engagement expenses per DAU per day starting from the second half of 2020.

We use user acquisition expenses per new installed user to measure our efforts to acquire new users. We switched to acquisition channels of lower cost in the first half of 2020, which resulted in lower user acquisition expenses per new installed user in such period. Since the effect of such new acquisition channels did not meet our expectations, we opted for better acquisition channels to acquire higher quality users in the second half of the 2020, which led to an increase in such metric. Such metric was higher in 2021 on a quarter-over-quarter basis primarily because we invested more in expanding the user base of Midu, which operates in the online literature sector that has higher acquisition cost per new install.

Non-GAAP Financial Measure

Non-GAAP net loss attributable to Qutoutiao Inc. represents net loss attributable to Qutoutiao Inc. before share-based compensation expenses. We use such non-GAAP financial measure in evaluating the Group's results of operation and for financial and operational decision-making purposes. We believe that such non-GAAP financial measure helps identify underlying trends in the Group's business that could otherwise be distorted by the effect of such share-based compensation expenses that the Group includes in cost of revenues, total operating expenses and net loss attributable to Qutoutiao Inc. We believe that such non-GAAP financial measure also provides useful information about the Group's operating results, enhance the overall understanding of the Group's past performance and future prospects and allow for greater visibility with respect to key metrics used by our management in its financial and operational decision-making.

The non-GAAP financial measure is not defined under U.S. GAAP and is not presented in accordance with U.S. GAAP. It should not be considered in isolation or construed as alternatives to net loss or any other measure of performance or as an indicator of the Group's operating performance. Investors are encouraged to review the historical non-GAAP financial measure in light of the most directly comparable GAAP measures, as shown below. The non-GAAP financial measure presented here may not be comparable to similarly titled measures presented by other companies. Other companies may calculate similarly titled measures differently, limiting its usefulness as comparative measures to the Group's data. We encourage investors and others to review the Group's financial information in its entirety and not rely on a single financial measure.

The table below sets forth a reconciliation of the non-GAAP financial measure for the periods indicated:

	Year Ended December 31,						
	2019	2020	2020 2021			20 2021	
	RMB	RMB	RMB	US\$			
	_	(in thous	ands)				
Net loss attributable to Qutoutiao Inc.	(2,688,681)	(1,104,439)	(1,239,617)	(194,523)			
Add: share-based compensation expenses:							
Cost of revenues	6,190	12,905	1,187	186			
Research and development	138,792	204,333	102,838	16,137			
Sales and marketing	45,042	86,656	32,122	5,041			
General and administrative	81,955	159,320	64,039	10,049			
Non-GAAP net loss attributable to Qutoutiao Inc.	(2,416,702)	(641,225)	(1,039,431)	(163,110)			

Key Components of the Group's Results of Operations

Revenues

The Group generates most of its revenues from advertising and marketing services. The following table sets forth a breakdown of the Group's revenues, both in absolute amount and as a percentage of its net revenues, for the years indicated.

	Year Ended December 31,										
	2019		2020		2021						
	RMB	%	RMB	%	RMB	US\$	%				
	(in thousands, except for percentages)										
Revenues:											
Advertising and marketing revenues	5,415,321	97.2	5,046,835	95.5	4,090,383	641,870	94.3				
Other revenue	154,760	2.8	238,360	4.5	249,220	39,108	5.7				
Net revenues	5,570,081	100.0	5,285,195	100.0	4,339,603	680,978	100.0				

(1) Revenues from transactions with related parties are set forth below for the periods indicated:

	Year Ended December 31,						
	2019	2020	020 202				
	RMB	RMB	RMB	US\$			
		(in thousands)					
Advertising and marketing revenues	473,216	250,875	40,263	6,318			

The Group charges its advertising and marketing services mainly on an optimized cost-per-click, or oCPC, basis, and in certain circumstances, on an optimized cost-per-thousand-impressions, or oCPM, basis.

The Group recognizes advertising and marketing revenues from its proprietary advertising platform on a gross basis as clicks are delivered on an oCPC basis. The Group also engages certain other advertising agents in selling its advertising and marketing solutions to its advertising customers.

In addition, the Group collaborates with various third-party advertising platforms to place advertisements on the Group's platform. Under the Group's arrangements with these advertising platforms, these advertising platforms are the Group's customers and the Group's performance obligation is to provide traffic to these advertising platforms. As such, the Group recognizes advertising and marketing revenues based on the net amount as impressions or clicks are delivered on an oCPC or oCPM basis. The Group started reducing the utilization of third-party advertising platforms in 2017 and we expect such collaboration to continue to decrease in the future as the Group further increase direct sales of its advertising and marketing solutions.

Other revenue includes revenues from providing agent and platform service between the advertising customers and third-party advertising platforms by facilitating the advertising customers to select third-party advertising platforms to display their advertisements. The Group recognizes revenues from the advertising customers based on the net amount equal to certain agreed percentage of the gross revenue earned by the third-party advertising platforms when impressions or clicks are successfully delivered.

Other revenue also includes revenues from live-streaming and online games. The Group started to offer live-streaming content in January 2019. Users can access our mobile applications and view the live-streaming content for free. We generate revenues when users purchase and send in-show virtual items to broadcasters, and when users become members by paying membership fees. Game related revenues are mostly generated from the consumption of virtual items by game players through the Group's platform and from the placement of advertising. The Group generally offers mobile games developed by third-party game developers non-exclusively, and the Group shares payments from users or advertisers with such game developers.

Cost of Revenues

Cost of revenues consists primarily of (i) bandwidth and server costs, (ii) costs incurred to vendors and suppliers for advertising and marketing services, (iii) content procurement costs paid to third-party professional media companies and freelancers, (iv) direct cost related to in-house content, rental cost, depreciation, salary and welfare for cost personnel and other miscellaneous costs, (v) costs incurred for mobile gaming and live streaming content, and (vi) cultural development fee and surcharges. The Group is subject to a cultural development fee on the provision of advertising services in the PRC. The applicable tax rate prior to June 30, 2019 was 3% of the net advertising revenues, and was changed to 1.5% from July 1, 2019 to December 31, 2024 according to relevant preferential tax policy. Due to the COVID-19 pandemic, the Group was exempted from the cultural development fee for 2020 and such exemption period has been further extended until December 31, 2021.

Cost of revenues from transactions with related parties are set forth below for the years indicated:

Year Ended December 31,					
2020	2019		2019		
RMB	%	RMB			
thousands, e	(in				
31,051	Λġ	42,412			
020 ds, e	2 RME thousan	% RMB (in thousan			

Operating Expenses

The following table sets forth our operating expenses, both in absolute amount and as a percentage of our net revenues, for the years indicated.

	Year Ended December 31,							
	2019		2020			2021		
	RMB	%	RMB	%	RMB	US\$	%	
			(in thousands, e	xcept for	percentages)			
Operating expenses ⁽¹⁾ :								
Research and development expenses	926,232	16.6	947,871	17.9	551,612	86,560	12.7	
Sales and marketing expenses	5,489,708	98.6	3,381,561	64.0	3,483,773	546,680	80.3	
General and administrative expenses	267,033	4.8	392,815	7.4	431,913	67,776	10.0	
Total operating expenses	6,682,973	120.0	4,722,247	89.3	4,467,298	701,016	103.0	

⁽¹⁾ Operating expenses from transactions with related parties are set forth below for the years indicated:

		Year Ended December 31,							
	-	2019		19 2020		2021			
	R	RMB	%	RMB	%	RMB	US\$	%	
		(in thousands, except for percentages)							
Sales and marketing-related party	3	3,284	0.1	4,192	0.1	15,840	2,486	0.4	

Research and Development Expenses. The Group's research and development expenses consist primarily of salaries and benefits for the Group's research and development personnel, including share-based compensation, rental expenses, IT service fees and deprecation of office premise and servers utilized by the Group's research and development personnel.

Sales and Marketing Expenses. The Group's sales and marketing expenses consist primarily of user engagement expenses, user acquisition expenses and other sales and marketing expenses.

User engagement expenses consist of the costs of engagement-based loyalty points associated with our user loyalty programs to promote user engagement and retention for the Group's mobile applications. Cost of users' loyalty points is comprised of amount of loyalty points redeemed by users during a specific period and the change in estimated liabilities as to accumulated unredeemed loyalty points during such period. Pursuant to the Group's user agreements, the Group can adjust at any time the minimum amount of loyalty points that must be earned before users can redeem their loyalty points. As such, change to such threshold in any specific period will affect the amount of sales and marketing expenses recorded during such period. For additional information on the accounting policy of our loyalty programs, see Note 2(w) to our audited consolidated financial statements included elsewhere in this annual report.

User acquisition expenses consist of the costs of both word-of-mouth referrals and third-party marketing.

Other sales and marketing expenses represent advertising and marketing expenses through third-party online and offline channels to promote brand recognition, short mobile messaging expenses and salaries and benefits for the Group's sales and marketing personnel, including share-based compensation.

General and Administrative Expenses. The Group's general and administrative expenses consist primarily of salaries and benefits for our general and administrative personnel, including share-based compensation, office expense and professional service fees.

Share-based Compensation

The following table sets forth the effect of share-based compensation expenses on the Group's operating cost and expenses line items, both in an absolute amount and as a percentage of the Group's revenues, for the years presented.

	Year Ended December 31,						
	2019		2020				
	RMB	%	RMB	%	RMB	US\$	%
		(in	thousands, ex	cept fo	r percentages)	
Cost of revenues	6,190	0.1	12,904	0.3	1,187	186	0.0
Research and development expenses	138,792	2.5	204,333	3.9	102,835	16,137	2.4
Sales and marketing expenses	45,041	8.0	86,656	1.6	32,122	5,041	0.7
General and administrative expenses	81,955	1.5	159,320	3.0	64,039	10,049	1.5
Total	271,978	4.9	463,213	8.8	200,183	31,413	4.6

See Note 16 to our audited consolidated financial statements included elsewhere in this annual report for a description of what the Group accounts for the compensation cost from share-based payment transactions.

Taxation

Cayman Islands

We are an exempted company with limited liability incorporated in the Cayman Islands. Under the current laws of the Cayman Islands, we are not subject to tax based upon profits, income, gains or appreciations and there is no taxation in the nature of inheritance tax or estate duty. In addition, upon payment of dividends by us to our shareholders, no Cayman Islands withholding tax will be imposed.

Hong Kong

Our subsidiary incorporated in Hong Kong is subject to Hong Kong profit tax at the rate of 8.25% for profit of up to HK\$2.0 million and 16.5% for the remainder of taxable income. Hong Kong does not impose a withholding tax on dividends.

China

Generally, our subsidiaries and the Group VIEs and their subsidiaries in China are subject to enterprise income tax on their taxable income in China at a rate of 25%. The enterprise income tax is calculated based on the entity's global income as determined under PRC tax laws and accounting standards.

On March 20, 2020, Shanghai Chenxing and Shanghai Luoshi performed record-filing for VAT tax invoice of software products and licenses of software products and were subject to the VAT rate of 13%. Besides that, the Group's revenues are subject to value-added tax at a rate of approximately 6%. The provision of advertising services in China is subject to a cultural development fee. The fee was charged at an applicable rate of 3% of the net advertising revenues prior to June 30, 2019, which was reduced to 1.5% commencing on July 1, 2019, according to a preferential tax policy issued on June 12, 2019 by the government of Shanghai. The preferential policy is said to be in effect until December 31, 2024. Moreover, pursuant to the Announcement on the Supporting Tax and Fee Policy for Film Industry and Other Industries issued by the MOF and the SAT on May 13, 2020, the cultural development fee was waived from January 1, 2020 until December 31, 2020. Pursuant to the Announcement on the Extension of Certain Tax Preferential Policies in Response to COVID-19 Epidemic, the exemption period of the cultural development fee was extended until December 31, 2021.

Any dividends paid by our wholly foreign-owned subsidiaries in China to our intermediary holding company in Hong Kong will be subject to a withholding tax rate of 10%, unless the relevant Hong Kong entity satisfies all the requirements under the Arrangement between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income and receives approval from the relevant tax authority, in which case the dividends paid to the Hong Kong subsidiary would be subject to withholding tax at the standard rate of 5%.

If our holding company in the Cayman Islands or any of our subsidiaries outside of China were deemed to be a "resident enterprise" under the PRC Enterprise Income Tax Law, it would be subject to enterprise income tax on its worldwide income at a rate of 25%.

Critical Accounting Estimates

Our discussion and analysis of the Group's financial condition and results of operations relates to the Group' consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, costs and expenses, and related disclosures. On an on-going basis, we evaluate our estimates based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources.

We consider an accounting estimate to be critical if: (1) the accounting estimate requires us to make assumptions about matters that were highly uncertain at the time the accounting estimate was made, and (2) changes in the estimate that are reasonably likely to occur from period to period, or use of different estimates that we reasonably could have used in the current period, would have a material impact on our financial condition or results of operations. There are other items within the Group's financial statements that require estimation but are not deemed critical, as defined above. Changes in estimates used in these and other items could have a material impact on our financial statements.

For a detailed discussion of our significant accounting policies and related judgments, please see Note 2 to our audited consolidated financial statements included elsewhere in this annual report. You should read the following description of critical accounting estimates in conjunction with the Group's consolidated financial statements and other disclosures included in this annual report.

Expected Credit Losses

Nature of estimate: Effective January 1, 2020, we adopted Accounting Standards Update (ASU) No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," which requires the Group to record the full amount of expected credit losses for the life of a financial asset at the time it is originated or acquired and adjusted for changes in expected lifetime credit losses subsequently, which requires earlier recognition of credit losses.

Assumptions: The provision for credit losses is estimated mainly based on past collection experience as well as consideration of current and future economic conditions. We estimate the expected credit losses for financial assets with similar risk characteristics on a pool basis. When assigning customers into different credit risk levels, factors like capital condition, reputation, industry, collection history, and external credit references of the customers are considered. The key assumptions used in the process of estimating the provision for expected credit losses include customer pool assignment, the historical loss rate for each customer pool, and the application of macroeconomic forecasts. The estimate of expected credit losses is sensitive to our assumptions in these factors.

Our estimate of the key assumptions did not change significantly throughout the periods presented.

See Note 2 to our audited consolidated financial statements included elsewhere in this annual report for more information regarding expected credit losses.

Results of Operations

The following tables set forth a summary of the Group's consolidated results of operations for the years presented, in absolute amount and as a percentage of the Group's revenues. This information should be read together with the Group's consolidated financial statements and related notes included elsewhere in this annual report. The operating results in any year are not necessarily indicative of the results that may be expected for any future period.

		Year Ended December 31,					
	2019		2020		202		
	RMB	<u>%</u>	RMB thousands, excep	%	RMB	US\$	<u>%</u>
Revenues ⁽¹⁾ :		(11)	i tiiousanus, excep	ot for perce	intages, snare and	per snare data	,
Advertising and marketing revenues	5,415,321	97.2	5,046,835	95.5	4,090,383	641,870	94.3
Other revenue	154,760	2.8	238,360	4.5	249,220	39,108	5.7
Net revenues	5,570,081	100.0	5,285,195	100.0	4,339,603	680,978	100.0
Cost of revenues ⁽²⁾	(1,640,632)	(29.5)	(1,674,416)	(31.7)	(1,171,626)	(183,853)	27.0
Gross profit	3,929,449	70.5	3,610,779	68.3	3,167,977	497,125	73.0
Operating expenses ⁽²⁾ :							
Research and development expenses	(926,232)	(16.6)	(947,871)	(17.9)	(551,612)	(86,560)	(12.7)
Sales and marketing expenses	(5,489,708)	(98.6)	(3,381,560)	(64.0)	(3,483,773)	(546,680)	(80.3)
General and administrative expenses	(267,033)	(4.8)	(392,816)	(7.4)	(431,913)	(67,776)	(10.0)
Total operating expenses	(6,682,973)	(120.0)	(4,722,247)	(89.3)	(4,467,298)	(701,016)	(102.9)
Other operating income	30,292	0.5	79,299	1.5	106,098	16,648	2.4
Loss from operations ⁽³⁾	(2,723,232)	(48.9)	(1,032,169)	(19.5)	(1,193,223)	(187,243)	(27.5)
Interest income	48,440	0.9	10,419	0.2	3,174	498	0.1
Interest expense	(26,878)	(0.5)	(38,143)	(0.7)	(35,477)	(5,567)	(8.0)
Foreign exchange related gains/(loss), net	1,868	0.0	(7,183)	(0.1)	(1)	(—)	0.0
Investment income (loss) including impairment	6,327	0.1	(31,788)	(0.6)	(36,041)	(5,656)	(8.0)
Other income/(expenses), net	9,050	0.2	(7,310)	(0.1)	27,637	4,337	0.6
Loss before income taxes	(2,684,425)	(48.2)	(1,106,174)	(20.9)	(1,233,931)	(193,631)	(28.4)
Income tax benefit/(expense)	(4,843)	(0.1)	1,008	(0.0)	(3,050)	(479)	(0.1)
Equity in loss of affiliate companies		_		_	(3,195)	(501)	(0.1)
Net loss	(2,689,268)	(48.3)	(1,105,166)	(20.9)	(1,240,176)	(194,611)	(28.6)
Net loss attributable to non-controlling interests	587	0.0	727	0.0	559	88	0.0
Net loss attributable to Qutoutiao Inc.	(2,688,681)	(48.3)	(1,104,439)	(20.9)	(1,239,617)	(194,523)	(28.6)

⁽¹⁾ Revenues from transactions with related parties are set forth below for the periods indicated:

	_	Year Ended December 31,			
	_	2019	2020	202	1
	_	RMB	RMB	RMB	US\$
	_	(in thousands)			
Advertising and marketing revenue	4	473,216	250,875	40,263	6,318

(2) Cost of revenues and operating expenses from transactions with related parties are set forth below for the periods indicated:

_	Year Ended December 31,						
	2019 2020			2021			
	RMB	%	RMB	%	RMB	US\$	%
		(in	thousands, o	except f	or percentage	es)	
Cost of revenues	42,412	8.0	31,051	0.6	103,286	16,207	2.4
Sales and marketing expenses	3,284	0.1	4,192	0.1	15,840	2,486	0.4

(3) The Group recognized share-based compensation expenses of RMB272.0 million, RMB463.2 million and RMB200.2 million (US\$31.4 million) in 2019, 2020 and 2021, respectively.

Comparison of Year Ended December 31, 2021 and Year Ended December 31, 2020

Revenues. The Group's net revenues decreased from RMB5,285.2 million in 2020 to RMB4,339.6 million (US\$681.0 million) in 2021 primarily due to primarily due to a decrease in the Group's advertising and marketing revenues from RMB5,046.8 million in 2020 to RMB4,090.4 million (US\$641.9 million) in 2021, partially offset by an increase in the Group's other revenue from RMB238.4 million in 2020 to RMB249.2 million (US\$39.1 million) in 2021. Decrease in the Group's advertising and marketing revenues was primarily due to the tightening regulatory environment in internet and technology sector which, to a certain extent, resulted in constrained budgets of advertisers. The number of advertising clicks decreased by 16.1% from 2020 to 2021 and the revenue per click remained relatively stable, which led to a decrease in the Group's advertising and marketing revenues charged on oCPC basis. Increase in the Group's other revenue was primarily due to the increase of revenues from *Midu* membership fee and, to a lesser extent, revenues from online game service and live-streaming.

Cost of Revenues. The Group's cost of revenues decreased from RMB1,674.4 million in 2020 to RMB1,171.6 million (US\$183.9 million) in 2021 primarily attributable to the decrease in bandwidth and IT infrastructure costs, integrated marketing service costs, salaries and benefits associated with content management personnel as well as live-streaming and online games revenue share, partially offset by an increase in the content procurement costs for *Midu Novels*. Cost of revenues as a percentage of the Group's net revenues decreased from 31.7% in 2020 to 27.0% in 2021. Share-based compensation expenses recognized in cost of revenues decreased from RMB12.9 million in 2020 to RMB1.2 million (US\$0.3 million) in 2021.

Gross Profit. The Group's gross profit decreased from RMB3,610.8 million in 2020 to RMB3,168.0 million (US\$497.1 million) in 2021.

Operating Expenses. The Group's total operating expenses decreased from RMB4,722.2 million in 2020 to RMB4,467.3 million (US\$701.0 million) in 2021.

- Research and development expenses. The Group's research and development expenses decreased from RMB947.9 million in 2020 to RMB551.6 million (US\$86.6 million) in 2021. The decrease was primarily due to the reduction in research and development headcount, which resulted in decreases in salaries and expenses relating to share-based compensation.
- Sales and marketing expenses. The Group's sales and marketing expenses increased from RMB3,381.6 million in 2020 to RMB3,483.8 million (US\$546.7 million) in 2021. The increase was primarily because the Group invested more in the expansion of Midu.

User engagement expenses decreased from RMB1,392.6 million in 2020 to RMB666.9 million (US\$104.6 million) in 2021, primarily because the Group improved its algorithm to provide personalized contents. User engagement expenses as a percentage of net revenues decreased from 26.3% in 2020 to 15.4% in 2021.

User acquisition expenses increased from RMB1,720.7 million in 2020 to RMB2,631.0 million US\$412.9 million in 2021, which was primarily due to the Group's effort in expanding Midu's user base.

Other sales and marketing expenses decreased from RMB268.4 million in 2020 to RMB179.6 million (US\$28.2 million) in 2021, primarily due to the Group's effort in reducing its operating expenses.

The result of the foregoing contributed to an increase in sales and marketing expenses as a percentage of the Group's net revenues increased from 64.0% in 2020 to 80.1% in 2021.

• General and administrative expenses. The Group's general and administrative expenses increased from RMB392.8 million in 2020 to RMB431.9 million (US\$67.8 million) in 2021. The increase was primarily due to bad-debt provision for account receivables of RMB249.1 million (US\$39.1 million) under ASC 326, Measurement of Credit Losses on Financial Instruments, which was partially offset by decrease in salaries as well as other administrative expenses. This also contributed to an increase in general and administrative expenses as a percentage of the Group's net revenues from 7.4% in 2020 to 10.0% in 2021.

Other operating income. The Group's other operating income increased from RMB79.3 million in 2020 to RMB106.1 million (US\$16.6 million) in 2021, primarily due to more refund of value-added taxes levied on software related products and services.

Interest income. The Group's interest income decreased from RMB10.4 million in 2020 to RMB3.2 million (US\$0.5 million) in 2021 due to lower average cash balance during 2021 in comparison to 2020.

Interest expense. The Group's interest expense was RMB35.5 million (US\$5.6 million) in 2021, compared to RMB38.1 million in 2020.

Foreign exchange related gains/(losses), net. The Group recognized foreign exchange related gains/losses, net, of RMB7.2 million in 2020 and RMB0.9 thousand (US\$0.1 thousand) in 2021.

Investment income/(expenses), *net*. The Group recorded investment loss of RMB36.1 million (US\$5.7 million), compared to investment loss of RMB31.8 million in 2020, primarily due to impairment losses on certain investments.

Other income/(expenses), net. The Group recorded other expenses of RMB7.3 million in 2020 and other income of RMB27.6 million (US\$4.3 million) in 2021. The Gain in 2021 mainly resulted from a gain of RMB23.1 million (US\$3.6 million) from the deconsolidation of a subsidiary.

Income tax benefits/(expense), net. The Group recorded income tax benefits of RMB1.0 million and income tax expenses of RMB3.1 million (US\$0.5 million) in 2020 and 2021, respectively.

Equity in loss of affiliate companies. The Group recorded equity in loss of affiliate companies of RMB3.2 million (US\$0.5 million) in 2021.

Net loss attributable to non-controlling interests. Net loss attributable to non-controlling interests represents a subsidiary's cumulative result of operation in deficit attribute to non-controlling shareholders. The Group recorded net loss attributable to non-controlling interests of RMB727.6 thousand in 2020 and RMB559.2 thousand (US\$87.8 thousand) in 2021.

Net loss attributable to Qutoutiao Inc. As a result of the foregoing, net loss attributable to Qutoutiao Inc. increased from RMB1,104.4 million in 2020 to RMB1,239.6 million (US\$194.5 million) in 2021.

Non-GAAP net loss attributable to Qutoutiao Inc. Non-GAAP net loss attributable to Qutoutiao Inc., which represents net loss attributable to Qutoutiao Inc. before share-based compensation expenses, increased from RMB641.2 million in 2020 to RMB1,039.4 million (US\$163.1 million) in 2021.

Comparison of Year Ended December 31, 2020 and Year Ended December 31, 2019

Revenues. The Group's net revenues decreased from RMB5,570.1 million in 2019 to RMB5,285.2 million in 2020 primarily due to a decrease in the Group's advertising and marketing revenues from RMB5,415.3 million in 2019 to RMB5,046.8 million in 2020, partially offset by an increase in the Group's other revenue from RMB154.8 million in 2019 to RMB238.4 million in 2020. Decrease in the Group's advertising and marketing revenues was primarily due to the Group's strategy to balance operational efficiency and sustainable growth. The number of advertising clicks decreased by 7% from 2019 to 2020 and the revenue per click remained the same, which led to a decrease in the Group's advertising and marketing revenues charged on oCPC basis. Increase in the Group's other revenue was primarily due to the increase of revenues from live-streaming, and, to a lesser extent, revenues from Midu's membership services and online game services.

Cost of Revenues. The Group's cost of revenues increased from RMB1,640.6 million in 2019 to RMB1,674.4 million in 2020 primarily due to increases in content procurement costs and costs related to revenue-sharing arrangements with content providers such as game developers; partially offset by the decreases in bandwidth and IT infrastructure costs, salaries and benefits associated with content management personnel. Cost of revenues as a percentage of the Group's net revenues increased from 29.5% in 2019 to 31.7% in 2020. Share-based compensation expenses recognized in cost of revenues increased from RMB6.2 million in 2019 to RMB12.9 million in 2020.

Gross Profit. The Group's gross profit increased from RMB3,929.4 million in 2019 to RMB3,610.8 million in 2020.

Operating Expenses. The Group's total operating expenses increased from RMB6,683.0 million in 2019 to RMB4,722.2 million in 2020.

- Research and development expenses. The Group's research and development expenses increased from RMB926.2 million in 2019 to RMB947.9 million in 2020. The increase was primarily due to the increase in share-based compensation, partially offset by the decrease in salaries and benefits. Share-based compensation expenses recognized in research and development expenses increased from RMB138.8 million in 2019 to RMB204.3 million in 2020. Research and development expenses as a percentage of the Group's net revenues increased from 16.6% in 2019 to 17.9% in 2020.
- Sales and marketing expenses. The Group's sales and marketing expenses decreased from RMB5,489.7 million in 2019 to RMB3,381.6 million in 2020. The decrease was primarily due to decreases in user acquisition expenses and user engagement expenses, as the Group continuously optimize its loyalty program and traffic acquisition strategy.

User engagement expenses decreased from RMB2,137.8 million in 2019 to RMB1,392.6 million in 2020, primarily due to the Group's ongoing efforts in optimizing user engagement expenses for its loyalty program, as well as the enhanced content algorithm facilitated by the Group's AI platform that aims to match the content much more precisely with users' personalized needs. User engagement expenses as a percentage of net revenues decreased from 38.4% in 2019 to 26.3% in 2020.

User acquisition expenses decreased from RMB2,932.4 million in 2019 to RMB1,720.7 million in 2020, which was primarily due to a decrease in the cost of word-of-mouth referrals and the Group's more efficient spending in third-party channels.

Other sales and marketing expenses decreased from RMB419.5 million in 2019 to RMB268.4 million in 2020, primarily due to reduction in expenditures in brand advertising.

The result of the foregoing contributed to a decrease in sales and marketing expenses as a percentage of the Group's net revenues from 98.6% in 2019 to 64.0% in 2020.

• General and administrative expenses. The Group's general and administrative expenses increased from RMB267.0 million in 2019 to RMB392.8 million in 2020. The increase was primarily due to the increase in bad-debt provision for account receivables as we adopted *ASC-326*, *Measurement of Credit Losses on Financial Instruments*, effective January 1, 2020; and, to a less extent, the increase in share-based compensation. This also contributed to an increase in general and administrative expenses as a percentage of the Group's net revenues from 4.8% in 2019 to 7.4% in 2020.

Other operating income. The Group's other operating income increased from RMB30.3 million in 2019 to RMB79.3 million in 2020, primarily due to refund of value-added taxes levied on software related products and services.

Interest income. The Group's interest income decreased from RMB48.4 million in 2019 to RMB10.4 million in 2020 due to lower average cash balance during 2020 in comparison to 2019.

Interest expense. The Group's interest expense increased from RMB26.9 million in 2019 to RMB38.1 million in 2020, primarily due to incurrence of the interest expense associated with the Convertible Loan advanced by Alibaba, which will be paid upon maturity or otherwise be waived in case of conversion.

Foreign exchange related gains/(losses), net. The Group recognized foreign exchange related gains/losses, net, of RMB1.9 million in 2019 and RMB7.2 million in 2020.

Investment income/(loss). The Group recorded investment loss of RMB31.8 million in 2021, compared to investment income of RMB6.3 million in 2019, primarily due to fair value change loss in equity investments.

Other income/(expenses), net. The Group recorded other expenses of other income of RMB9.0 million in 2019 and other expense of RMB7.3 million in 2020.

Income tax expense. We recorded income tax expense of RMB4.8 million and RMB1.0 million in 2019 and 2020, respectively.

Net loss attributable to non-controlling interests. Net loss attributable to non-controlling interests represents a subsidiary's cumulative result of operation in deficit attribute to non-controlling shareholders. The Group recorded net loss attributable to non-controlling interests of RMB587.1 thousand in 2019 and RMB727.6 thousand in 2020.

Net loss attributable to Qutoutiao Inc. As a result of the foregoing, net loss attributable to Qutoutiao Inc. increased from RMB2,688.7 million in 2019 to RMB1,104.4 million in 2020.

Recent Accounting Pronouncements

A list of recently adopted and recently issued accounting pronouncements that are relevant to us is included in Note 2(ai) and Note 2(aj) to our audited consolidated financial statements included elsewhere in this annual report.

B. Liquidity and Capital Resources

We require a significant amount of cash to fund our operations. We also have a significant amount of debt outstanding. We may also require cash to meet our future capital requirements, which may be difficult to predict.

We have conducted the below debt and equity financing activities since our initial public offering:

- In September 2018, we completed our initial public offering and raised net proceeds of US\$85.8 million after deducting underwriting discounts and commissions and the offering expenses.
- On March 28, 2019, we and Alibaba entered into a convertible loan agreement, pursuant to which Alibaba advanced aggregate principal amount of approximately US\$171.1 million to us on April 4, 2019. The Convertible Loan is unsecured and unsubordinated and has an original maturity date of April 4, 2022, which has been further extended pursuant to a supplemental agreement. The convertible loan agreement contains certain covenants, restrictions and events of default on our activities, including, but not limited to, limitations on the incurrence of additional indebtedness; dividends or other distributions in cash or cash equivalents; and mergers, consolidations or the sale of all or substantially all of our assets.
- In April 2019, we completed a follow-on public offering and raised net proceeds of US\$31.0 million after deducting underwriting discounts and commissions and offering expenses.
- On September 27, 2019, we issued an aggregate of 1,480,123 Class A ordinary shares to Haitong International Investment Solutions
 Limited pursuant to various agreements entered into between us, Shanghai Dongfang Newspaper Co., Ltd. and its subsidiaries, or
 collectively, The Paper, and certain other parties, and received proceeds of US\$20.4 million.
- In November 2018, Fun Literature Limited, our subsidiary that is the holding company of the entities that operate *Midu Novels*, entered into preferred share purchase agreements with certain third-party investors to issue series A redeemable convertible preferred shares an aggregate issuance price of US\$14.0 million.
- In 2019, Fun Literature Limited entered into a series of preferred share purchase agreements with third party investors to issue series A and B redeemable preferred shares for an aggregate issuance price of US\$54 million.
- In December 2020, Fun Literature Limited issued Series C redeemable convertible preferred shares to certain third-party investors for a total consideration of US\$111.8 million, which is net of issuance costs amounting to US\$0.5 million. The consideration was comprised of US\$55.0 million in cash, intangible assets of US\$20.8 million, which mainly included developed technology and user data, and contents of US\$36.6 million from one of the investors, which were all measured at fair value on the date of exchange. The Series C preferred shares were issued in December 2020 and the transfer of the intangible assets were completed in January 2021.

For the Convertible Loan, we and Alibaba entered into supplemental agreements to the original convertible loan agreement on March 28, 2022 and April 29, 2022. According to the supplemental agreements, the maturity date of the Convertible Loan has been extended to May 28, 2022. We have made several undertakings under the April 2022 supplemental agreement, including, among others, an undertaking to pay US\$3,000,000 as a part of the accrued interest of the Convertible Loan to Alibaba no later than May 15, 2022. The April 2022 supplemental agreement also provides that the maturity date of the Convertible Loan shall not be extended beyond May 28, 2022 without the prior consent of Alibaba. The interest rate of the Convertible Loan has been amended from an original compound rate of 3% per annum to a compound rate of 9% per annum plus a simple rate of 3% per annum, calculated from the original loan drawdown date of April 4, 2019. The Convertible Loan is convertible into our Class A ordinary shares at Alibaba's option on the conversion date, which has been amended to be the 60th calendar day following the maturity date or a date falling on or after the occurrence of an event of default.

The following factors raise substantial doubt about our ability to continue as a going concern:

- For the years ended December 31, 2019, 2020 and 2021, we incurred net losses of RMB2,689.3 million, RMB1,105.2 million and RMB1,240.2 million (US\$194.6 million), respectively.
- For the years ended December 31, 2019, 2020 and 2021, we had net cash used in operating activities of RMB2,367.3 million, RMB863.8 million and RMB279.1 million (US\$43.8 million), respectively.
- As of December 31, 2021, we had an accumulated deficit of RMB7,355.7 million (US\$1,154.3 million) and a deficit in working capital of RMB1,401.2 million (US\$219.9 million).
- As of December 31, 2021, we had cash, cash equivalents, restricted cash and short-term investments of RMB658.9 million (US\$103.4 million), short-term borrowings of RMB20.0 million (US\$3.1 million), and a Convertible Loan of approximately RMB1,183.0 million (US\$185.6 million), including principal of US\$171.1 million (RMB1,147.0 million) and accrued and unpaid interest, that was expected to be matured within one year from the date of the issuance of the audited consolidated financial statements included elsewhere in this annual report.

Our liquidity is primarily dependent on our ability to adjust the pace of the operation expansion, to control operating cost and expenses to reduce the cash used in operating cash flows, to pursue financing arrangements, including the renewal of the Convertible Loan with the creditor, and to obtain additional funds from sale of our assets.

We have carried out an assessment of our cash flow forecast for the twelve months from the date of issuance of this annual report. In preparing the cash flow forecast, we have considered our historical cash requirements, our expected loan repayment obligations in 2022 and beyond, and our plan to further reduce operating costs and expenses.

We are currently exploring a variety of measures to improve our liquidity and financial position as follows:

We continue to optimize our user loyalty programs and traffic acquisition strategy to efficiently control and reduce costs and continues to be selective in the content and better leverage our existing content varieties to attract and maintain users. These measures can in turn lead to savings in user related costs. We further plan to preserve liquidity and manage cash flows by reducing expenditure on developing and maintaining smaller and novel applications and limiting other general and administrative expenses. We also plan to obtain additional external financing and funds through, including but not limited to, additional credit facilities obtained from banks in the normal course of business, potential additional issuances of equity and/ or debt as a Group or through our subsidiaries, and sale of our assets, including our equity interest in our subsidiaries, to third parties.

In addition, the maturity date of the Convertible Loan has been extended to May 28, 2022. The total amount of the principal and accumulated interest of the Convertible Loan, including the incremental interest related to the increase in interest rate under the supplemental agreements from a compound rate of 3% per annum to a compound rate of 9% per annum plus a simple rate of 3% per annum, calculated starting from the original loan drawdown date of April 4, 2019, will amount to approximately US\$240.4 million (RMB1.5 billion) as of May 28, 2022. While we cannot assure you that we will be able to further extend the maturity date of the principal and accrued and unpaid interest of the Convertible Loan after May 28, 2022, we have assumed that we will be able to extend the maturity date of the Convertible Loan in preparing our cash flow forecast.

Based on our assessment, there can be no assurance, however, that the above operating measures will be successfully completed due to factors outside of our control. There can also be no assurance that new financings, additional funds from sale of our assets, extension of the maturity date of the Convertible Loan, or other transactions will be available to us on commercially acceptable terms, or at all. In addition, the potential worsening global economic conditions may adversely impact our ability to secure additional financing.

Facts and circumstances including accumulated and recurring losses from operations, net cash used in operating activities, negative working capital and uncertainties on the repayment of the Convertible Loan raise substantial doubt about our ability to continue as a going concern. See "Item 3.D. Risk Factors—Risks Relating to Our Industry and Business—There is substantial doubt as to our ability to continue as a going concern" and "—We require a significant amount of cash to fund our operations as well as to meet our Convertible Loan obligations. If we cannot obtain additional financing and liquidity, our business, financial condition and results of operation will be materially and adversely affected."

The following table sets forth a summary of the Group's cash flows for the years indicated:

	Year Ended December 31,			
	2019	2020	202	
	RMB	RMB	RMB	US\$
		(in thousa	nds)	
Selected Consolidated Cash Flows Data:				
Net cash provided by/(used in) operating activities	(2,367,295)	(863,774)	(279,122)	(43,801)
Net cash provided by/(used in) investing activities	(1,224,152)	782,545	75,521	11,850
Net cash provided by financing activities	1,768,001	307,746	(66,094)	(10,372)
Net increase/(decrease) in cash, cash equivalents and restricted cash	(1,823,446)	226,517	(269,695)	(42,322)
Effect of exchange rate changes on cash and cash equivalents	12,847	(7,415)	(9,263)	(1,453)
Cash, cash equivalents and restricted cash at beginning of the year	2,186,288	375,689	594,791	93,336
Cash, cash equivalents and restricted cash at the end of the year	375,689	594,791	315,833	49,561

Operating Activities

Net cash used in operating activities was RMB 279.1 million (US\$43.8 million) in 2021, primarily due to net loss of RMB1,240.2 million (US\$194.6 million), adjusted for (i) allowance for doubtful accounts of RMB249.1 million (US\$39.1 million) and (ii) share-based compensation of RMB200.2 million (US\$31.4 million). Changes in assets and liabilities primarily consisted of (i) a decrease in accrued liabilities and other current liabilities of RMB593.1 million (US\$93.1 million), (ii) an increase in accounts receivable of RMB282.3 million (US\$44.3 million), (iii) a decrease in prepayments and other current assets of RMB195.4 million (US\$30.7 million), (iv) a decrease in accounts payable of RMB135.2 million (US\$21.2 million) and (v) a decrease in amount due from related parties of RMB123.7 million (US\$19.4 million).

Net cash used in operating activities was RMB863.8 million in 2020, primarily due to net loss of RMB1,105.2 million, adjusted for (i) share-based compensation of RMB463.2 million, (ii) allowance for doubtful accounts of RMB79.8 million, (iii) unrealized loss of non-marketable equity securities of RMB54.4 million and (iv) non-cash operating lease expense of RMB41.2 million. Changes in assets and liabilities primarily consisted of (i) an increase in accounts receivable of RMB297.7 million, (ii) a decrease in advances from customers and deferred revenue of RMB105.9 million and (iii) an increase in amount due from related parties of RMB105.4 million, which was partially offset by (i) an increase in accounts payable of RMB120.6 million and (ii) a decrease in prepayments and other current assets of RMB105.7 million.

Net cash used in operating activities was RMB2,367.3 million in 2019, primarily due to net loss of RMB2,689.3 million, adjusted for (i) share-based compensation of RMB272.0 million, (ii) non-cash operating lease expense of RMB43.5 million, (iii) interest expenses of RMB26.9 million and (iv) changes in assets and liabilities. Changes in assets and liabilities primarily consisted of (i) an increase in accounts receivable of RMB322.8 million, (ii) an increase in amount due from related parties of RMB278.2 million and (iii) a decrease in registered users' loyalty payable of RMB122.5 million, which was partially offset by (i) an increase in accounts payable of RMB197.0 million and (ii) an increase in accrued liabilities and other current liabilities of RMB392.1 million.

Investing Activities

Net cash provided by investing activities was RMB75.5 million (US\$11.9 million) in 2021, which were primarily due to proceeds from sales and maturity of short-term investments of RMB982.0 million (US\$154.1 million), partially offset by purchase of short-term investments of RMB899.8 million (US\$141.2 million).

Net cash provided by investing activities was RMB782.5 million in 2020, which were primarily due to proceeds from maturity of short-term investments of RMB2,173.6 million, partially offset by (i) purchase of short-term investments of RMB1,271.8 million, (ii) purchase of long-term investment of RMB106.3 million and (iii) purchase of property and equipment mainly comprising investments in information technology infrastructure of RMB6.2 million.

Net cash used in investing activities was RMB1,224.2 million in 2019, which were primarily attributable to (i) purchase of short-term investments of RMB2,454.6 million, (ii) purchase of equity investments of RMB37.6 million and (iii) purchase of property and equipment mainly comprising investments in information technology infrastructure of RMB21.3 million, partially offset by proceeds from maturity of short-term investments of RMB1,294.4 million.

Financing Activities

Net cash used in financing activities was RMB66.1 million (US\$10.4 million) in 2021, which were primarily due to (i) repayments of bank borrowings of RMB70.0 million (US\$11.0 million) and (ii) repayment of borrowings from a related party of RMB13.0 million (US\$2.0 million), partially offset by proceeds from bank borrowings of RMB20.0 million (US\$3.1 million).

Net cash provided by financing activities was RMB307.7 million in 2020, which were primarily attributable to proceeds from issuance of Series C Convertible redeemable Preferred Shares of Fun Literature Limited, net of issuance costs, of RMB360.6 million, partially offset by repurchase of Series B Convertible redeemable Preferred Shares of Fun Literature Limited for an aggregate amount of RMB135.7 million.

Net cash provided by financing activities was RMB1,768.0 million in 2019, which was primarily attributable to proceeds from the Convertible Loan advanced by Alibaba, proceeds from Midu's series B financing, and the proceeds from the follow-on public offering, net of issuance costs, partially offset by payment for repurchase of ordinary shares.

Capital Expenditures

The Group made capital expenditures of RMB13.0 million and RMB7.7 million (US\$1.2 million) in 2020 and 2021, respectively. The Group's capital expenditures were mainly used for purchase of property and equipment and purchase of intangible assets. The decrease in capital expenditures from 2020 to 2021 was primarily due to a decrease in purchase of fixed assets. The Group will continue to make capital expenditures to meet the expected growth of its business.

Commitments

The following table set forth the Group's contractual obligations as of December 31, 2021:

			Payment	due by period		
			Less than			More than
	Tota	al	1 Year	1 – 3 Years	3 – 5 Years	5 Years
	RMB	US\$		RM	B	
			(in tl	nousands)		
Operating lease obligations	29,685	4,670	13,022	16,664	_	_
Content fee	337,000	52,882	175,000	162,000	_	
Capital and other commitments	1,532	241	1,344	188	_	
Total	368,217	57,793	189,366	178,852		

Holding Company Structure

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

C. Research and Development

The Group has focused on and will continue to invest in its technology system, including (i) enhancing its content recommendation engine, (ii) optimizing its advertising solution by improving its real-time predictive click-through rate model and offering superior user targeting, and (iii) enhancing its content management and delivery capabilities through increased adoption of artificial intelligence based technology and greater level of automation to achieve higher operational efficiency and scalability.

The Group's research and development expenses were RMB926.2 million, RMB947.9 million and RMB551.6 million (US\$86.6 million) in 2019, 2020 and 2021, respectively.

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2021 that are reasonably likely to have a material effect on the Group's total net revenues, income, profitability, liquidity or capital reserves, or that caused the disclosed financial information to be not necessarily indicative of future operating results or financial conditions.

E. Critical Accounting Estimates

See "Item 5. Operating and Financial Review and Prospects — A. Operating Results — Critical Accounting Estimates."

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

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

Directors and Executive Officers

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

Name	Age	Position/Title
Eric Siliang Tan	42	Co-founder, chairman and chief executive officer
Feng Li	45	Independent director
James Jun Peng	47	Independent director
Jianfei Dong	40	Director and co-president
Oliver Yucheng Chen	43	Director
Xiaolu Zhu	38	Chief financial officer
Sihui Chen	37	Co-founder and chief operating officer
Zhiliang Wang	38	Co-founder and chief technology officer

Mr. Eric Siliang Tan is our co-founder, chairman of board of directors and chief executive officer. Mr. Tan has more than 15 years of experience in the Internet industry and serial entrepreneurship experiences. Mr. Tan served as chief executive officer of AdIn Media (Shanghai) Co., Ltd. from 2013 to 2018, an advertising technology company he founded in 2013, which was acquired in 2015 by Wutong Holding Group Co., Ltd., a company listed on Shenzhen Stock Exchange. Prior to that, Mr. Tan was head of advertising solutions of Shanghai Shengyue Advertising Co., Ltd., a subsidiary of SNDA Interactive Entertainment Limited from 2010 to 2013, in charge of developing open Internet advertising platform. Previously, Mr. Tan served at Wealink.com, an Internet recruiting company, as chief technology officer from 2008 to 2009, and at 51.com, an online game company, as engineering manager in 2008. Mr. Tan worked at Yahoo! China, with his last position as senior engineer, from 2006 to 2008. Mr. Tan graduated from Tsinghua University with a bachelor of engineering degree in automation in 2002. Mr. Tan graduated from Chinese Academy of Sciences with master of engineering degree in artificial intelligence in 2006.

Mr. Feng Li has served as our director since September 2018. Mr. Li has more than 22 years of experience in business management and financial education. At the University of Michigan Stephen M. Ross School of Business, he was an Assistant Professor from July 2004 to July 2011 and the Harry Jones Associate Professor with tenure from July 2011 to June 2015. Since July 2015, Mr. Li has been a professor of accounting at Shanghai Advanced Institute of Finance of Shanghai Jiao Tong University, where he served as the Faculty Director of the Finance MBA Program and Deputy Dean for Non-Executive Programs. Mr. Li has also been an independent director and the audit committee financial expert for Sungy Mobile Limited, a company listed on the NASDAQ (NASDAQ: GOMO) and Yintech Investment Holdings Limited, a company listed on the NASDAQ (NASDAQ: YIN). Mr. Li is a member of the American Accounting Association and received the Distinguished Contribution to the Accounting Literature Award from the Association in 2018. Mr. Li graduated from Fudan University with a bachelor degree in economics in July 1996 and a master degree in economics in July 1998. He received his master degree in business administration from the University of Chicago in June 2004 and obtained a doctor of philosophy degree in accounting from the University of Chicago in June 2005.

Mr. James Jun Peng has served as our director since September 2018. Mr. Peng is the co-founder and CEO of Pony.ai Inc. Prior to co-founding Pony.ai Inc. in 2016, Mr. Peng served as a chief architect of the autonomous driving division, leading the overall strategy and development of Baidu's autonomous vehicle from 2011 to 2016. Mr. Peng began his career as a software engineer at Google in 2005, specializing in backend and frontend advertising systems. Mr. Peng obtained a bachelor of civil engineering degree from Tsinghua University in 1996, a master of civil engineering degree from SUNY-Buffalo in 1998 and a doctor of philosophy degree from Stanford University in 2002.

Mr. Jianfei Dong is our director and co-president. Prior to joining our company in May 2018, Mr. Dong served as the co-chief operating officer of Inke, a mobile live-streaming platform, from 2017 to 2018. Prior to that, he served as the director of technology and general manager of the mobile applications development department of Baidu from 2008 to 2017. Previously, Mr. Dong worked as a senior research and development engineer on Internet search engine at Kuxun, a travel services and search website, from 2007 to 2008. Mr. Dong graduated from Tsinghua University with a bachelor degree in control science and engineering in automation in 2005 and a master degree in control science and engineering in automation in 2007.

Mr. Oliver Yucheng Chen is our director. Mr. Chen served as our chief strategy officer from August 2018 to February 2020. Prior to that he was a co-founding partner of Innotech Capitals from 2015 to 2018, chief financial officer at AdIn Media (Shanghai) Co., Ltd. from 2014 to 2015, SNDA Interactive Entertainment Limited SDO division from 2012 to 2014 and Sohu.com video division from 2011 to 2012. Previously, Mr. Chen worked as Asia audit director of PepsiCo from 2009 to 2011. He also worked in the U.S. from 2001 to 2009 at KPMG and at Deloitte. Mr. Chen graduated from University of Michigan with a bachelor degree in economics and a master degree in accounting in 2001. He is a U.S. certified public accountant with inactive status.

Mr. Xiaolu Zhu is our chief financial officer. Mr. Zhu served as our co-chief financial officer from May 2019 to January 2020 and became our chief financial officer in January 2020. Prior to joining us in May 2019, Mr. Zhu served as CFO at KrSpace Inc., a leading Chinese co-working space operator, from April 2018 to March 2019, and as CFO of Qunar, a leading Chinese mobile and online travel service provider, from January 2016 to November 2017. Mr. Zhu was the Vice President of Finance at Lashou Group Inc. from April 2012 to October 2014. Before that, Mr. Zhu worked at Goldman Sachs where he worked on multiple IPOs and M&A transactions of Chinese Internet and technology companies. Mr. Zhu received his L.L.B. from Peking University and J.D. from Duke University.

Ms. Sihui Chen is our co-founder and chief operating officer. Prior to joining our company in January 2016, Ms. Chen worked at Shanghai Qingyuan Lvwang Co., Ltd., an Internet gaming company, as head of project management responsible for product development. Previously, Ms. Chen held several positions at SNDA Interactive Entertainment Limited, including executive assistant to the chief executive officer of literature division from 2012 to 2014, and corporate human resource business partner from 2007 to 2012. Ms. Chen graduated from Zhongnan University of Economics and Law with a bachelor degree in management and a bachelor degree in finance in 2007.

Mr. Zhiliang Wang is our co-founder and chief technology officer. Prior to joining our company in March 2016, Mr. Wang had over ten years of experience in the Internet industry focusing on advertising and mobile applications. He worked at Baidu, Inc. as an engineering manager responsible for the mobile browser division from 2013 to 2015. Previously, Mr. Wang was a senior manager of programmatic advertising platform solutions at Shanghai Shengyue Advertising Co., Ltd., a subsidiary of SNDA Interactive Entertainment Limited from 2010 to 2013. Prior to that, Mr. Wang worked at PPLive, an online video company, as a research and development supervisor of online video from 2007 to 2010. Mr. Wang graduated from Southwestern University with a bachelor degree in information management and information systems in 2007.

The business address for all of our executive officers and directors is Building No. 8, Shanghai Pudong Software Park, 519 Yi De Road, Pudong New Area, Shanghai, 200124, People's Republic of China.

B. Compensation

Compensation

In 2021, we paid aggregate cash compensation of approximately RMB5.1 million (US\$0.8 million) to our directors and executive officers as a group. We did not pay any other cash compensation or benefits in kind to our directors and executive officers. We have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our directors and executive officers. Our PRC subsidiaries and the Group VIEs are required by law to make contributions equal to certain percentages of each employee's salary for his or her pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund. Our board of directors may determine compensation to be paid to the directors and the executive officers. The compensation committee will assist the directors in reviewing and approving the compensation structure for the directors and the executive officers.

For information regarding share awards granted to our directors and executive officers, see "— Equity Incentive Plan."

Employment Agreements and Indemnification Agreements

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

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

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

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

Equity Incentive Plan

Equity Incentive Plan

In January 2019, our board of directors adopted a new equity incentive plan, or equity incentive plan, pursuant to which equity-based awards may be granted to eligible participants. The purpose of the equity incentive plan is to attract and retain the services of key personnel by providing additional incentive to promote the business of our company. The equity incentive plan replaced the 2017 equity incentive plan and 2018 equity incentive plan that we previously adopted in their entirety and assumed the awards previously granted under these two plans.

The equity incentive plan provides initially for an aggregate amount of no more than 12,464,141 Class A ordinary shares to be issued pursuant to equity-based awards granted under the plan. On March 5, 2019, the Company increased the aggregate number of Class A ordinary shares reserved for issuance pursuant to awards granted under the equity incentive plan by 3.5% of the total number of Class A ordinary shares and Class B ordinary shares outstanding as of December 31, 2018. On every January 1 thereafter for four years, the aggregate number of Class A ordinary shares reserved and available for issuance pursuant to awards granted under the equity incentive plan will be increased by 2.0% of the total number of Class A ordinary shares and Class B ordinary shares outstanding on December 31 of the preceding calendar year. Generally, if any award (or portion thereof) under the equity incentive plan terminates, expires, lapses, is canceled for any reason without being vested or exercised, or is settled in cash or other property, as applicable, the ordinary shares subject to such award will again be available for future grant.

As of the date of this annual report, equity-based awards with respect to 6,020,287 Class A ordinary shares have been granted and were outstanding under the equity incentive plan (including equity-based awards previously granted under the 2017 equity incentive plan and the 2018 equity incentive plan).

Administration

The equity incentive plan will be administered by our board of directors or any member(s) of the board of directors or officer(s) who have been delegated any authority pursuant to the equity incentive plan. The plan administrator is authorized to interpret the plan and to determine the provisions of each award including the number of shares covered, the type of award, the exercise price, if applicable, and the vesting schedule. In addition, the plan administrator may (i) select the recipients of awards, (ii) prescribe the forms of award agreements and amend any award agreement (subject to certain limitations), (iii) allow a participant to satisfy minimum tax withholding obligations by withholding shares to be issued pursuant to an award and (iv) make other decisions and determinations as provided in the equity incentive plan.

Types of Awards

The equity incentive plan permits awards of, among others, options, restricted shares and restricted share units.

Change in Control

In the event of a change in control, the plan administrator may, in its sole discretion, (i) adjust the number and kind of shares and prices subject to awards then held by a participant in the equity incentive plan to provide the assumption or substitution of any award or provide for the assumption, conversion or replacement of any option with other rights (including cash) or property (as the plan administrator selects or determines to be reasonable, equitable and appropriate) (ii) accelerate the vesting, in whole or in part, of any award, or (iii) purchase any award for an amount of cash or shares (in accordance with the terms of the equity incentive plan). In the event a successor or surviving company refuses to assume, convert or replace an award, then the outstanding awards shall fully vest. A "change of control" under the equity incentive plan is defined as (i) an amalgamation, arrangement, merger, consolidation or scheme of arrangement in which our company is not the surviving entity, except for a transaction the principal purpose of which is to change the jurisdiction in which our company is incorporated or which following such transaction the holders of our company's voting shares immediately prior to such transaction own more than fifty percent (50%) of the voting shares of the surviving entity; (ii) the sale, transfer or other disposition of all or substantially all of the assets of our company (other than to one of our subsidiaries); (iii) the completion of a voluntary or insolvent liquidation or dissolution of our company; (iv) any takeover, reverse takeover, scheme of arrangement, or series of related transactions culminating in a reverse takeover or scheme of arrangement (including, but not limited to, a tender offer followed by a takeover or reverse takeover) in which our company survives but (A) the shares of our company outstanding immediately prior to such transaction are converted or exchanged by virtue of the transaction into other property, whether in the form of shares, securities, cash or otherwise, or (B) the shares carrying more than 50% of the total combined voting power of our company's then issued and outstanding shares are transferred to a person or persons different from those who held such shares immediately prior to such transaction culminating in such takeover, reverse takeover or scheme of arrangement, or (C) our company issues new voting shares in connection with any such transaction such that holders of the our company's voting shares immediately prior to the transaction no longer hold more than 50% of the voting shares of our company after the transaction; or (v) the acquisition in a single or series of related transactions by any person or related group of persons (other than employees of our company, our subsidiaries or any other person in or of which our company or subsidiaries holds a substantial economic interest or possesses the power to direct or cause the direction of the management policies or entities established for the benefit of the employees of our company, our subsidiaries or any other person in or of which our company or subsidiaries holds a substantial economic interest or possesses the power to direct or cause the direction of the management policies) of (A) control of our board of directors or the ability to appoint a majority of the members of our board of directors, or (B) beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of shares carrying more than 50% of the total combined voting power of the our company's then issued and outstanding shares.

Term

Unless terminated earlier, the equity incentive plan will expire ten years from the date the equity incentive plan becomes effective. Awards made under the equity incentive plan on or prior to the date of its termination will continue in effect subject to the terms of the equity incentive plan and the applicable award agreement.

Vesting Schedule

In general, the plan administrator determines the vesting schedule of each award as evidenced by an award agreement. The plan administrator may accelerate the vesting of any award.

Amendment and Termination of Plan

Our board of directors, in its sole discretion, may at any time amend, alter or discontinue the equity incentive plan, subject to certain exceptions.

Granted Options (including options previously granted under our 2017 equity incentive plan and 2018 equity incentive plan

Name	Position	Class A Ordinary Shares Underlying Options Awarded	Option Exercise Price	Grant Date	Option Expiration Date
Zhiliang Wang	Chief technology officer	2,372,965	US\$0.0001	June 30, 2016	June 30, 2026
Sihui Chen	Chief operating officer	957,655	US\$0.0001	June 30, 2016	June 30, 2026
Jianfei Dong	Director and co-president	*	US\$0.0001	June 30, 2018	June 30, 2028
		*	US\$0.0001	March 31, 2019	March 31, 2029
Xiaolu Zhu	Chief financial officer	*	US\$0.0001	June 30, 2019	June 30, 2029
		*	US\$0.0001	September 30, 2019	September 30, 2029
		*	US\$0.0001	March 31, 2021	March 31, 2031

^{*} Less than 1% of our outstanding shares

As of the date of this annual report, aside from grants of options, no other awards have been granted under our equity incentive plan.

Equity Incentive Trusts

We established equity incentive trusts pursuant to a deed dated February 26, 2018 among us, The Core Trust Company Limited, as the trustee, and Qu World Limited and QFUN Limited, each as a nominee. Through such trusts, our ordinary shares underlying equity awards granted pursuant to our equity incentive plan may be provided to certain of recipients of such equity awards. As of the date of this annual report, Qu World Limited holds 3,876,500 Class A ordinary shares pursuant to our equity incentive plan and QFUN Limited does not currently holds any Class A ordinary shares. Upon satisfaction of vesting conditions and exercise by a grant recipient, the trustee will transfer the ordinary shares underlying the relevant equity awards to such grant recipient.

The trust deed provides that the trustee shall not have any voting power in relation to the Class A ordinary shares held by Qu World Limited and QFUN Limited. Although these shares are legally issued and outstanding, they are accounted for as treasury shares and as a result, are not deemed as outstanding from an accounting perspective.

C. Board Practices

Our board of directors consists of five directors. A director is not required to hold any shares in our company to qualify to serve as a director. A director may vote with respect to any contract or any proposed contract or arrangement in which he is interested, and if he does so his vote shall be counted and he may be counted in the quorum at any meeting of our directors at which any such contract or proposed contract or arrangement is considered, provided (a) such director has declared the nature of his interest at the meeting of the board at which the question of entering into the contract or arrangement is first considered if he knows his interest then exists, or in any other case at the first meeting of the board after he knows he is or has become so interested, either specifically or by way of a general notice and (b) if such contract or arrangement is a transaction with a related party, such transaction has been approved by the audit committee. The directors may exercise all the powers of the company to borrow money, to mortgage or charge its undertaking, property and uncalled capital, and to issue debentures or other securities whenever money is borrowed or as security for any debt, liability or obligation of the company or of any third party. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

Committees of the Board of Directors

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. We have adopted a charter for each of the committees. Each committee's members and functions are described below.

Audit Committee

Our audit committee consists of Mr. James Jun Peng and Mr. Feng Li. Mr. Feng Li is the chairperson of our audit committee. Mr. Feng Li satisfies the criteria of an audit committee financial expert as set forth under the applicable rules of the SEC. Our audit committee consists solely of independent directors. Each of Mr. James Jun Peng and Mr. Feng Li satisfies the requirements for an "independent director" within the meaning of Rule 5605(a)(2) of the Listing Rules of the NASDAQ Global Select Market and meets the criteria for independence set forth in Rule 10A-3 of the United States Securities Exchange Act of 1934, as amended, or the Exchange Act.

The audit committee oversees our accounting and financial reporting processes and the audits of our financial statements. Our audit committee is responsible for, among other things:

- selecting the independent auditor;
- pre-approving auditing and non-auditing services permitted to be performed by the independent auditor;
- annually reviewing the independent auditor's report describing the auditing firm's internal quality control procedures, any material issues
 raised by the most recent internal quality control review, or peer review, of the independent auditors and all relationships between the
 independent auditor and our company;
- setting clear hiring policies for employees and former employees of the independent auditors;
- reviewing with the independent auditor any audit problems or difficulties and management's response;
- reviewing and, if material, approving all related party transactions on an ongoing basis;
- · reviewing and discussing the annual audited financial statements with management and the independent auditor;
- reviewing and discussing with management and the independent auditors major issues regarding accounting principles and financial statement presentations;
- reviewing reports prepared by management or the independent auditors relating to significant financial reporting issues and judgments;
- discussing earnings press releases with management, as well as financial information and earnings guidance provided to analysts and rating agencies;
- reviewing with management and the independent auditors the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on our financial statements;
- · discussing policies with respect to risk assessment and risk management with management, internal auditors and the independent auditor;
- timely reviewing reports from the independent auditor regarding all critical accounting policies and practices to be used by our company, all alternative treatments of financial information within U.S. GAAP that have been discussed with management and all other material written communications between the independent auditor and management;
- establishing procedures for the receipt, retention and treatment of complaints received from our employees regarding accounting, internal
 accounting controls or auditing matters and the confidential, anonymous submission by our employees of concerns regarding questionable
 accounting or auditing matters;
- annually reviewing and reassessing the adequacy of our audit committee charter;
- such other matters that are specifically delegated to our audit committee by our board of directors from time to time;
- · meeting separately, periodically, with management, internal auditors and the independent auditor; and
- reporting regularly to the full board of directors.

Compensation Committee

Our compensation committee consists of Mr. James Jun Peng and Mr. Feng Li. Mr. James Jun Peng is the chairperson of our compensation committee. Each of Mr. James Jun Peng and Mr. Feng Li satisfies the requirements for an "independent director" within the meaning of Rule 5605(a)(2) of the Listing Rules of the NASDAQ Global Select Market.

Our compensation committee is responsible for, among other things:

- reviewing, evaluating and, if necessary, revising our overall compensation policies;
- reviewing and evaluating the performance of our directors and senior officers and determining the compensation of our senior officers;
- reviewing and approving our senior officers' employment agreements with us;
- setting performance targets for our senior officers with respect to our incentive—compensation plan and equity-based compensation plans;
- administering our equity-based compensation plans in accordance with the terms thereof; and such other matters that are specifically
 delegated to the remuneration committee by our board of directors from time to time.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Mr. Eric Siliang Tan, Mr. James Jun Peng and Mr. Feng Li. Mr. Eric Siliang Tan is the chairperson of our nominating and corporate governance committee. Each of Mr. James Jun Peng and Mr. Feng Li satisfies the requirements for an "independent director" within the meaning of Rule 5605 (a)(2) of the Listing Rules of the NASDAQ Global Select Market. The nominating and corporate governance committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience and diversity;
- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board;
- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our
 compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on
 any remedial action to be taken.

Duties of Directors

Under Cayman Islands law, our directors have a fiduciary duty to act honestly in good faith with a view to our best interests. Our directors also have a duty to exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. In fulfilling their duty of care to us, our directors must ensure compliance with our amended and restated memorandum and articles of association. A shareholder has the right to seek damages if a duty owed by our directors is breached.

The functions and powers of our board of directors include, among others:

- conducting and managing the business of our company;
- representing our company in contracts and deals;
- · appointing attorneys for our company;
- select senior management;
- providing employee benefits and pension;
- managing our company's finance and bank accounts;

- exercising the borrowing powers of our company and mortgaging the property of our company; and
- exercising any other powers conferred by the shareholders' meetings or under our amended and restated memorandum and articles
 of association.

Terms of Directors and Executive Officers

Our directors may be elected by a resolution of our board of directors, or by an ordinary resolution of our shareholders, pursuant to our amended and restated memorandum and articles of association. Each of our directors will hold office until his or her successor takes office or until his or her earlier death, resignation or removal or the expiration of his or her term as provided in the written agreement with our company, if any. A director will cease to be a director if, among other things, the director (i) dies, or becomes bankrupt or makes any arrangement or composition with his creditors, (ii) is found to be or becomes of unsound mind, (iii) resigns his office by notice in writing to the company, or (iv) without special leave of absence from our board, is absent from three consecutive board meetings and our directors resolve that his office be vacated. Our officers are elected by and serve at the discretion of the board of directors.

D. <u>Employees</u>

As of December 31, 2019, 2020 and 2021, the Group had a total of 2,932, 1,704 and 1,110 employees, respectively. The following table sets forth the breakdown of the Group's employees as of December 31, 2021 by function:

<u>Function</u>	Number of Employees	% of Total
Content management	314	28.3
Technology and product development	531	47.8
Sales, customer service and marketing	116	10.3
General administration	149	13.4
Total	1,110	100.0

The Group's employees are based in Shanghai, Beijing, Wuhu City in Anhui Province, Guangzhou in Guangdong Province and Tianjin, respectively.

We believe the Group offers its employees competitive compensation packages and a dynamic work environment that encourages initiative and meritocracy. As a result, the Group has generally been able to attract and retain qualified personnel and maintain a stable core management team. The Group plans to hire additional experienced and talented employees in areas such as content management and research and development as it expand its business.

As required by PRC regulations, the Group participate in various government statutory employee benefit plans, including social insurance funds, namely a pension contribution plan, a medical insurance plan, an unemployment insurance plan, a work-related injury insurance plan and a maternity insurance plan, and a housing provident fund. In addition, the Group purchased employer's liability insurance and additional commercial health insurance to increase insurance coverage of its employees. The Group enters into standard labor, confidentiality and non-compete agreements with its employees. The non-compete restricted period typically expires two years after the termination of employment, and the Group agrees to compensate the employee with a certain percentage of his or her pre-departure salary during the restricted period.

We believe that the Group maintains a good working relationship with its employees, and the Group has not experienced any major labor disputes.

E. Share Ownership

The following table sets forth information as of the date of this annual report with respect to the beneficial ownership of our Class A ordinary shares and Class B ordinary shares by:

- · each of our directors and executive officers; and
- each person known to us to own beneficially 5.0% or more of our ordinary shares.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to, or the power to receive the economic benefit of ownership of, the securities. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days, including through the exercise of any option or other right or the conversion of any other security.

For the purpose of the table below that sets forth information as to the beneficial ownership of our ordinary shares, the total number of ordinary shares issued and outstanding as of the date of this annual report is 76,857,211, comprising 43,920,018 Class A ordinary shares and 32,937,193 Class B ordinary shares. The 43,920,018 Class A ordinary shares issued and outstanding include 3,876,500 Class A ordinary shares held by an equity incentive trust, Qu World Limited. Although these shares are legally issued and outstanding, they are accounted for as treasury shares and as a result, are not deemed as outstanding from an accounting perspective. Upon satisfaction of vesting conditions and exercise by a grant recipient, the trustee of our equity incentive trusts will transfer the ordinary shares underlying the relevant equity awards to such grant recipient.

		Ordinary Shares Be	Ordinary Shares Beneficially Owned				
	Class A Ordinary Shares	Class B Ordinary Shares	Percentage of total ordinary shares	Percentage of aggregate voting power***			
Directors and Executive Officers:**							
Eric Siliang Tan ⁽¹⁾	_	27,123,442	35.3%	72.7%			
Lei Li ⁽²⁾	_	5,813,751	7.6%	15.6%			
Zhiliang Wang ⁽⁵⁾	1,852,965		2.4%	0.5%			
Sihui Chen	*	_	*	_			
James Jun Peng	_		_	_			
Feng Li	_	_	_	_			
Xiaolu Zhu	_		_	_			
Oliver Yucheng Chen	_	_	_	_			
Directors and Executive Officers as a Group	3,264,148	32,937,193	47.1%	89.1%			
Principal Shareholders							
Innotech Group Holdings Ltd. ⁽¹⁾	_	27,123,442	35.3%	72.7%			
News List Ltd. ⁽²⁾	_	5,813,751	7.6%	15.6%			
Qu World Limited ⁽³⁾	3,876,500	_	5.0%	_			
Mount McKinley Investment Limited ⁽⁴⁾	3,343,245	_	4.4%	0.9%			

^{*} Less than 1% of our outstanding shares.

- *** For each person and group included in this column, the percentage of voting power is calculated by dividing the voting power beneficially owned by such person or group by the voting power of all of our Class A and Class B ordinary shares as a single class. In respect of all matters upon which the ordinary shares are entitled to vote, each Class A ordinary share is entitled to one vote, and each Class B ordinary share is entitled to ten (10) votes, voting together as one class. Each Class B ordinary share is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares under any circumstances.
- (1) Represents 27,123,442 Class B ordinary shares that are held by Innotech Group Holdings Ltd., a limited liability company established in the Cayman Islands. Innotech Group Holdings Ltd. is indirectly wholly owned by a trust of which Mr. Eric Siliang Tan and his family are beneficiaries. The registered address of Innotech Group Holdings Ltd. is P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205, Cayman Islands.
- (2) Represents 5,813,751 Class B ordinary shares that are held by News List Ltd., a limited liability company established in the British Virgin Islands. News List Ltd. is indirectly wholly owned by a trust of which Mr. Lei Li and his family are beneficiaries. The registered address of News List Ltd. is Craigmuir Chambers, Road Town, Tortola, British Virgin Islands.
- (3) Represents 3,876,500 Class A ordinary shares held by Qu World Limited, a limited liability company established in the British Virgin Islands, as a nominee of our equity incentive trust. Qu World Limited is wholly owned by The Core Trust Company Limited, a trust company established in Hong Kong that acts as the trustee of our equity incentive trust. Registered address of Qu World Limited is Wickhams Cay II, Road Town, Tortola, VG1110, British Virgin Islands. The trust deed for our equity incentive trust provides that the trustee shall not have any voting power in relation to the 3,876,500 Class A ordinary shares held by Qu World Limited.
- (4) Represents 3,343,245 Class A ordinary shares in the form of 1,337,298 ADSs held by Mount McKinley Investment Limited, a company incorporated in British Virgin Islands, as reported in Amendment No. 1 to the Schedule 13G filed on February 11, 2022, which accounts for 7.6% of the outstanding Class A ordinary shares as of the date of this annual report. Mount McKinley Investment Limited is a wholly-owned subsidiary of Tencent Holdings Limited, a company incorporated in the Cayman Islands and listed on the Hong Kong Stock Exchange. The registered address of Mount McKinley Investment Limited is 29/F., Three Pacific Place, No. 1 Queen's Road East, Wanchai, Hong Kong. The registered address of Tencent Holdings Limited is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, Cayman Islands.
- (5) Represents 1,852,965 Class A ordinary shares issuable to Mr. Zhiliang Wang upon exercise of the share options granted under our equity incentive plan that have vested or are expected to vest within 60 days from the date of this annual report.

^{**} The business address for our directors and executive officers is Building No. 8, Shanghai Pudong Software Park, 519 Yi De Road, Pudong New Area, Shanghai, 200124, People's Republic of China.

The trustee of our equity incentive trusts does not have any voting power in relation to the 3,876,500 Class A ordinary shares held by Qu World Limited. In addition, The Bank of New York Mellon, the depositary bank of our ADR program, does not have voting power over the 152,890 Class A ordinary shares it holds that are reserved for equity awards granted under our equity incentive plan. As such, 72,827,821 of the 76,857,211 ordinary shares issued and outstanding as of the date of this annual report have voting power.

In April 2019, we completed a follow-on public offering of an aggregate of 10,000,000 ADSs, comprising 3,327,868 ADSs issued and sold by us and 6,672,132 ADSs sold by certain selling shareholders, representing an aggregate of 2,500,000 Class A ordinary shares. We raised approximately US\$31.0 million in net proceeds, after deducting underwriting discounts and commissions and the offering expenses payable by us. We did not receive any of the proceeds from the sale of ADSs by the selling shareholders.

On May 28, 2019, our board of directors authorized a share repurchase program under which we may repurchase up to US\$50 million worth of our outstanding American depositary shares ("ADSs") representing our Class A ordinary shares over the next 12 months. Under the share repurchase program, we may repurchase our ADSs from time to time through open market transactions at prevailing market prices, privately negotiated transactions, block trades or any combination thereof. In addition, we will also effect repurchase transactions in compliance with Rule 10b5-1 and/or Rule 10b-18 under the Securities Exchange Act of 1934, as amended, and its insider trading policy. The number of ADSs repurchased and the timing of repurchases will depend on a number of factors, including, but not limited to, price, trading volume and general market conditions, along with our working capital requirements, general business conditions and other factors. The share repurchase program has been terminated, and a total of 4,665,700 ADSs, representing 1,166,425 Class A ordinary shares, were repurchased for a total consideration of US\$20.7 million.

On September 27, 2019, we issued an aggregate of 1,480,123 Class A ordinary shares to Haitong International Investment Solutions Limited pursuant to various agreements entered into between us, Shanghai Dongfang Newspaper Co., Ltd. and its subsidiaries, or collectively, The Paper, and certain other parties. Upon the completion of this issuance, The Paper is deemed to beneficially own approximately 2.0% of our total enlarged issued and outstanding share capital. The Paper will also carry out the performance with a fee charge of certain strategic cooperation agreements with Shanghai Jifen, the Group VIE, for certain years. In addition, Shanghai Jifen has issued equity interests representing 1% of its enlarged share capital to The Paper.

As of the date of this annual report, a total of 37,192,665 Class A ordinary shares are held by one record holder in the United States, The Bank of New York Mellon, the depositary bank of our ADR program, which represents approximately 48.4% of our total outstanding shares. None of our outstanding Class B ordinary shares is held by record holders in the United States. We are not aware of any of our shareholders being affiliated with a registered broker-dealer or being 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.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. <u>Major Shareholders</u>

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

B. Related Party Transactions

Transactions with Companies Controlled by or Affiliated with Mr. Tan

The Group provided advertising and marketing services to several companies controlled by Mr. Eric Siliang Tan, mainly Shanghai Tujin Internet Technology Co., Ltd., or Shanghai Tujin, and charged service fees of RMB473.2 million, RMB250.9 million and RMB40.3 million (US\$6.3 million) in the fiscal years ended December 31, 2019, 2020 and 2021, respectively. The advertising and marketing services were provided to help promote these companies' mobile applications, which were developed in late 2018. As of December 31, 2020 and 2021, amount due from such related parties was RMB383.6 million and RMB259.9 million (US\$40.8 million), respectively. As of December 31, 2020, the amount due from such related parties was comprised of RMB368.5 million, which pertained to accounts receivable from related parties revenues generated, whereas the remaining RMB15.1 million was a fee that we prepaid to a related party to place advertisements on behalf of their customers on the related party platform; the balance was settled and recorded as cost of revenues as the advertisement services were provided, and the prepayment was fully utilized during 2021. As of December 31, 2021, the amounts due from such related parties was comprised of RMB246.5 million (US\$38.7 million) which pertained to accounts receivable from related parties revenues generated, whereas the remaining RMB13.4 million (US\$2.1 million) was related to accounts receivable from an entity that was deconsolidated during 2021 and became a related party. Out of the accounts receivable from related parties of RMB259.9 million (US\$40.8 million) as of December 31, 2021, a total of RMB204.4 million (US\$32.0 million) of the balance is overdue; a majority amount of RMB191.5 million (US\$30.1 million) of the overdue balance was collected as of the date of this annual report. Although the overdue receivables were settled after the due date, and the settlement of the remaining receivables may still be after the due date, as these companies are under the common control of our founder and they have demonstrated an ability to continuously pay off their balances, we did not view this delay in payment as a sign of collectability risk.

The Group entered into a cost-per-impression (CPM) arrangement for advertisement placement by the Group's advertising customers with Shanghai Mengjia Internet Technology Co., Ltd., or Shanghai Mengjia, and Shanghai Tujin, which are media platforms controlled by Mr. Eric Siliang Tan, in 2019. The total service fee charged by Shanghai Mengjia and Shanghai Tujin amounted to RMB35.6 million, RMB29.2 million and RMB103.3 million (US\$16.2 million) for the fiscal years ended December 31, 2019, 2020 and 2021, respectively.

The Group entered into a game cooperation agreement with Shanghai Ruiti Internet Technology Co., Ltd., or Shanghai Ruiti, a game developing company in which Mr. Eric Siliang Tan's controlled entity has significant influence on. The total service fee the Group paid to Shanghai Ruiti in relation to the arrangement amounted to RMB6.8 million, RMB1.8 million and RMB11.0 thousand (US\$1.7 thousand) for the fiscal years ended December 31, 2019, 2020 and 2021, respectively.

As of December 31, 2020 and 2021, amount due to the related parties in relation to the CPM arrangement and game cooperation was RMB9.4 million and RMB6.9 million (US\$1.1 million), respectively.

In addition, Shanghai Tujin also provided advertising and marketing-related promotion services to the Group. For the years ended December 31, 2019, 2020 and 2021, the service fees charged from such related parties amounted to RMB3.3 million, RMB4.2 million and RMB15.8 million (US\$2.5 million), respectively.

The Group borrowed an interest-free loan with a principal amount of RMB13.0 million from an entity under common control of the founder, which was repaid in the first quarter of 2021.

Contractual Arrangements with the Group VIEs and Their Respective Shareholders

PRC laws and regulations place certain restrictions on foreign investment in and ownership of internet-based businesses. Accordingly, we conduct the Group's operations mainly through the Group VIEs and their subsidiaries. We effectively control the Group VIEs through a series of contractual arrangements with the Group VIEs, their respective shareholders and our WFOEs. As a result, we operate the Group's relevant business through contractual arrangements among Shanghai Quyun and Shanghai Zhicao, our wholly-owned PRC subsidiaries, Shanghai Jifen, Big Rhinoceros Horn and Beijing Churun, the Group VIEs, and their respective shareholders. For a description of these contractual arrangements, see "Item 4. — Information on the Company — D. Organizational Structure — Contractual Arrangements among Our Key WFOEs, the Key VIEs and Their Respective Shareholders."

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 and Administrative Proceedings

Lawsuit on Contractual Dispute

Shanghai Jifen was named as the defendant in a lawsuit filed in the People's Court of Jiading District in Shanghai in December 2019 on contractual dispute regarding certain advertising placement agreement between Shanghai Jifen and the plaintiff, Shanghai Wenji Culture Communications Co., Ltd. The plaintiff subsequently withdrew the original lawsuit and filed it again in the Shanghai No.2 Intermediate People's Court on January 20, 2020, and sought a total payment of RMB103.2 million. On March 31, 2021, Shanghai Jifen reached settlement agreement with the plaintiff with a settlement amount of RMB55.0 million (US\$9.0 million). The amount has been recorded in our financial statements for fiscal years 2019 and 2020.

In re Qutoutiao Inc. Securities Litigation, 1:20-cv-06707 (SHS) (SDNY)

On August 20, 2020, we and certain of our current and former directors and officers were named as defendants in a putative shareholder class action lawsuit filed in the United States District Court for the Southern District of New York. This action is brought on behalf of a putative class of persons who purchased or acquired our securities pursuant or traceable to our September 2018 initial public offering or April 2019 secondary public offering, or otherwise acquired our securities between September 14, 2018 and December 16, 2020 (the "Putative Class Period"). The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933, Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and Rule 10b-5 promulgated thereunder based on alleged materially false or misleading statements or omissions in offering documents and/or issued throughout the Putative Class Period. Lead Plaintiff was appointed, and a consolidated amended complaint was filed on January 15, 2021. We filed a motion to dismiss such amended complaint on March 16, 2021. Lead Plaintiff filed an opposition to the motion on May 17, 2021, and we filed a reply on July 1, 2021. A decision on the motion is pending.

Except as disclosed above, the Group is currently not a party to any other material legal or administrative proceedings. The Group may from time to time be subject to various legal or administrative claims and proceedings arising from the ordinary course of business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial cost and diversion of the Group's resources, including our management's time and attention.

Dividend Policy

Since inception, we have not declared or paid any dividends on our shares. We do not have any present plan to pay any dividends on our Class A ordinary shares in the foreseeable future. We intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

Any other future determination to pay dividends will be made at the discretion of our board of directors and may be based on a number of factors, including our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant. If we pay any dividends, ADS holders will receive payment to the same extent as holders of our Class A ordinary shares, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. See "Item 12. Description of Securities other than Equity Securities — D. American Depositary Shares." Cash dividends on our Class A ordinary shares, if any, will be paid in U.S. dollars.

We are an exempted company with limited liability incorporated in the Cayman Islands. In order for us to distribute any dividends to our shareholders and ADS holders, we may rely on dividends distributed by our PRC subsidiaries. Certain payments from our PRC subsidiaries to us may be subject to PRC withholding income tax. In addition, regulations in the PRC currently permit payment of dividends of a PRC company only out of accumulated distributable after-tax profits as determined in accordance with its articles of association and the accounting standards and regulations in China. Each of our PRC subsidiaries is required to set aside at least 10% of its after-tax profit based on PRC accounting standards every year to a statutory common reserve fund until the aggregate amount of such reserve fund reaches 50% of the registered capital of such subsidiary. Such statutory reserves are not distributable as loans, advances or cash dividends.

B. Significant Changes

The Group has not experienced any other 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 September 14, 2018 under the symbol "QTT." On December 10, 2021, we effected a change of the ratio of our ADSs to Class A ordinary shares from the then ADS ratio of four (4) ADSs to one (1) Class A ordinary share to a new ADS ratio of two (2) ADS representing five (5) Class A ordinary shares.

B. Plan of Distribution

Not Applicable.

C. Markets

Our ADSs have been listed on the NASDAQ Global Select Market since September 14, 2018 under the symbol "QTT." On December 10, 2021, we effected a change of the ratio of our ADSs to Class A ordinary shares from the then ADS ratio of four (4) ADSs to one (1) Class A ordinary share to a new ADS ratio of two (2) ADS representing five (5) Class A ordinary shares.

D. Selling Shareholders

Not applicable.

E. Dilution

Not Applicable.

F. Expenses of the Issue

Not Applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not Applicable.

B. Memorandum and Articles of Association

We incorporate by reference into this annual report the description of our sixth amended and restated memorandum of association contained in our F-1 registration statement (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018. Our shareholders adopted our sixth amended and restated memorandum and articles of association by a special resolution passed on September 4, 2018, which became effective immediately prior to the completion of our initial public offering of ADSs representing our Class A ordinary shares.

C. Material Contracts

The Group has not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company," "Item 5. Operating and Financial Review and Prospects," or elsewhere in this annual report.

D. Exchange Controls

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

E. Taxation

The following is a general summary of certain Cayman Islands, People's Republic of China and United States federal income tax consequences relevant to an investment in our ADSs and Class A ordinary shares. The discussion is not intended to be, nor should it be construed as, legal or tax advice to any particular prospective purchaser. The discussion is based on laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change or different interpretations, possibly with retroactive effect. The discussion does not address U.S. state or local tax laws, or tax laws of jurisdictions other than the Cayman Islands, the People's Republic of China and the United States. You should consult your own tax advisors with respect to the consequences of acquisition, ownership and disposition of our ADSs and Class A ordinary shares.

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciations and there is no taxation in the nature of inheritance tax or estate duty or withholding tax applicable to us or to any holder of ADSs and Class A ordinary shares. Stamp duties may be applicable on instruments executed in, or after execution brought within the jurisdiction of, the Cayman Islands. No stamp duty is payable in the Cayman Islands on transfers of shares of Cayman Islands companies except those which hold interests in land in the Cayman Islands. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Pursuant to Section 6 of the Tax Concessions Act (as amended) of the Cayman Islands, we have obtained an undertaking from the Financial Secretary:

- (1) that no law which is enacted in the Cayman Islands imposing any tax to be levied on profits or income or gains or appreciation shall apply to us or our operations; and
- (2) that no tax be levied on profits, income, gains or appreciations or which is in the nature of estate duty or inheritance tax shall be payable by the Company:
 - (a) on or in respect of the shares, debentures or other obligations of the Company; or
 - (b) by way of withholding in whole or in part of any relevant payment as defined in section 6(3) of the Tax Concessions Act (as amended).

The undertaking for us is for a period of twenty years from November 29, 2016.

People's Republic of China Taxation

In December 2018, the National People's Congress of China enacted the modified Enterprise Income Tax Law, which became effective on December 29, 2018. The modified Enterprise Income Tax Law provides that 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 implementing rules of the Enterprise Income Tax Law further define the term "de facto management body" as the management body that exercises substantial and overall management and control over the business, personnel, accounts and properties of an enterprise. While we do not currently consider our company or any of our overseas subsidiaries to be a PRC resident enterprise, there is a risk that the PRC tax authorities may deem our company or any of our overseas subsidiaries as a PRC resident enterprise since a substantial majority of the members of our management team as well as the management team of some of our overseas subsidiaries are located in China, in which case we or the overseas subsidiaries, as the case may be, would be subject to the PRC enterprise income tax at the rate of 25% on worldwide income. If the PRC tax authorities determine that our Cayman Islands holding company is a "resident enterprise" for PRC enterprise income tax purposes, a number of unfavorable PRC tax consequences could follow. One example is a 10% withholding tax would be imposed on dividends we pay to our non-PRC enterprise shareholders and with respect to gains derived by our non-PRC enterprise shareholders from transferring our shares or ADSs. Furthermore, dividends payable to individual investors who are non-PRC residents and any gain realized on the transfer of ADSs or ordinary shares by such investors may be subject to PRC tax at a current rate of 20%, subject to any reduction or exemption set forth in applicable tax treaties or under applicable tax arrangements between jurisdictions. It is unclear whether, if we are considered a PRC resident enterprise, holders of our shares or ADSs would be able to claim the benefit of income tax treaties or agreements entered into between China and other countries or areas.

Certain United States Federal Income Tax Considerations

The following discussion describes certain United States federal income tax consequences of the ownership and disposition of our ADSs and Class A ordinary shares. This discussion deals only with ADSs and Class A ordinary shares that are held as capital assets by a United States Holder (as defined below).

As used herein, the term "United States Holder" means a beneficial owner of our ADSs or Class A ordinary shares that is, for United States federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for United States federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to United States federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

This discussion is based upon provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial decisions thereunder as of the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in United States federal income tax consequences different from those summarized below. In addition, this discussion assumes that the deposit agreement, and all other related agreements will be performed in accordance with their terms.

This discussion does not represent a detailed description of the United States federal income tax consequences applicable to you if you are subject to special treatment under the United States federal income tax laws, including if you are:

- a dealer in securities or currencies;
- a financial institution;
- a regulated investment company;
- a real estate investment trust;
- an insurance company;
- a tax-exempt organization;
- a person holding our ADSs or Class A ordinary shares as part of a hedging, integrated or conversion transaction, a constructive sale or a straddle:
- a trader in securities that has elected the mark-to-market method of accounting for your securities;
- a person liable for alternative minimum tax;
- a person who owns or is deemed to own 10% or more of our stock by vote or value;
- a partnership or other pass-through entity for United States federal income tax purposes;
- a person required to accelerate the recognition of any item of gross income with respect to our ADSs or Class A ordinary shares as a result of such income being recognized on an applicable financial statement; or
- a person whose "functional currency" is not the United States dollar.

If a partnership (or other entity or arrangement treated as a partnership for United States federal income tax purposes) holds our ADSs or Class A ordinary shares, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our ADSs or Class A ordinary shares, you should consult your tax advisors.

This discussion does not contain a detailed description of all the United States federal income tax consequences to you in light of your particular circumstances and does not address the Medicare tax on net investment income, United States federal estate and gift taxes or the effects of any state, local or non-United States tax laws. If you are considering the purchase of our ADSs or Class A ordinary shares, you should consult your own tax advisors concerning the particular United States federal income tax consequences to you of the ownership and disposition of our ADSs or Class A ordinary shares, as well as the consequences to you arising under other United States federal tax laws and the laws of any other taxing jurisdiction.

ADSs

If you hold ADSs, for United States federal income tax purposes, you generally will be treated as the owner of the underlying Class A ordinary shares that are represented by such ADSs. Accordingly, deposits in or withdrawals from our ADS facility as such will not be subject to United States federal income tax.

Taxation of Dividends

Subject to the discussion under "— Passive Foreign Investment Company" below, the gross amount of distributions on the ADSs or Class A ordinary shares (including any amounts withheld to reflect potential PRC withholding taxes, as discussed above under "— People's Republic of China Taxation") will be taxable as dividends to the extent paid out of our current or accumulated earnings and profits, as determined under United States federal income tax principles. To the extent that the amount of any distribution exceeds our current and accumulated earnings and profits for a taxable year, the distribution will first be treated as a tax-free return of capital, causing a reduction in the tax basis of the ADSs or Class A ordinary shares, and to the extent the amount of the distribution exceeds your tax basis, the excess will be taxed as capital gain recognized on a sale or exchange. We do not, however, expect to determine earnings and profits in accordance with United States federal income tax principles. Therefore, you should expect that a distribution will generally be reported as a dividend.

Any dividends that you receive (including any withheld taxes) will be includable in your gross income as ordinary income on the day actually or constructively received by you, in the case of Class A ordinary shares, or by the depositary, in the case of ADSs. Such dividends will not be eligible for the dividends received deduction allowed to corporations under the Code.

Subject to applicable limitations (including a minimum holding period requirement), certain dividends received by non-corporate United States investors from a qualified foreign corporation may be treated as "qualified dividend income" that is subject to reduced rates of taxation. A foreign corporation is treated as a qualified foreign corporation with respect to dividends received from that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. United States Treasury Department guidance indicates that our ADSs, which are listed on the NASDAQ Global Select Market, are readily tradable on an established securities market in the United States. Thus, we believe that dividends we pay on our ADSs will be eligible for these reduced tax rates. Since we do not expect that our Class A ordinary shares will be listed on an established securities market in the United States, we do not believe that dividends that we pay on our Class A ordinary shares that are not represented by ADSs currently meet the conditions required for these reduced tax rates. There also can be no assurance that our ADSs will be considered readily tradable on an established securities market in the United States in later years. A qualified foreign corporation also includes a foreign corporation that is eligible for the benefits of certain income tax treaties with the United States. In the event that we are deemed to be a PRC resident enterprise under the modified Enterprise Income Tax Law, we may be eligible for the benefits of the income tax treaty between the United States and the PRC, or the Treaty, and if we are eligible for such benefits, dividends we pay on our Class A ordinary shares, regardless of whether such shares are represented by ADSs, would be potentially eligible for reduced rates of taxation. See "—People's Republic of China Taxation" above. You should consult your own tax advisors regarding the application of these rules given your particular circumstan

Non-corporate United States Holders will not be eligible for reduced rates of taxation on any dividends received from us if we are a passive foreign investment company (a "PFIC") in the taxable year in which such dividends are paid or in the preceding taxable year (see "— Passive Foreign Investment Company" below).

Subject to certain conditions and limitations (including a minimum holding period requirement), any PRC withholding taxes on dividends may be treated as foreign taxes eligible for credit against your United States federal income tax liability. For purposes of calculating the foreign tax credit, dividends paid on the ADSs or Class A ordinary shares will be treated as income from sources outside the United States and will generally constitute passive category income. The rules governing the foreign tax credit are complex. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances. Instead of claiming a foreign tax credit, you may, at your election, deduct any otherwise creditable PRC withholding taxes in computing your taxable income, but only for a taxable year in which you elect to do so with respect to all foreign income taxes and subject to generally applicable limitations under United States law.

Distributions of ADSs, Class A ordinary shares or rights to subscribe for ADSs or Class A ordinary shares that are received as part of a pro rata distribution to all of our shareholders generally will not be subject to United States federal income tax.

Passive Foreign Investment Company

Based on the past and projected composition of our income and assets, and the valuation of our assets, including goodwill, we do not believe we were a PFIC for our most recent taxable year, and we do not expect to become a PFIC in the current taxable year or the foreseeable future, although there can be no assurance in this regard.

In general, we will be a PFIC for any taxable year in which:

- at least 75% of our gross income is passive income, or
- at least 50% of the value (generally determined based on a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income.

For this purpose, passive income generally includes dividends, interest, royalties and rents (other than royalties and rents derived in the active conduct of a trade or business and not derived from a related person), and cash and other assets readily convertible into cash are generally considered passive assets. If we own at least 25% (by value) of the stock of another corporation, for purposes of determining whether we are a PFIC, we will be treated as owning our proportionate share of the other corporation's assets and receiving our proportionate share of the other corporation's income. However, there is uncertainty as to the treatment of the Group's corporate structure and ownership of the Group VIEs for United States federal income tax purposes, we consider ourselves to own the equity of the Group VIEs. If it is determined, contrary to our view, that we do not own the equity of the Group VIEs for United States federal income tax purposes (for instance, because the relevant PRC authorities do not respect these arrangements), we may be treated as a PFIC.

The determination of whether we are a PFIC is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in our asset or income composition. Because we have calculated the value of our goodwill by taking into account the market value of our ADSs, a decrease in the price of our ADSs may also result in our becoming a PFIC. If we are a PFIC for any taxable year during which you hold our ADSs or Class A ordinary shares, you will be subject to special tax rules discussed below.

If we are a PFIC for any taxable year during which you hold our ADSs or Class A ordinary shares and you do not make a timely mark-to-market election, as described below, you will be subject to special tax rules with respect to any "excess distribution" received and any gain realized from a sale or other disposition, including a pledge, of ADSs or Class A ordinary shares. Distributions received in a taxable year will be treated as excess distributions to the extent that they are greater than 125% of the average annual distributions received during the shorter of the three preceding taxable years or your holding period for the ADSs or Class A ordinary shares. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the ADSs or Class A ordinary shares,
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we were a PFIC, will be treated as ordinary income, and
- the amount allocated to each other year will be subject to tax at the highest tax rate in effect for that year for individuals or corporations, as
 applicable, and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each
 such year.

Although the determination of whether we are a PFIC is made annually, if we are a PFIC for any taxable year in which you hold our ADSs or Class A ordinary shares, you will generally be subject to the special tax rules described above for that year and for each subsequent year in which you hold the ADSs or Class A ordinary shares (even if we do not qualify as a PFIC in such subsequent years). However, if we cease to be a PFIC, you can avoid the continuing impact of the PFIC rules by making a special election to recognize gain as if your ADSs or Class A ordinary shares had been sold on the last day of the last taxable year during which we were a PFIC. You are urged to consult your own tax advisor about this election.

In lieu of being subject to the special tax rules discussed above, you may make a mark-to-market election with respect to your ADSs or Class A ordinary shares, provided such ADSs or Class A ordinary shares are treated as "marketable stock." The ADSs or Class A ordinary shares generally will be treated as marketable stock if the ADSs or Class A ordinary shares are regularly traded on a "qualified exchange or other market" (within the meaning of the applicable Treasury regulations). Under current law, the mark-to-market election may be available to holders of ADSs since the ADSs are listed on the NASDAQ Global Select Market, which constitutes a qualified exchange, although there can be no assurance that the ADSs will be "regularly traded" for purposes of the mark-to-market election. It should also be noted that only the ADSs and not the Class A ordinary shares are listed on the NASDAQ Global Select Market. Consequently, if you are a holder of Class A ordinary shares that are not represented by ADSs, you generally will not be eligible to make a mark-to-market election.

If you make an effective mark-to-market election, for each taxable year that we are a PFIC you will include as ordinary income the excess of the fair market value of your ADSs at the end of the year over your adjusted tax basis in the ADSs. You will be entitled to deduct as an ordinary loss in each such year the excess of your adjusted tax basis in the ADSs over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. Your adjusted tax basis in the ADSs will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. In addition, upon the sale or other disposition of your ADSs in a year that we are a PFIC, (i) any gain will be treated as ordinary income and (ii) any loss will be treated as ordinary loss, but only to the extent of the net amount of previously included 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, if you make a mark-to market election with respect to our ADSs, you may continue to be subject to the general PFIC rules with respect to your indirect interest in any of our non-United States subsidiaries that is classified as a PFIC (as discussed below).

If you make a mark-to-market election, it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the ADSs are no longer regularly traded on a qualified exchange or other market, or the Internal Revenue Service consents to the revocation of the election. You are urged to consult your tax advisor about the availability of the mark-to-market election, and whether making the election would be advisable in your particular circumstances.

Alternatively, you can sometimes avoid the special tax rules described above by electing to treat a PFIC as a "qualified electing fund" under Section 1295 of the Code. However, this option is not available to you because we do not intend to comply with the requirements necessary to permit you to make this election.

If we are a PFIC for any taxable year during which you hold our ADSs or Class A ordinary shares and any of our non-United States subsidiaries is also a PFIC, you will be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of the PFIC rules. You are urged to consult your tax advisors about the application of the PFIC rules to any of our subsidiaries.

You will generally be required to file Internal Revenue Service Form 8621 if you hold our ADSs or Class A ordinary shares in any year in which we are classified as a PFIC. You are urged to consult your tax advisors concerning the United States federal income tax consequences of holding ADSs or Class A ordinary shares if we are considered a PFIC in any taxable year.

Taxation of Capital Gains

For United States federal income tax purposes, you will recognize taxable gain or loss on any sale, exchange or other taxable disposition of the ADSs or Class A ordinary shares in an amount equal to the difference between the amount realized for the ADSs or Class A ordinary shares and your tax basis in the ADSs or Class A ordinary shares, both as determined in U.S. dollars. Subject to the discussion under "— Passive Foreign Investment Company" above, such gain or loss will generally be capital gain or loss and will generally be long-term capital gain or loss if you have held the ADSs or Class A ordinary shares for more than one year. Long-term capital gains of non-corporate United States Holders (including individuals) are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by you will generally be treated as United States source gain or loss. However, if we are treated as a PRC resident enterprise for PRC tax purposes and PRC tax were imposed on any gain, and if you are eligible for the benefits of the Treaty, you may be able to elect to treat such gain as PRC source gain under the Treaty. If you are not eligible for the benefits of the Treaty or if you fail to make the election to treat any gain as PRC source, then you generally would not be able to use a foreign tax credit for any PRC tax imposed on the disposition of ADSs or Class A ordinary shares unless such credit can be applied (subject to applicable limitations) against tax due on other income derived from foreign sources. However, pursuant to recently issued Treasury regulations that apply to taxes paid or accrued in taxable years beginning on or after December 28, 2021, if you do not elect to treat any gain as PRC source gain under the Treaty, any PRC tax imposed on such gain would generally not be a foreign income tax eligible for a foreign tax credit (regardless of any other income that you may have that is derived from foreign sources). You are urged to consult your tax

Information Reporting and Backup Withholding

You may be required to report information to the Internal Revenue Service relating to an interest in "specified foreign financial assets," including our ADSs or Class A ordinary shares, subject to certain asset value thresholds and subject to certain exceptions (including an exception for shares held in a custodial account maintained with a United States financial institution). You may also be subject to penalties if you are required to submit information to the Internal Revenue Service and fail to do so.

In general, information reporting will apply to dividends in respect of our ADSs or Class A ordinary shares and the proceeds from the sale, exchange or other disposition of our ADSs or Class A ordinary shares that are paid to you within the United States (and in certain cases, outside the United States), unless you are an exempt recipient. A backup withholding tax may apply to such payments if you fail to provide a taxpayer identification number or certification of exempt status or fail to report in full dividend and interest income.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your United States federal income tax liability provided the required information is timely furnished to the Internal Revenue Service.

F. <u>Dividends and Paying Agents</u>

Not Applicable.

G. Statement by Experts

Not Applicable.

H. Documents on Display

We have filed this annual report on Form 20-F, including exhibits, with the SEC. As allowed by the SEC, in Item 19 of this annual report, we incorporate by reference certain information we filed with the SEC. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be part of this annual report.

You may read and copy this annual report, including the exhibits incorporated by reference in this annual report, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 and at the SEC's regional offices in New York, New York and Chicago, Illinois. You also can request copies of this annual report, including the exhibits incorporated by reference in this annual report, upon payment of a duplicating fee, by writing information on the operation of the SEC's Public Reference Room.

The SEC also maintains a website at www.sec.gov that contains reports, proxy statements and other information regarding registrants that file electronically with the SEC. Our annual report and some of the other information submitted by us to the SEC may be accessed through this web site. Our filings are also available on our website at http://www.qutoutiao.net. The information on our website, however, is not, and should not be deemed to be a part of this annual report.

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.

Our financial statements have been prepared in accordance with U.S. GAAP.

We will furnish our shareholders with annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP.

I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Risk

Substantially all of the Group's revenues and substantially all of our expenses are denominated in Renminbi. The functional currency of our company and our Hong Kong subsidiary is the U.S. dollar. The functional currency of our subsidiaries in the PRC, the Group VIEs and their subsidiaries is the Renminbi. The Group uses Renminbi as our reporting currency. Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at the rates of exchange ruling at the balance sheet date. Transactions in currencies other than the functional currency during the year are converted into functional currency at the applicable rates of exchange prevailing when the transactions occurred. Transaction gains and losses are recognized in the statements of operations. The Group recorded a loss in foreign currency translation adjustment, net of RMB1,506 thousand in 2019, RMB102 million in 2020, and RMB45 million (US\$7 million) in 2021.

We do not believe that the Group currently has any significant direct foreign exchange risk and have not used any derivative financial instruments to hedge exposure to such risk. Although in general the Group's 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 Renminbi because the value of the Group's business is effectively denominated in Renminbi, while our ADSs will be traded in U.S. dollars.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the PBOC. The PRC government allowed the Renminbi to appreciate by more than 20% against the U.S. dollar between July 2005 and July 2008. Between July 2008 and June 2010, the exchange rate between the Renminbi and the U.S. dollar had been stable and traded within a narrow band. Since June 2010, the Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. On November 30, 2015, the Executive Board of the International Monetary Fund (IMF) completed the regular five-year review of the basket of currencies that make up the Special Drawing Right, or the SDR, and decided that with effect from October 1, 2016, Renminbi is determined to be a freely usable currency and will be included in the SDR basket as a fifth currency, along with the U.S. dollar, the Euro, the Japanese yen and the British pound. In the fourth quarter of 2016, the Renminbi has depreciated significantly in the backdrop of a surging U.S. dollar and persistent capital outflows of China. With the development of the foreign exchange market and progress towards interest rate liberalization and Renminbi internationalization, the PRC government may in the future announce further changes to the exchange rate system, and we cannot assure you that the Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

To the extent that we need to convert U.S. dollars into Renminbi for the Group's operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount the Group receives from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amounts available to the Group.

Interest Rate Risk

The Group has not been exposed to material risks due to changes in market interest rates, and we have not used any derivative financial instruments to manage the Group's interest risk exposure. However, we cannot provide assurance that the Group will not be exposed to material risks due to changes in market interest rate in the future.

The Group may invest in interest-earning instruments. Investments in both fixed rate and floating rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates, while floating rate securities may produce less income than expected if interest rates fall.

Inflation

Since inception, inflation in China has not materially affected the Group's results of operations. According to the National Bureau of Statistics of China, the year-over-year percent changes in the consumer price index for 2019, 2020 and 2021 were increases of 2.9%, 2.5% and 0.9%, respectively. Although we have not been materially affected by inflation in the past, we may be affected if China experiences higher rates of inflation in the future.

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

securities

D. <u>American Depositary Shares</u>

Depositary Fees and Charges

Under the terms of the deposit agreement for our ADSs, an ADS holder will be required to pay the following service fees to the depositary and certain taxes and governmental charges (in addition to any applicable fees, expenses, taxes and other governmental charges payable on the deposited securities represented by any of ADSs):

Persons depositing or withdrawing shares or ADS holders must pay:	For:
US\$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
US\$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 (including rights) that are distributed by the depositary to ADS holders
US\$0.05 (or less) per ADS 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 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	As necessary

The depositary 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 (or by selling a portion of securities or other property distributable) 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.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates and, in those cases, acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligations under the deposit agreement. The methodology used to determine exchange rates used in currency conversions is available upon request.

Payments by Depositary

We did not receive any payment from The Bank of New York Mellon, the depositary bank for our ADR program, in 2021.

PART II.

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Material Modifications to the Rights of Security Holders

See "Item 10. Additional Information" for a description of the rights of securities holders, which remain unchanged.

Use of Proceeds

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed under the Exchange Act is recorded, processed, summarized and reported within the specified time periods and accumulated and communicated to our management, including our principal executive officer and principal accounting officer, as appropriate, to allow timely decisions regarding required disclosure.

Our management, under the supervision and with the participation of our principal executive officer and our principal accounting officer, evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Exchange Act, as of December 31, 2021. Based on that evaluation, our principal executive officer and principal accounting officer have concluded that, as of December 31, 2021, our existing disclosure controls and procedures were ineffective due to the material weakness in internal control over financial reporting identified in "—Management's Annual Report on Internal Control over Financial Reporting" below.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) under the Exchange Act). Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. 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 conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, it used the criteria established within the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management has concluded that, as of December 31, 2021, our internal control over financial reporting was ineffective due to the material weakness identified below.

In accordance with reporting requirements set forth by the SEC, a "material weakness" is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis. The material weakness, which was first identified in the course of preparing our consolidated financial statements for the year ended December 31, 2017, relates to the lack of sufficient financial reporting and accounting personnel with appropriate knowledge of U.S. GAAP and SEC reporting requirements to formalize key controls over financial reporting and to prepare consolidated financial statements and related disclosures.

To remedy our previously identified material weakness, we have undertaken and will continue to undertake steps to strengthen our internal control over financial reporting, including: (i) hiring more qualified resources including financial controller, equipped with relevant U.S. GAAP and SEC reporting experience and qualifications to strengthen the financial reporting function and to set up a financial and system control framework, (ii) implementing regular and continuous U.S. GAAP accounting and financial reporting training programs for our accounting and financial reporting personnel, (iii) establishing effective oversight and clarifying reporting requirements for non-recurring and complex transactions to ensure consolidated financial statements and related disclosures are accurate, complete and in compliance with SEC reporting requirements, and (iv) enhancing an internal audit function as well as engaging an external consulting firm to help us assess our compliance readiness under rule 13a-15 of the Exchange Act and improve overall internal control. However, such measures have not been fully implemented and we concluded that material weakness in our internal control over financial reporting had not been corrected as of December 31, 2021.

Since we qualified as an "emerging growth company" as defined under the JOBS Act as of December 31, 2021, this annual report on Form 20-F does not include an attestation report of our independent registered public accounting firm.

Changes in Internal Control over Financial Reporting

Other than as described above, there were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report on Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our Board of Directors has determined that Mr. Feng Li, who is an independent director, qualifies as an audit committee financial expert as defined in Item 16A of the instruction to Form 20-F.

ITEM 16B. CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to our directors, officers and employees. We have filed our code of business conduct and ethics as an exhibit to our registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the SEC on August 17, 2018. 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.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by PricewaterhouseCoopers Zhong Tian LLP, our independent public accountant for the years indicated. We did not pay any other fees to our auditors during the years indicated below.

		rear Ended nber 31,
	2020	2021
	(In thousand	s of US dollars)
Audit Fees ⁽¹⁾	1,073	1,177
Tax Fees (2)		
All Other Fees	_	_
Total	1,073	1,177

- (1) "Audit fees" means the aggregate fees billed for each of the fiscal years listed for professional services rendered by our principal auditors for the audit or review of our annual or quarterly financial statements.
- (2) "Tax fees" represents the aggregate fees for professional services rendered by our principal auditors for tax compliance.

The policy of our audit committee or our board of directors is to pre-approve all audit and non-audit services provided by our independent public accountant, including audit services, audit-related services and other services as described above. All of the services of PricewaterhouseCoopers Zhong Tian LLP for 2020 and 2021 described above were in accordance with the audit committee pre-approval policy.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

None.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

Not applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not Applicable.

ITEM 16G. CORPORATE GOVERNANCE

We are a "foreign private issuer" (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs, every two ADSs representing five Class A ordinary share, are listed on the NASDAQ Global Select Market. The NASDAQ Global Select Market rules permit a foreign private issuer like us to follow the corporate governance practices of its home country. Certain corporate governance practices in the Cayman Islands, which is our home country, may differ significantly from the NASDAQ Global Select Market corporate governance listing standards.

We currently follow and intend to continue to follow Cayman Islands corporate governance practices in lieu of the corporate governance requirements of the NASDAQ Global Select Market. For instance, we are not required to: (i) have a majority of the board be independent; (ii) have a compensation committee or a nominating and corporate governance committee consisting entirely of independent directors; (iii) have regularly scheduled executive sessions with only independent directors each year; or (iv) hold annual shareholders meetings.

ITEM 16H. MINE SAFETY DISCLOSURE

Not Applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The consolidated financial statements of Qutoutiao Inc., its subsidiaries and the Group VIEs are included at the end of this annual report.

ITEM 19. EXHIBITS

Exhibit Number	Description of Document
1.1	Sixth Amended and Restated Memorandum and Articles of Association of the Registrant (incorporated herein by reference to Exhibit 3.2 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
2.1	Form of American Depositary Receipt evidencing American Depositary Shares (incorporated herein by reference to Exhibit (1) to the registration statement on Form F-6 (File No. 333-227181), as amended, filed with the Securities and Exchange Commission on September 4, 2018)
2.2	Specimen of Ordinary Share Certificate (incorporated herein by reference to Exhibit 4.1 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
2.3	Form of Deposit Agreement among the Registrant and The Bank of New York Mellon, as depositary, and all Owners and Holders from time to time of American Depositary Shares issued thereunder (incorporated herein by reference to Exhibit (1) to the registration statement on Form F-6 (File No. 333-227181), as amended, filed with the Securities and Exchange Commission on September 4, 2018)
2.4	Description of Rights of Each Class of Securities Registered Under Section 12 of the Securities Exchange Act of 1934 (incorporated herein by reference to Exhibit 2.4 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.1	Form of Indemnification Agreement between the Registrant and its directors and executive officers (incorporated herein by reference to Exhibit 10.1 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.2	Form of Employment Agreement between the Registrant and its executive officers (incorporated herein by reference to Exhibit 10.2 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.3	Equity Interest Pledge Agreement by and among Shanghai Quyun Internet Technology Co., Ltd. ("Shanghai Quyun"), Shanghai Jifen Culture Communications Co., Ltd. ("Shanghai Jifen") and each shareholder of Shanghai Jifen (incorporated herein by reference to Exhibit 10.3 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.4	<u>Voting Rights Proxy Agreement by and among Shanghai Quyun, Shanghai Jifen and each shareholder of Shanghai Jifen (incorporated herein by reference to Exhibit 10.4 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)</u>
4.5	Exclusive Technology and Consulting Service Agreement by and between Shanghai Quyun and Shanghai Jifen (incorporated herein by reference to Exhibit 10.5 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.6	Exclusive Option Agreement by and among Shanghai Quyun, Shanghai Jifen and each shareholder of Shanghai Jifen (incorporated herein by reference to Exhibit 10.6 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)

Exhibit Number

4.16

Commission on August 17, 2018)

4.7	Loan Agreement by and among Shanghai Quyun and each shareholder of Shanghai Jifen (incorporated herein by reference to Exhibit 10.7 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.8	Qutoutiao Inc. Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the Registration Statement on Form S-8 (Registration No. 333-229673), filed with the Securities and Exchange Commission on February 14, 2019)
4.9	Series B1 Preferred Share Purchase Agreement, dated March 4, 2018, by and among Image Flag Investment (HK) Limited, the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.10 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.10	Series B2 Preferred Share Purchase Agreement, dated March 8, 2018, by and among several investors, the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.11 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.11	Trust Deed dated February 26, 2018 among the Registrant, The Core Trust Company Limited, as trustee, and Qu World Limited and QFUN Limited, each as a nominee (incorporated herein by reference to Exhibit 10.12 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.12	Baidu Alliance Membership Registration Agreement (English Translation) (incorporated herein by reference to Exhibit 10.16 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.13	Series B3 Preferred Share Purchase Agreement, dated April 19, 2018, by and among several investors, the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.17 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.14	Series C1 Preferred Share Purchase Agreement, dated August 17, 2018, by and among Shimmering Investment (BVI) Ltd., the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.18 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.15	Series C1 Preferred Share Purchase Agreement, dated August 17, 2018, by and among CG Partners Opportunity Fund SP, the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.19 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)

Description of Document

Series C2 Preferred Share Purchase Agreement, dated August 27, 2018, by and among Shanghai Pengpai Online Network Technology Co., 4.17 Ltd., the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.21 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)

Supplementary Agreement to Series C1 Preferred Share Purchase Agreement, dated September 4, 2018, by and among Shimmering Horizon L.P., the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.20 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange

Strategic Cooperation Framework Agreement, dated August 27, 2018, by and between Shanghai Dongfang Newspaper Co., Ltd. and Shanghai 4.18 Jifen (English Translation) (incorporated herein by reference to Exhibit 10.22 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)

December 31, 2019)

Exhibit Number

4.19	Supplementary Agreement to Series C1 Preferred Share Purchase Agreement, dated September 11, 2018, by and among CG Partners Opportunity Fund SP, the Registrant, its principal shareholders and subsidiaries and other parties named thereto (incorporated herein by reference to Exhibit 10.23 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
4.20	Equity Interest Pledge Agreement by and among Shanghai Zhicao Information Technology Co., Ltd. ("Shanghai Zhicao"), Shanghai Big Rhinoceros Horn Information Technology, Co., Ltd. ("Big Rhinoceros Horn") and each shareholder of Big Rhinoceros Horn (English Translation) (incorporated herein by reference to Exhibit 10.20 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.21	Voting Rights Proxy Agreement by and among Shanghai Zhicao, Big Rhinoceros Horn and each shareholder of Big Rhinoceros Horn (English Translation) (incorporated herein by reference to Exhibit 10.21 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.22	Exclusive Technology and Consulting Service Agreement by and between Shanghai Zhicao and Big Rhinoceros Horn (English Translation) (incorporated herein by reference to Exhibit 10.22 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.23	Exclusive Option Agreement by and among Shanghai Zhicao, Big Rhinoceros Horn and each shareholder of Big Rhinoceros Horn (English Translation) (incorporated herein by reference to Exhibit 10.23 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.24	Loan Agreement by and among Shanghai Zhicao and each shareholder of Big Rhinoceros Horn (English Translation) (incorporated herein by reference to Exhibit 10.24 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.25	Convertible Loan Agreement, dated March 28, 2019, by and between the Registrant and Alibaba Investment Limited (incorporated herein by reference to Exhibit 10.25 to the registration statement on Form F-1 (File No. 333-230624), as amended, initially filed with the Securities and Exchange Commission on March 29, 2019)
4.25A*	Third Supplemental Agreement to the Convertible Loan Agreement, dated April 29, 2022, by and between the Registrant and Alibaba Investment Limited.
4.26	Series B Preferred Share Purchase Agreement, dated September 24, 2019, by and among Fun Literature Limited, Fun Literature (HK) Limited, Shanghai Zhicao, Big Rhinoceros Horn, Qutoutiao Inc. and CMC Rocket Holdings Limited (incorporated herein by reference to Exhibit 4.26 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.27	Share Pledge Agreement, dated September 29, 2019, by and among Shanghai Quyun, Anhui Zhangduan Internet Technology Co., Ltd. ("Anhui Zhangduan") and each shareholder of Anhui Zhangduan (English Translation) (incorporated herein by reference to Exhibit 4.27 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.28	Voting Rights Proxy Agreement, dated September 29, 2019, by and among Shanghai Quyun, Anhui Zhangduan and each shareholder of Anhui Zhangduan (English Translation) (incorporated herein by reference to Exhibit 4.28 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.29	Exclusive Technical and Consulting Service Agreement, dated September 29, 2019, by and between Shanghai Quyun and Anhui Zhangduan (English Translation) (incorporated herein by reference to Exhibit 4.29 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.30	Exclusive Option Agreement, dated September 29, 2019, by and among Shanghai Quyun, Anhui Zhangduan and each shareholder of Anhui Zhangduan (English Translation) (incorporated berein by reference to Exhibit 4.30 to the annual report on Form 20.5 for the fiscal year ended

Description of Document

Exhibit Number	Description of Document
4.31	Loan Agreement, dated September 29, 2019, by and among Shanghai Quyun and each shareholder of Anhui Zhangduan (English Translation) (incorporated herein by reference to Exhibit 4.31 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.32	Share Pledge Agreement, dated January 1, 2019, by and among Shanghai Quyun, Shanghai DragonS Information Technology, Co., Ltd. ("DragonS Information") and each shareholder of DragonS Information (English Translation) (incorporated herein by reference to Exhibit 4.32 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.33	Voting Rights Proxy Agreement, dated January 1, 2019, by and among Shanghai Quyun, DragonS Information and each shareholder of DragonS Information (English Translation) (incorporated herein by reference to Exhibit 4.33 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.34	Exclusive Technical and Consulting Service Agreement, dated January 1, 2019, by and between Shanghai Quyun and DragonS Information (English Translation) (incorporated herein by reference to Exhibit 4.34 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.35	Exclusive Option Agreement, dated January 1, 2019, by and among Shanghai Quyun, DragonS Information and each shareholder of DragonS Information (English Translation) (incorporated herein by reference to Exhibit 4.35 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.36	Loan Agreement, dated January 1, 2019, by and among Shanghai Quyun and each shareholder of DragonS Information (English Translation) (incorporated herein by reference to Exhibit 4.36 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.37	Share Pledge Agreement, dated June 1, 2019, by and among Shanghai Quyun, Hubei Rapid Information Technology Co., Ltd. ("Rapid Information") and each shareholder of Rapid Information (English Translation) (incorporated herein by reference to Exhibit 4.37 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.38	<u>Voting Rights Proxy Agreement, dated June 1, 2019, by and among Shanghai Quyun, Rapid Information and each shareholder of Rapid Information (English Translation) (incorporated herein by reference to Exhibit 4.38 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)</u>
4.39	Exclusive Technical and Consulting Service Agreement, dated June 1, 2019, by and between Shanghai Quyun and Rapid Information (English Translation) (incorporated herein by reference to Exhibit 4.39 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.40	Exclusive Option Agreement, dated June 1, 2019, by and among Shanghai Quyun, Rapid Information and each shareholder of Rapid Information (English Translation) (incorporated herein by reference to Exhibit 4.40 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
4.41	<u>Loan Agreement, dated June 1, 2019, by and among Shanghai Quyun and each shareholder of Rapid Information (English Translation)</u> (incorporated herein by reference to Exhibit 4.41 to the annual report on Form 20-F for the fiscal year ended December 31, 2019)
8.1*	<u>List of Subsidiaries</u>
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated herein by reference to Exhibit 99.1 to the registration statement on Form F-1 (File No. 333-226913), as amended, initially filed with the Securities and Exchange Commission on August 17, 2018)
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 Independent Registered Public Accounting Firm
15.2*	Consent of King & Wood Mallesons

Exhibit <u>Number</u>	Description of Document
101.INS*	Inline XBRL Instance Document—this instance document does not appear on the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH*	Inline XBRL Taxonomy Extension Schema Document
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)

^{*} Filed herewith

^{**} Furnished herewith

[†] Certain portions of this exhibit have been redacted pursuant to Item 601(b)(10)(iv) of Regulation S-K. The omitted information is (i) not material and (ii) would likely cause competitive harm to the Company if publicly disclosed. Schedules have been omitted from this exhibit pursuant to Item 601(a)(5) of Regulation S-K. The Company agrees to furnish supplementally an unredacted copy of the exhibit or a copy of any omitted schedule to the SEC upon its request.

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.

QUTOUTIAO INC.

By /s/ Eric Siliang Tan

Name: Eric Siliang Tan

Title: Chairman and Chief Executive Officer

Date: May 2, 2022

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm (PCAOB ID: 1424)	F-2
Consolidated Balance Sheets as of December 31, 2020 and 2021	F-3
Consolidated Statements of Comprehensive Loss for the years ended December 31, 2019, 2020 and 2021	F-5
Consolidated Statements of Changes in Shareholders' Deficit for the years ended December 31, 2019, 2020 and 2021	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2020 and 2021	F-9
Notes to the Consolidated Financial Statements	F-11

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Qutoutiao Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Qutoutiao Inc. and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of comprehensive loss, of changes in shareholders' deficit and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America.

Substantial Doubt about the Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2(a) to the consolidated financial statements, facts and circumstances including accumulated and recurring losses from operations, net cash used in operating activities, negative working capital as of December 31, 2021, and uncertainties on the repayment of a convertible loan raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2(a). The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers Zhong Tian LLP Shanghai, the People's Republic of China May 2, 2022

We have served as the Company's auditor since 2017.

QUTOUTIAO INC. CONSOLIDATED BALANCE SHEETS

As of December 31, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

		As of			
	Note	December 31, 2020		oer 31, 2021	
ASSETS		RMB	RMB	US\$ (Note 2(e))	
Current assets:					
Cash and cash equivalents	5	494,475	240,351	37,716	
Restricted cash	2(h)	100,316	75,482	11,845	
Short-term investments	6	391,033	343,017	53,827	
Accounts receivable, net	7	737,789	770,919	120,974	
Amounts due from related parties	21	383,594	259,863	40,778	
Prepayments and other current assets	8	365,109	172,877	27,128	
Total current assets		2,472,316	1,862,509	292,268	
Non-current assets:		2,172,010	1,002,000		
Accounts receivables, non-current	7	54,639		_	
Property and equipment, net	9	17,213	12.861	2,018	
Right-of-use assets, net	11	50,319	26,342	4,134	
Intangible assets	10	83,123	165,270	25,935	
Goodwill	10	7,268	7,268	1,141	
Long-term investments	6	82,889	1,416	222	
Other non-current assets	8	148,091	4,809	753	
Total non-current assets	J	443,542	217,966	34,203	
Total assets		2,915,858			
		2,915,050	2,080,475	326,471	
LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' DEFICIT					
Current liabilities (including current liabilities of the consolidated variable interest					
entity("VIEs") and its subsidiaries without recourse to the Company amounting to					
RMB1,602,787 and RMB1,902,280, as of December 31, 2020 and December 31,					
2021, respectively):					
Short-term borrowings (including short-term borrowings of the consolidated VIEs and					
VIE's subsidiaries without recourse to the Company of RMB50,000 and nil as of	2()	5 0.000	20.000	2.420	
December 31, 2020 and 2021, respectively)	2(p)	70,000	20,000	3,138	
Loan from a related party (including loan from a related party of the consolidated					
VIEs and VIE's subsidiaries without recourse to the Company of nil and nil as of	21	12.050			
December 31, 2020 and 2021, respectively) Accounts payable (including accounts payable of the consolidated VIEs and VIE's	21	13,050	_	_	
subsidiaries without recourse to the Company of RMB RMB399,858 and					
RMB255,182 as of December 31, 2020 and December 31, 2021, respectively)		448,981	313,768	49,237	
Amounts due to a related party (including amount due to a related party of the		440,301	313,700	49,237	
consolidated VIEs and VIE's subsidiaries without recourse to the Company of					
RMB4,295 and RMB1,495 as of December 31, 2020 and 2021, respectively)	21	9,427	6,928	1,087	
Registered users' loyalty payable (including registered users' loyalty payable of the	21	J, 4 27	0,520	1,007	
consolidated VIEs and VIE's subsidiaries without recourse to the Company of					
RMB66,180 and RMB55,392 as of December 31, 2020 and December 31, 2021,					
respectively)	2(w)	72,627	61,691	9,681	
respectively)	2(W)	, 2,027	01,031	5,001	

Advance from customers and deferred revenue (including advance from customers and				
deferred revenue of the consolidated VIEs and VIE's subsidiaries without recourse to the Company of RMB 140,776 and RMB 122,594 as of December 31, 2020 and December 31,				
2021, respectively)		140,776	122,597	19,238
Salary and welfare payable (including salary and welfare payable of the consolidated VIEs		140,770	122,337	13,230
and VIE's subsidiaries without recourse to the Company of RMB115,307 and RMB42,237				
as of December 31, 2020 and December 31, 2021, respectively)		149,704	65,987	10,353
Tax payable (including tax payable of the consolidated VIEs and VIE's subsidiaries without		145,704	05,507	10,555
recourse to the Company of RMB98,797 and RMB15,288 as of December 31, 2020 and				
December 31, 2021, respectively)	12	97,144	43,879	6,886
Lease liabilities, current (including lease liabilities, current of the consolidated VIEs and		57,111	15,575	0,000
VIE's subsidiaries without recourse to the Company of RMB20,030 and RMB11,675 as of				
December 31, 2020 and December 31, 2021, respectively)	11	20,760	11,897	1,867
Accrued liabilities related to users' loyalty programs (including accrued liabilities related to				,
users' loyalty program of the consolidated VIEs and VIE's subsidiaries without recourse to				
the Company of RMB100,088 and RMB99,360 as of December 31, 2020 and				
December 31, 2021, respectively)	2(w)	100,088	99,360	15,592
Accrued liabilities and other current liabilities (including accrued liabilities and other current				
liabilities of the consolidated VIEs and VIE's subsidiaries without recourse to the Company				
of RMB607,455 and RMB1,299,057 as of December 31, 2020 and December 31, 2021,				
respectively)	13	763,433	1,334,603	209,428
Convertible Loan (including convertible loan of the consolidated VIEs and VIE's subsidiaries				
without recourse to the Company of nil and nil as of December 31, 2020 and December 31,				
2021, respectively)	14		1,182,963	185,633
Total current liabilities		1,885,990	3,263,673	512,140
Non-current liabilities:				
Other non-current liabilities	13	4,256	1,733	272
Lease liabilities, non-current	11	23,756	15,985	2,508
Deferred tax liabilities	18	18,825	16,422	2,577
Convertible Loan	14	1,174,868		
Non-current liabilities		1,221,705	34,140	5,357
Total liabilities		3,107,695	3,297,813	517,497
Commitments and contingencies	23			
Mezzanine equity:				
Redeemable non-controlling interests	20	1,093,526	1,172,218	183,947
Shareholders' deficit:				
Class A ordinary shares (US\$0.0001 par value, 50,000,000 shares authorized as of				
December 31, 2020 and 2021; 42,812,245 shares issued as of December 31, 2020 and 2021;				
35,321,611 and 38,370,892 shares outstanding as of December 31, 2020 and 2021)	15	23	26	4
Class B ordinary shares (US\$0.0001 par value; 34,248,442 shares authorized as of				
December 31, 2020 and 2021; 32,937,193 shares issued and outstanding as of				
December 31, 2020 and 2021)	15	24	24	4
Additional paid-in capital		4,784,315	4,979,353	781,369
Treasury stock (US\$0.0001 par value; 7,490,634 and 4,441,353 shares as of December 31,				
2020 and December 31, 2021, respectively)		(142,229)	(142,229)	(22,319)
Accumulated other comprehensive income		84,320	129,010	20,245
Accumulated deficit		(6,007,227)	(7,355,740)	(1,154,276)
Total Qutoutiao Inc. shareholders' deficit		(1,280,774)	(2,389,556)	(374,973)
Non-controlling interests	20	(4,589)		
Total shareholders' deficit		(1,285,363)	(2,389,556)	(374,973)
Total liabilities, mezzanine equity and shareholders' deficit		2,915,858	2,080,475	326,471
				-

The accompanying notes are an integral part of these consolidated financial statements.

QUTOUTIAO INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
For the years ended December 31, 2019, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

			Year ended I	Year ended December 31,			
	Note	2019	2020	20			
		RMB	RMB	RMB	US\$(Note 2(e))		
Advertising and marketing revenue	24	4,942,105	4,795,960	4,050,120	635,552		
Advertising and marketing revenue- related parties	21	473,216	250,875	40,263	6,318,		
Other revenue		154,760	238,360	249,220	39,108		
Net revenues		5,570,081	5,285,195	4,339,603	680,978		
Cost of revenues		(1,598,220)	(1,643,365)	(1,068,340)	(167,646)		
Cost of revenues-related parties	21	(42,412)	(31,051)	(103,286)	(16,207)		
Gross profit		3,929,449	3,610,779	3,167,977	497,125		
Operating expenses:							
Research and development expenses	2(t)	(926,232)	(947,871)	(551,612)	(86,560)		
Sales and marketing expenses	2(u)	(5,486,424)	(3,377,368)	(3,467,933)	(544,194)		
Sales and marketing expenses-related parties	21	(3,284)	(4,192)	(15,840)	(2,486)		
General and administrative expenses	2(v)	(267,033)	(392,816)	(431,913)	(67,776)		
Total operating expenses		(6,682,973)	(4,722,247)	(4,467,298)	(701,016)		
Other operating income	19	30,292	79,299	106,098	16,648		
Loss from operations		(2,723,232)	(1,032,169)	(1,193,223)	(187,243)		
Interest income	5, 6	48,440	10,419	3,174	498		
Interest expense	14	(26,878)	(38,143)	(35,477)	(5,567)		
Foreign exchange related gains (loss), net		1,868	(7,183)	(1)			
Investment income (loss) including impairment	6	6,327	(31,788)	(36,041)	(5,656)		
Other income/(expenses), net	6	9,050	(7,310)	27,637	4,337		
Loss before income taxes		(2,684,425)	(1,106,174)	(1,233,931)	(193,631)		
Income tax benefit/(expense)	18	(4,843)	1,008	(3,050)	(479)		
Equity in loss of affiliate companies	6	_	_	(3,195)	(501)		
Net loss		(2,689,268)	(1,105,166)	(1,240,176)	(194,611)		
Net loss attributable to non-controlling interests		587	727	559	88		
Net loss attributable to Qutoutiao Inc.		(2,688,681)	(1,104,439)	(1,239,617)	(194,523)		
Accretion to redemption value of convertible redeemable preferred shares of a							
subsidiary	20	(20,548)	(48,277)	(108,896)	(17,088)		
Gains on repurchase of convertible redeemable preferred shares of a subsidiary	20	` <u></u>	14,842	<u> </u>			
Net loss attributable to Qutoutiao Inc.'s ordinary shareholders		(2,709,229)	(1,137,874)	(1,348,513)	(211,611)		
Net loss		(2,689,268)	(1,105,166)	(1,240,176)	(194,611)		
Other comprehensive income/(loss)		(=,000,=00)	(1,100,100)	(1,2 10,17 0)	(10 1,011)		
Foreign currency translation adjustment, net of nil tax		(1,505)	102,254	44,690	7,013		
Total comprehensive loss		(2,690,773)	(1,002,912)	(1,195,486)	(187,598)		
Comprehensive loss attributable to non-controlling interests		587	727	559	88		
Comprehensive loss attributable to Qutoutiao Inc.		(2,690,186)	(1,002,185)	(1,194,927)	(187,510)		
Net loss per share attributable to Qutoutiao Inc.'s ordinary shareholders		(2,030,100)	(1,002,105)	(1,134,327)	(107,510)		
— Basic and diluted	22	(39.41)	(15.69)	(17.80)	(2.79)		
Weighted average number of ordinary shares used in per share calculation:	22	(39.41)	(13.09)	(17.00)	(2.79)		
— Basic and Diluted	22	68,749,981	72,513,077	75,767,532	75,767,532		
			_,==5,077	= -, -, -, -, -, -, -, -, -, -, -, -, -,	,,.,		

The accompanying notes are an integral part of these consolidated financial statements.

QUTOUTIAO INC. CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' DEFICIT

For the Years Ended December 31, 2019, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

	Outstanding ordinary shares				Accumulated other				Total	
	Number of Shares	Amount	paid-in capital	Number of Shares	Amount	comprehensive loss	Accumulated deficit	Statutory reserves	Non-controlling interests	shareholders' deficit
Balance as of										
January 1, 2019	61,771,248	41	3,684,130	9,500,000		(16,429)	(2,153,235)		(3,274)	1,511,233
Share-based compensation expense (Note 16)	_	_	271,978	_	_	_	_	_	_	271,978
Accretion on Series A convertible redeemable preferred shares of a subsidiary (Note 20)	_	_	_	_	_	_	(12,172)	_	_	(12,172)
Accretion on Series B convertible redeemable preferred shares of a subsidiary (Note 20)	_			_		_	(8,376)		_	(8,376)
Issuance of ordinary shares upon follow-on offering, net of issuance costs							(6,6.7.6)			(6,5,7,6)
(Note 3) Issuance of ordinary shares to the Paper	831,967	1	212,144	_	_	_	_	_	_	212,145
(Note 3)	1,480,123	1	152,849	_	_	_	_	_	_	152,850
Repurchase of ordinary shares (Note 2z)	(1,166,425)	_	_	1,166,425	(142,229)	_	_	_	_	(142,229)
Exercise of share										
options	2,197,105	2	_	(2,031,005)	_	_	— (D. 600, 601)			2
Net loss	_	_	_	_	_	_	(2,688,681)	_	(588)	(2,689,269)
Foreign currency translation						(1,506)				(1,506)
Balance as of December 31, 2019	65,114,018	45	4,321,101	8,635,420	(142,229)	(17,935)	(4,862,464)		(3,862)	(705,344)

QUTOUTIAO INC.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' DEFICIT

For the Years Ended December 31, 2019, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

	Outstanding ordinary shares Additional Treasury stocks Number of paid-in Number of		stocks	Accumulated other comprehensive	Accumulated	Statutory	Non-controlling	Total shareholders'		
D 1	Shares	Amount	capital	Shares	Amount	income/(loss)	deficit	reserves	interests	deficit
Balance as of January 1, 2020	CE 114 010	45	4 221 101	0.635.430	(1.42.220)	(17.025)	(4.002.404)		(2,002)	(705.244)
•	65,114,018	45	4,321,101	8,635,420	(142,229)	(17,935)	(4,862,464)		(3,862)	(705,344)
Cumulative effect of adoption of accounting standard	_	_	_	_	_	_	(6,889)	_	_	(6,889)
Share-based										
compensation expense (Note 16) Accretion on Series A convertible	_		463,214	_	_	_	_	_	_	463,214
redeemable preferred shares of a subsidiary (Note 20)	_	_	_	_	_	_	(13,509)	_	_	(13,509)
Accretion on Series B convertible redeemable preferred shares of a subsidiary (Note 20)	_	_	_	_	_	_	(33,187)	_	_	(33,187)
Accretion on Series C convertible redeemable preferred shares of a subsidiary (Note 20)	_	_	_	_	_	_	(1,580)	_	_	(1,580)
Gains on repurchase of Series B convertible redeemable preferred shares of a subsidiary (Note										
20)	_	_	_	_	_	_	14,843	_	_	14,843
Exercise of share options	3,144,786	2		(1,144,786)						2
Net loss	J,144,/00 —		_	(1,144,700)			(1,104,441)		(727)	(1,105,168)
Foreign currency translation						102,255				102,255
Balance as of				_	_			_		
December 31, 2020	68,258,804	<u>47</u>	4,784,315	7,490,634	(142,229)	84,320	(6,007,227)		(4,589)	(1,285,363)

The accompanying notes are an integral part of these consolidated financial statements.

QUTOUTIAO INC.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' DEFICIT

For the Years Ended December 31, 2019, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

	Outstanding ordinary shares		Additional	Treasury	Treasury stocks		Accumulated other			Total
	Number of Shares	Amount	paid-in capital	Number of Shares	Amount	comprehensive income	Accumulated deficit	Statutory reserves	Non-controlling interests	shareholders' deficit
Balance as of January 1, 2021	68,258,804	47	4,784,315	7,490,634	(142,229)	84,320	(6,007,227)		(4,589)	(1,285,363)
Share-based compensation expense (Note 16)	_	_	200,186	_	_				_	200,186
Accretion on Series A convertible redeemable preferred shares of a subsidiary							(14,000)			(14,000)
(Note 20) Accretion on Series B convertible redeemable preferred shares of a subsidiary	_	_	_	_	_	_	(14,089)	_	_	(14,089)
(Note 20) Accretion on Series C convertible redeemable preferred shares of a subsidiary	_	_	_	_	_	_	(21,726)	_	_	(21,726)
(Note 20) Exercise of share options	3,049,281	3	_	(3,049,281)	_	_	(73,081)	_	_	(73,081)
Net loss		_	_	— (5,0 15, 2 01)	_	_	(1,239,617)	_	(559)	(1,240,176)
Foreign currency translation	_	_	_	_	_	44,690	_	_	_	44,690
Acquisition of remaining equity interest of a subsidiary from the non-controlling										
interests (Note 20)			(5,148)						5,148	
Balance as of December 31, 2021	71,308,085	50	4,979,353	4,441,353	(142,229)	129,010	(7,355,740)			(2,389,556)

The accompanying notes are an integral part of these consolidated financial statements.

QUTOUTIAO INC. CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Years Ended December 31, 2019, 2020 and 2021

(All amounts in RMB thousands, except share data, or otherwise noted)

		Year ended December 31,			
	2019 RMB	2020 RMB	RMB		
Cash flows from operating activities	RMB	RMB	RMB	US\$(Note 2(e))	
Net loss	(2,689,268)	(1,105,166)	(1,240,176)	(194,611)	
Adjustments for:	(2,005,200)	(1,100,100)	(1,2 10,17 0)	(15 1,011)	
Depreciation of property and equipment	10,004	12,144	11,108	1,743	
Amortization of intangible assets	10,555	13,026	54,099	8,489	
Non-cash operating lease expense	43,514	41,205	29,464	4,624	
Deferred tax benefit	(2,403)	(2,404)	(2,403)	(377)	
Share-based compensation	271,978	463,214	200,186	31,413	
Interest expense	26,878	36,798	35,350	5,547	
Changes in estimate for accrued liabilities related to users' loyalty programs	22,686	8,746	12,369	1,940	
Allowance for doubtful accounts		79,809	249,143	39,096	
Unrealized loss (gain) of publicly traded equity security	_	(16,665)	15,315	2,403	
Unrealized loss of non-marketable equity securities		54,403	1,208	190	
Loss (gain) on disposal of property, plant and equipment	_	170	(216)	(34)	
Gain on disposal of subsidiary	_	—	(23,083)	(3,622)	
Equity in losses of affiliated companies	_	<u> </u>	3,195	501	
Impairment of long-term investment securities		<u>_</u>	28,528	4,477	
Changes in assets and liabilities, net of impact of acquisition:			20,320	7,77	
Accounts receivable	(322,839)	(297,664)	(282,272)	(44,295)	
Amount due from related parties	(278,156)	(105,438)	123,731	19,416	
Prepayments and other current assets	(85,959)	105,749	195,375	30,659	
Accounts receivables, noncurrent	(05,555)	(54,639)	54,639	8,574	
Other non-current assets	(8,979)	13,112	3,350	526	
Accounts payable	197,020	120,575	(135,213)	(21,218)	
Amount due to related parties	3,437	5,990	(2,499)	(392)	
Registered users' loyalty payable	(122,516)	(61,519)	(10,935)	(1,716)	
Salary and welfare payable	85,748	20,257	(83,334)	(13,077)	
Tax payable	13,097	(20,964)	(53,265)	(8,358)	
Accrued liabilities related to users' loyalty programs	22,364	2,157	(13,095)	(2,055)	
Accrued liabilities and other current liabilities	392,072	(28,786)	593,134	93,076	
Advances from customers and deferred revenue	91,531	(105,854)	(18,179)	(2,853)	
Operating lease liabilities	(45,585)	(39,073)	(22,122)	(3,471)	
Non-current liabilities	(2,474)	(2,957)	(2,524)	(396)	
Net cash used in operating activities	(2,367,295)	(863,774)	(2,324) $(279,122)$	(43,801)	
Cash flows from investing activities:	(2,507,255)	(005,774)	(275,122)	(43,001)	
Purchase of short-term investments	(2,454,602)	(1,271,776)	(899,787)	(141,196)	
Purchase of long-term investments	(37,589)	(106,277)	(655,767)	(141,150)	
Proceeds from sales and maturity of short-term investments	1,294,360	2,173,594	981,975	154,093	
Purchase of intangible assets	(4,971)	(3,786)	(113)	(18)	
Purchase of property and equipment	(21,350)	(6,198)	(7,607)	(1,194)	
Proceeds from disposal of property and equipment	(21,550)	788	1,053	165	
Prepayment for purchase of intangible asset	_	(3,800)			
Net cash provided by/(used in) investing activities	(1,224,152)	782,545	75,521	11,850	
Cash flows from financing activities:	(1,227,102)	/ 02,070	70,021	11,000	
Proceeds from issuance of Series A Convertible redeemable Preferred Shares of a					
subsidiary, net of issuance cost	27,358	_	_		
Proceeds from issuance of Series B Convertible redeemable Preferred Shares of a	۵۷,۰٫۵	_	_		
subsidiary, net of issuance cost	353,336				
substancy, net of issumice cost	555,550				

Payment of accrued issuance costs for Series B convertible redeemable preferred shares of a subsidiary	_	(435)	_	_
Payment of accrued issuance costs for Series C convertible redeemable preferred shares of a		(433)		
subsidiary			(3,135)	(492)
Repurchase of Series B Convertible redeemable Preferred Shares of a subsidiary	_	(135,744)	(5,155)	— (13 <u>2</u>)
Proceeds from issuance of Series C Convertible redeemable Preferred Shares of a subsidiary,		(===,: : :)		
net of issuance costs	_	360,569		_
Payment of accrued Initial Public Offering expense	(1,576)	_	_	_
Proceeds from follow-on offering, net of issuance costs	212,144	_	_	_
Proceeds from issuance of ordinary shares to The Paper	144,351	_	_	_
Proceeds from Convertible Loan, net of issuance costs	1,174,617	_	_	_
Payment for repurchase of ordinary shares	(142,229)	_	_	_
Proceeds from bank borrowings		70,000	20,000	3,139
Repayments of bank borrowings		_	(70,000)	(10,985)
Proceeds of borrowings from a related party	_	13,356	_	
Repayment of borrowings from a related party		_	(12,959)	(2,033)
Net cash provided by financing activities	1,768,001	307,746	(66,094)	(10,371)
Net increase/(decrease) in cash, cash equivalents and restricted cash	(1,823,446)	226,517	(269,695)	(42,322)
Effect of exchange rate changes on cash, restricted cash and cash equivalents	12,847	(7,415)	(9,263)	(1,453)
Cash, cash equivalents and restricted cash at the beginning of year	2,186,288	375,689	594,791	93,336
Cash, cash equivalents and restricted cash at the end of year	375,689	594,791	315,833	49,561
Supplemental disclosure of cash flow information:				
Cash paid for interest	_	364	42	7
Cash paid for income taxes	_	3,268	4,079	640
Non-cash financing and investing activities:				
Accrued Series A and B convertible redeemable preferred shares issuance cost of a subsidiary	435	_	_	_
Revenue recognized for non-monetary transactions (Note 8)	(40,000)	_	_	_
Sales and marketing expense recorded for non-monetary transactions (Note 8)	21,132	_	_	_
Incentive payment to customer (Note 13)	_	_		_
Cooperation service fee to The Paper (Note 3)	(8,500)	_	_	_
Accrued Series C convertible redeemable preferred shares issuance cost of a subsidiary	_	3,135		_
Gains on repurchase of convertible redeemable preferred shares of a subsidiary	_	(14,842)	_	_
Accretion to redemption value of Series A, B and C convertible redeemable preferred shares of				
a subsidiary	20,548	48,277	108,896	17,088
Content and intangible assets acquired from a third-party investor through the issuance of				
Series C convertible redeemable preferred shares of a subsidiary (Note 20)	_	(375,805)	_	_
The below table reconciles cash, cash equivalents, and restricted cash as reported in the				
consolidated balance sheets to the total of the same amounts shown in the consolidated				
statements of cash flows				
Cash and cash equivalents	347,817	494,475	240,351	37,716
Restricted cash	27,872	100,316	75,482	11,845
Total cash, cash equivalents, and restricted cash shown in the consolidated statements of cash				
flows	375,689	594,791	315,833	49,561

The accompanying notes are an integral part of these consolidated financial statements.

QUTOUTIAO INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(All amounts in RMB thousands, except share data, or otherwise noted)

1. Organization and Principal Activities

(a) Principal activities

Qutoutiao Inc. (the "Company"), an exempted company with limited liability incorporated in the Cayman Islands, (i) its various equity-owned consolidated subsidiaries, (ii) its controlled affiliates, and (iii) the subsidiaries of its controlled affiliates are collectively referred to as the "Group". The Group's principal activity is to operate mobile platforms Qutoutiao ("QTT"), and Midu ("MD") for the distribution, consumption and sharing of light entertainment content. The Group generates revenue primarily by providing cost-effective and targeted advertising solutions through the mobile platforms in the People's Republic of China ("PRC"), through its controlled affiliates and their wholly-owned subsidiaries thereof (collectively referred to as the "Affiliated Entities").

Descentage of

As of December 31, 2021, the Company's principal subsidiaries and consolidated Affiliated Entities are as follows:

Name of subsidiaries and VIEs	Date of establishment/ acquisition	Place of incorporation	Percentage of direct or indirect economic ownership
Wholly owned subsidiaries of the Company:	<u>ucquisition</u>	incorporation	<u> </u>
InfoUniversal Limited("InfoUniversal")	August 2017	Hong Kong	100%
Qtech USA Inc. ("Qtech")	April 2018	USA	100%
Fun Literature Limited (Cayman) ("Fun Literature")	r	Cayman	
	October 2018	Islands	65%
Fun Literature (HK) Limited ("Fun Literature HK")	October 2018	Hong Kong	100%
Shanghai Quyun Internet Technology Co., Ltd. ("Quyun WFOE")	October 2017	PRC	100%
Shanghai Dianguan Network Technology Co., Ltd. ("Dianguan")	February 2018	PRC	100%
QTT Asia Ltd.("QTT Asia")	, and the second	British	
		Virgin	
	April 2018	Islands ("BVI")	100%
Kubik Media International Ltd. ("Kubik Media")	May 2018	BVI	100%
Kubik Technology Pte. Ltd. ("Kubik Technology")	May 2018	Singapore	100%
PT. Sedjahtera Inti Abadi ("Abaidi")	October 2018	Indonesia	100%
AI-Fun Technology Limited ("AI-Fun")	January 2019	Hong Kong	100%
Fun-Platform Holdings Limited ("Fun-Platform")	January 2019	Cayman	100%
Striking Technology Holdings limited ("Striking")	January 2019	Hong Kong	100%
Fun Literature SG Pte. Ltd. ("Fun DG")	February 2021	Singapore	100%
Shanghai Zhicao Information Technology Co., Ltd. ("Zhicao WFOE")	December 2018	PRC	100%
Shanghai Chenxing Software Technology Co., Ltd. ("Chenxing")	Januray 2020	PRC	100%
Shanghai Yanmo Software Technology Co., Ltd. ("Yanmo")	October 2019	PRC	100%
Shanghai Shuqin Information Technology Co., Ltd. ("Shuqin")	November 2020	PRC	100%
Shanghai Wennuo Information Technology Co., Ltd. ("Wennuo")	July 2020	PRC	100%
Hainan Mengbang Network Technology Co., Ltd. ("Mengbang")	June 2021	PRC	100%
Variable Interest Entity ("VIEs")			
Shanghai Jifen Culture Communications Co., Ltd. ("Jifen or Jifen VIE")	January 2012	PRC	100%
Beijing Churun Internet Technology Co., Ltd. ("Churun")	November 2018	PRC	100%
Shanghai Big Rhinoceros Horn Information Technology,			
Co., Ltd ("Big Rhinoceros Horn")	November 2018	PRC	100%
Shanghai DragonS Information Technology,			
Co., Ltd (" DragonS Information")	January 2019	PRC	100%
Anhui Zhangduan Internet Technology Co., Ltd. ("Zhangduan")	March 2017	PRC	100%
Hubei Rapid Information Technology Co., Ltd. ("Rapid Information")	March 2019	PRC	100%
Shanghai Tuohuan Information Technology Co., Ltd. ("Tuohuan")	September 2019	PRC	100%
Shanghai Ququanquan Information Technology Co., Ltd. ("Ququanquan")	October 2019	PRC	100%
Shanghai Xunkai Information Technology Co., Ltd. ("Xunkai")	October 2019	PRC	100%
Huaian Beixia Information Technology Co., Ltd. ("Beixia")	November 2020	PRC	100%
Shanghai Douzao Internet Technology Co., Ltd. ("Douzao")	July 2020	PRC	100%
Shanghai Yuanyin Information Technology Co., Ltd. ("Yuanyin")	April 2021	PRC	100%
Shanghai Kuaishen Information Technology Co., Ltd. ("Kuaishen")	April 2021	PRC	100%
Shanghai Guatian Network Technology Co., Ltd. ("Guatian")	June 2021	PRC	100%

Name of subsidiaries and VIEs	Date of establishment/ acquisition	Place of incorporation	Percentage of direct or indirect economic ownership
Subsidiaries of Variable Interest Entity ("VIE subsidiaries")			
Shanghai Xike Information Technology Service Co., Ltd. ("Xike")	July 2016	PRC	100%
Shanghai Tuile Information Technology Service Co., Ltd. ("Tuile")	July 2016	PRC	100%
Beijing Qukandian Internet Technology Co., Ltd. ("Qukandian")	April 2017	PRC	100%
Shanghai Heitu Internet Technology Co., Ltd. ("Heitu")	January 2019	PRC	100%
Shanghai Zheyun Internet Technology Co., Ltd. ("Zheyun")	January 2019	PRC	100%
Beijing Supreme Pole International Sports Development Co., Ltd. ("Supreme Pole			
International Sports")	January 2019	PRC	100%
Tianjin Quwen Internet Technology Co., Ltd. ("Quwen")	August 2018	PRC	100%
Shanghai Manchuan Information Technology Co., Ltd. ("Manchuan")	March 2020	PRC	100%
Shanghai Yunxi Information Technology Co., Ltd. ("Yunxi")	April 2020	PRC	100%
Hubei Xijie Information Technology Co., Ltd. Shanghai Branch ("Xijie")	January 2020	PRC	100%
Hubei Xijie Information Technology Co., Ltd. ("Xijie")	January 2019	PRC	100%
Hubei Rapid Information Technology Co., Ltd. Shanghai Branch ("Jietu")	January 2020	PRC	100%
Shanghai Luoshi Software Technology Co., Ltd. ("Luoshi")	Januray 2020	PRC	100%
Shanghai Xiaying Software Technology Co., Ltd. ("Xiaying")	November 2019	PRC	100%
Shanghai Songmang Internet Technology Co., Ltd. ("Songmang")	December 2019	PRC	100%
Shanghai Miaoqu Internet Technology Co., Ltd. ("Miaoqu")	December 2019	PRC	100%
Shanghai Xixia Information Technology Co., Ltd. ("Xixia")	October 2019	PRC	100%
Shanghai Mili Information Technology Co., Ltd. ("Mili")	March 2020	PRC	100%
Shanghai Kunjie Information Technology Co., Ltd. ("Kunjie")	March 2020	PRC	100%
Hubei Qingluo Information Technology Co., Ltd. Shanghai Branch ("Qingluo")	March 2020	PRC	100%
Hubei Qingluo Information Technology Co., Ltd. ("Qingluo")	March 2019	PRC	100%
Shanghai Guanji Information Technology Co., Ltd. ("Guanji")	February 2021	PRC	100%
Shanghai Yimao Information Technology Co., Ltd. ("Yimao")	February 2021	PRC	100%
Shanghai Xier Information Technology Co., Ltd. ("Xier")	April 2021	PRC	100%
Shanghai Yixun Information Technology Co., Ltd. ("Yixun")	June 2021	PRC	100%
Hainan Jingxuan Information Technology Co., Ltd. ("Jingxuan")	June 2021	PRC	100%
Shanghai Chengshan Information Technology Co., Ltd. ("Chengshan")	March 2021	PRC	100%

(b) Organization

The consolidated financial statements include the financial statements of the Company, its subsidiaries, the Affiliated Entities for which the Company is the primary beneficiary.

Jifen was incorporated in the PRC in 2012 and started the operation of the mobile platforms for distribution, consumption and sharing of light entertainment content (the "principal business") from 2016. To facilitate offshore financing, an offshore corporate structure was formed in 2017 by incorporating the Company and Quyun WFOE. On October 13, 2017, the Group entered into various arrangements ("VIE Agreements") as related to its Affiliated Entities or its shareholders in order to comply with PRC laws and regulations on internet business.

By entering the VIE Agreements, Jifen became a VIE whose primary beneficiary is Quyun WFOE and the shareholders of Jifen became the "Nominee Shareholders" of Jifen. The principal terms of the contractual arrangements are described below:

Exclusive Technology Support and Consulting Services Agreement

Under the exclusive technology support and consulting services agreement between Jifen VIE and Quyun WFOE, Quyun WFOE has the exclusive right to provide to Jifen technology support, business management consulting, marketing consultation, products research and development and technology services related to all technologies, and business operations needed for its business. Quyun WFOE owns the exclusive intellectual property rights created because of the performance of this agreement.

The service fee payable by Jifen to Quyun WFOE is determined by Quyun WFOE based on its services provided including various factors such as Quyun WFOE's incurred technology support and consulting services fees, performance data and Jifen VIE's revenues. The term of this agreement will expire in 10 years and may be extended at Quyun WFOE's request prior to the expiration date. Quyun WFOE is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Jifen VIE. There was no service fee paid and payable from Jifen VIE to Quyun WFOE for this agreement for the years ended December 31, 2019, 2020 and 2021 as Jifen, in aggregated, has been incurring losses.

Exclusive Option Agreement

The parties to the exclusive option agreement entered are Jifen VIE, Quyun WFOE and each of the shareholders of Jifen VIE. Under the exclusive option agreement, each of the shareholders of Jifen VIE irrevocably granted Quyun WFOE or its designated representative(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of his or its equity interests in Jifen VIE and all or part of assets of Jifen VIE. Quyun WFOE or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. The exercise price shall be the lowest allowable share purchase amount permitted by the PRC law for the 100% equity interest (or pro-rata if Quyun WFOE decides to purchase part of the equity interest). Additionally, the share purchase amount paid by WFOE to the shareholders should be used to settle the outstanding loan amounts under the loan agreement and/or refund back to Quyun WFOE through the method permitted by the PRC law once received. Without Quyun WFOE's prior written consent, Jifen VIE's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Jifen VIE. The agreement expires upon transfer of all shares or assets of Jifen VIE to Quyun WFOE or its designated representative(s). The term of this agreement will expire in 10 years and may be extended at Quyun WFOE's request prior to the expiration date. Quyun WFOE is entitled to terminate the agreement at any time by providing 30 days' prior written notice to Jifen VIE.

Voting Rights Proxy Agreement

The parties to the exclusive option agreement are Jifen VIE, Quyun WFOE and each of the shareholders of Jifen VIE, with the exception of The Paper (see below for additional information on The Paper arrangement). Under the agreement, each of the shareholders of Jifen VIE irrevocably granted Quyun WFOE or its designated representative(s) the right to exercise his/her rights as a shareholder of Jifen VIE including hosting board of directors meeting, terminate and nominate board members and senior management of Jifen VIE and other shareholders' voting rights. During the period that each of Shanghai Quyun and Shanghai Jifen remain in operation, the voting rights proxy agreement shall be irrevocable and continuously effective and valid for ten years from the execution date unless otherwise agreed to by all parties. Upon the expiration of the original term or any renewal term of the voting rights proxy agreement, the agreement shall be automatically renewed for an additional one year period unless, at least 30 days prior to the expiration date, Shanghai Quyun provides notice to the other parties to the voting rights proxy agreement not to renew the agreement.

Loan Agreement

Quyun WFOE has entered into an interest-free loan agreement with Jifen VIE, which may only be used for the purpose of business operations and development of Jifen VIE. Under the terms of the agreement, Quyun WFOE is going to provide unconditional financial support to Jifen VIE and the amount would be agreed between Quyun WFOE and Jifen VIE. Jifen VIE along with its subsidiaries pledge all its shares equity for the outstanding loan. Also, the maturity date of the loan is the earlier of 10 years, the end of Quyun WFOE's operation period or the end of Jifen VIE's operation period. Upon maturity, Quyun WFOE or its designated third party may purchase the equity interests in the Jifen VIE at a price equal to the lowest allowable amount for a similar transaction per PRC laws, rules and regulations. Quyun WFOE can also accelerate the payment terms of Jifen VIE to repay the loan using its shares/equity. Additionally, Quyun WFOE should provide unconditional capital support to Jifen VIE.

Equity Interest Pledge Agreement

Pursuant to the equity interest pledge agreement between Quyun WFOE and the shareholders of Jifen VIE, with the exception of The Paper (see below for additional information on The Paper arrangement), the shareholders of Jifen VIE has pledged all of their equity interests in Jifen VIE to Quyun WFOE to guarantee the performance by Jifen VIE and its shareholders' performance of their respective obligations under the exclusive option agreement, exclusive technology support and business services agreement, voting rights proxy agreement and loan agreement. If Jifen VIE and/or its shareholders breach their contractual obligations under those agreements, Quyun WFOE, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests.

Jifen, under Generally Accepted Accounting Principles in the United States ("US GAAP"), is considered to be a consolidated VIE in which the Company, or its subsidiaries, through contractual arrangements, bears the risks of, and enjoys the rewards normally associated with, ownership of the entity, and therefore the Company or one of its subsidiaries is the primary beneficiary of the entity. Through the aforementioned contractual agreements, the Company has the ability to:

- exercise effective control over Jifen whereby having the power to direct Jifen's activities that most significantly drive the economic results of Jifen;
- receive substantially all of the economic benefits and residual returns, and absorb substantially all the risks and expected losses from the Jifen as if it was their sole shareholder; and
- have an exclusive option to purchase all of the equity interests in Jifen.

Management evaluated the relationships among the Company, Quyun WFOE and Jifen VIE, and concluded that Quyun WFOE is the primary beneficiary of Jifen VIE. As a result, Jifen's results of operations, assets and liabilities have been included in the Group's consolidated financial statements for all the presented periods.

The Group's other VIEs entered into the VIE Agreements (Exclusive Technology Support and Consulting Services Agreement, Exclusive Option Agreement, Voting Rights Proxy Agreement, Loan Agreement and Equity Interest Pledge Agreement) which have the same terms as those described in Jifen VIE. As a result, these VIEs' primary beneficiaries are Quyun WFOE and Zhicao WFOE and their shareholders became the "Nominee Shareholders".

In September 2019, Jifen VIE issued equity interests representing 1% of its enlarged share capital to Shanghai Dongfang Newspaper Co., Ltd., commonly known as "The Paper" at a nominal price. The Paper has designated one representative to Jifen VIE's Board of Directors to assist with enhancing the quality of contents and ensure the content compliance with the applicable laws on the Company's platform but does not participate in the VIE's operational decision making. The Paper will not absorb the losses allocation, if any, from the Jifen VIE. The Company believes that its control over the consolidated VIE and its subsidiaries and the economic benefits received from the consolidated VIE will not be affected and will continue to consolidate the VIE. The 1% equity interests held by The Paper represents a non-controlling interest of the Group.

2. Principal Accounting Policies

(a) Basis of preparation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP").

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The realization of assets and the satisfaction of liabilities in the normal course of business are dependent on the Group's ability to reduce cash used in operating activities, adjust the pace of its operation expansion, control of the related expense to fund its general operations and capital expansion needs, and the ability to pursue financing arrangements and obtain additional funds from the sale of its assets to support its working capital requirements and its obligations and commitments on loans and borrowings when they become due.

The following factors raise substantial doubt about the Group's ability to continue as a going concern:

- For the years ended December 31, 2019, 2020 and 2021, the Group incurred net losses of RMB2,689.3 million, RMB1,105.2 million and RMB1,240.2 million, respectively.
- For the years ended December 31, 2019, 2020 and 2021, the Group had net cash used in operating activities of RMB2,367.3 million, RMB863.8 million and RMB279.1 million, respectively.
- As of December 31, 2021, the Group had an accumulated deficit of RMB7,355.7 million and a deficit in working capital of RMB1,401.2 million.
- As of December 31, 2021, the Group had cash, cash equivalents, restricted cash and short-term investments of RMB658.9 million, short-term borrowings of RMB20.0 million, and as discussed in Note 14 and Note 25 to the consolidated financial statements, a convertible loan from Alibaba ("Convertible Loan") of approximately RMB1.2 billion, including principal of US\$171.1 million (RMB1.1 billion) and accrued and unpaid interest that was expected to be matured within one year from the date of the issuance of the consolidated financial statements.

The liquidity of the Group is primarily dependent on management's ability to adjust the pace of its operation expansion, to control operating cost and expenses to reduce the cash used in operating cash flows, to pursue financing arrangements, including the renewal of its Convertible Loan with the creditor, and to obtain additional funds from the sale of its assets.

The Company has carried out an assessment of its cash flow forecast for the twelve months from the date of issuance of the consolidated financial statements. In preparing the cash flow forecast, the Company's management has considered historical cash requirements of the Group, the Group's expected loan repayment obligations in 2022 and beyond, and the Company's plan to further reduce operating costs and expenses.

The Company is currently exploring a variety of measures to improve the Group's liquidity and financial position as follows:

The Company continues to optimize its user loyalty programs and traffic acquisition strategy to efficiently control and reduce costs and continues to be selective in their content and better leverage its existing content varieties to attract and maintain users. These measures can in turn lead to savings in user related costs. The Company further plans to preserve liquidity and manage cash flows by reducing expenditure on developing and maintaining smaller and novel applications and limiting other general and administrative expenses. The Company also plans to obtain additional external financing and funds through, including but not limited to, additional credit facilities obtained from banks in the normal course of business, potential additional issuances of equity and/ or debt as a Group or through its subsidiaries, and sale of its assets, including the Group's equity interest in its subsidiaries, to third parties.

The Convertible Loan from Alibaba had the original maturity date on April 4, 2022 (Note 14). The Company and Alibaba entered into supplemental agreements to the original Convertible Loan agreement on March 28, 2022 and April 29, 2022 (Note 25). According to the supplemental agreements, the maturity date of the Convertible Loan has been extended to May 28, 2022. In addition, the total amount of the principal and accumulated interest of the Convertible Loan, including the incremental interest related to the increase in interest rate from the original compound rate of 3% per annum to a compound rate of 9% per annum plus a simple rate of 3% per annum, calculated starting from the original loan drawdown date of April 4, 2019, will amount to approximately US\$240.4 million (RMB1.5 billion) as of May 28, 2022. While the Company cannot assure that it will be able to further extend the maturity date of the principal and accrued and unpaid interest of the Convertible Loan after May 28, 2022, the Company has assumed that it will be able to extend the Convertible Loan in preparing its cash flow forecast.

Based on the management's assessment, there can be no assurance, however, that the above operating measures will be successfully completed due to factors outside of the Company's control. There can also be no assurance that new financings, additional funds from the sale of assets, further extension of the maturity date of the Convertible Loan, or other transactions will be available to the Company on commercially acceptable terms, or at all. In addition, the potential worsening global economic conditions may adversely impact the Group's ability to secure additional financing.

Facts and circumstances including accumulated and recurring losses from operations, net cash used in operating activities, negative working capital and uncertainties on the repayment of the Convertible Loan raise substantial doubt about the Group's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements are summarized below.

(b) Use of estimates

The preparation of the Group's consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from such estimates.

The Company believes that revenue recognition, liabilities related to loyalty programs, consolidation of VIEs, allowance for credit losses, determination of share-based compensation and impairment assessment of long-lived assets reflect more significant judgments and estimates used in the preparation of its consolidated financial statements.

Management bases the estimates on historical experience and on various other assumptions as discussed elsewhere to the consolidated financial statements 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 materially differ from these estimates.

(c) Consolidation

The Group's consolidated financial statements include the financial statements of the Company, its subsidiaries, its VIEs and a VIEs' subsidiaries for which the Company or its subsidiary is the primary beneficiary. All transactions and balances among the Company, its subsidiaries, its VIEs have been eliminated upon consolidation.

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

A VIE is an entity in which the Company, or its subsidiary, through contractual agreements, bears the risks of, and enjoys the rewards normally associated with ownership of the entity. In determining whether the Company or its subsidiaries are the primary beneficiary, the Company considered whether it has the power to direct activities that are significant to the VIEs' economic performance, and also the Group's obligation to absorb losses of the VIEs that could potentially be significant to the VIEs or the right to receive benefits from the VIEs that could potentially be significant to the VIEs. The Company's WFOEs and ultimately the Company hold all the variable interests of the VIEs and its subsidiaries, and have been determined to be the primary beneficiaries of the VIEs.

The following table sets forth the assets, liabilities, results of operations and cash flows of VIEs and its subsidiaries, which are included in the Group's consolidated financial statements. Transactions between the VIEs and its subsidiaries are eliminated in the balances presented below:

Assets Current assets 12,084 19,788 Restricted cash 64,316 13,160 Short-term investments 98,350 33,600 Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 330,887 114,317 Total current assets 330,887 114,317 Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intagible assets 7,821 99,582 Other non-current assets 279,335 142,110 Total assets 3,064,299 2,291,461 Total interment inselities 2,000 — Current liabilities 3,064,299 2,5182 Accounts payable<		As of		
Current assets 12,084 19,783 Restricted cash 64,316 13,160 Short-term investments 98,350 33,600 Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 303,087 114,317 Total current assets 2,784,944 2,149,351 Non-current assets Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Ebilities 4 1,000 Current liabilities 5,000 — Accounts pay	A	December 31, 2020	December 31, 2021	
Cash and cash equivalents 12,084 19,783 Restricted cash 64,316 13,160 Short-term investments 98,350 33,600 Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Cong-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intagible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 30,64,299 2,291,461 Total under to subsidiaries of the Company 50,000 — Accounts payable 50,000 —				
Restricted cash 64,316 13,160 Short-term investments 98,350 33,600 Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 330,887 114,317 Non-current assets 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,146 Total assets 7,821 99,582 Other non-current assets 279,355 142,110 Total assets 5,004 — Total lassets 5,000 — Current liabilities 5,000 — Short-term borrowing 5,000 — Acco		10.004	40 500	
Short-term investments 98,350 33,600 Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intagible assets 7,821 99,582 Other non-current assets 279,355 142,110 Total assets 30,429 2,291,461 Total assets 30,000 — Current liabilities 399,858 255,182 Current liabilities 399,858 255,182 Accounts payable 66,180 55,394	•			
Accounts receivable, net 737,789 770,797 Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets 16,961 12,828 Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total sests 3,064,299 2,291,461 Liabilities 2 2,291,461 Current liabilities 5,000 — Current porrowing 50,000 — Accounts payable 39,958 255,182 Amount due to related parties 4,295 1,495 <td></td> <td></td> <td></td>				
Amount due from subsidiaries of the Company 1,173,053 937,831 Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets 8 2,784,944 2,149,351 Property and equipment, net 16,961 12,828 4,262 1,416 </td <td></td> <td>· ·</td> <td></td>		· ·		
Amount due from related parties 368,465 259,863 Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets 8 16,961 12,828 Property and equipment, net 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Liabilities S 2,504 Current liabilities 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 115,307 42,237 Salary and welfare payable<				
Prepayments and other current assets 330,887 114,317 Total current assets 2,784,944 2,149,351 Non-current assets *** Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 —** Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total nor-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Total bilities ** ** Current liabilities ** ** Short-term borrowing 50,000 —** Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Salary and welfare payable 98,797 15,288				
Total current assets 2,784,944 2,149,351 Non-current assets Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Current liabilities 5 10,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 98,797 15,288 Lease liabilities, current 20,303 11,675 Accrued liabilities related to users' loyalty programs 100,088				
Non-current assets Incompany 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Current liabilities 5 1,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 <td></td> <td></td> <td></td>				
Property and equipment, net 16,961 12,828 Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Current liabilities Stabilities Stabilities Current liabilities 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360	Total current assets	2,784,944	2,149,351	
Accounts receivables, non-current 54,639 — Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Current liabilities 50,000 — Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 <				
Long-term investments 8,000 1,416 Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Liabilities Stort-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities, non-current 23,534			12,828	
Right-of-use assets 48,109 26,120 Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Liabilities Current liabilities Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Advance from customers and deferred revenue 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities, non-current 23,534 15,985	· ·		_	
Intangible assets 7,821 99,582 Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Intal assets 3,064,299 2,291,461 Liabilities Current liabilities Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities, non-current 23,534 15,985			,	
Other non-current assets 143,825 2,164 Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Liabilities Current liabilities Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities, non-current 23,534 15,985		48,109	26,120	
Total non-current assets 279,355 142,110 Total assets 3,064,299 2,291,461 Liabilities Current liabilities Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Intangible assets	7,821	99,582	
Total assets 3,064,299 2,291,461 Liabilities Current liabilities 50,000 — Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Other non-current assets	143,825	2,164	
Liabilities Current liabilities 50,000 — Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Total non-current assets	279,355	142,110	
Current liabilities 50,000 — Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Total assets	3,064,299	2,291,461	
Short-term borrowing 50,000 — Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Liabilities			
Accounts payable 399,858 255,182 Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Current liabilities			
Amount due to subsidiaries of the Company 5,426,801 5,505,444 Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Short-term borrowing	50,000	_	
Amount due to related parties 4,295 1,495 Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Accounts payable	399,858	255,182	
Registered users' loyalty payable 66,180 55,392 Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Amount due to subsidiaries of the Company	5,426,801	5,505,444	
Advance from customers and deferred revenue 140,776 122,594 Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Amount due to related parties	4,295	1,495	
Salary and welfare payable 115,307 42,237 Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Registered users' loyalty payable	66,180	55,392	
Tax payable 98,797 15,288 Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Advance from customers and deferred revenue	140,776	122,594	
Lease liabilities, current 20,030 11,675 Accrued liabilities related to users' loyalty programs 100,088 99,360 Accrued liabilities and other current liabilities 607,456 1,299,057 Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Salary and welfare payable	115,307	42,237	
Accrued liabilities related to users' loyalty programs100,08899,360Accrued liabilities and other current liabilities607,4561,299,057Total current liabilities7,029,5887,407,724Lease liabilities, non-current23,53415,985	Tax payable	98,797	15,288	
Accrued liabilities and other current liabilities607,4561,299,057Total current liabilities7,029,5887,407,724Lease liabilities, non-current23,53415,985	Lease liabilities, current	20,030	11,675	
Total current liabilities 7,029,588 7,407,724 Lease liabilities, non-current 23,534 15,985	Accrued liabilities related to users' loyalty programs	100,088	99,360	
Lease liabilities, non-current23,53415,985	Accrued liabilities and other current liabilities	607,456	1,299,057	
		7,029,588	7,407,724	
Total liabilities 7,053,122 7,423,709	Lease liabilities, non-current	23,534	15,985	
	Total liabilities	7,053,122	7,423,709	

Revenues: 75,59,954 32,38,682 4336,388 Intia-Group revenues 67,419 − 188,298 Total revenues 66,24,37 5,23,662 4,236,888 Total revenues 66,24,37 5,23,602 4,524,606 Cost of revenues (1,515,632) (1,47,176) (687,701) Intra-Group cost of revenues (35,648) (15,512) (149,157) 808,605 Total cost of revenues (35,648) (1,49,157) 808,606 Goss profit 4076,093 3,72,004 3,638,026 Operating expenses (6,561,213) (4,97,093) 3,638,026 Operating expenses (6,561,213) (4,97,093) 4,007,032 Intra-Group operating expenses (6,561,213) (4,97,093) 1,002,000 Other operating income/(expense) (6,561,213) (4,97,093) 1,002,000 Other operating income/(expense) (2,474,000) 1,007,000 1,002,000 Loss from Operating expenses (3,41) 1,002,000 1,002,000 Loss from Operating income/(expense) (3,41) <th></th> <th colspan="3">Year ended December 31,</th>		Year ended December 31,		
Third-party revenues 5,559,595 5,238,682 4,336,388 Intra-Group revenues 67,419 — 188,298 Cost of revenues 5,627,373 5,238,682 4,524,686 Cost of revenues (1,515,632) (1,462,16) (867,701) Intra-Group cost of revenues (35,648) (1,546,21) (88,709) Total cost of revenues (1,551,280) (1,462,11) (88,660) Gross profit 4,076,033 3,79,204 3,638,026 Operating expenses 6,561,213 (4,957,603) 4,067,548 Intra-Group operating expenses 6,561,213 (4,902,30) 5,012,020 Other operating expenses 6,561,213 (4,902,30) 5,012,020 Total operating expenses 6,561,213 (4,902,30) 16,012,020 Other operating income/(expense) 2,474,039 (4,902,30) 18,052,05 Non-operating income/(expense) 2,444,252 (1,906,20) 1,302,555 Non-operating income/(expense) 4,811 — 1,310 Equity in loss of affiliate companies 2,464,252 (2019	2020	2021
Intra-Group revenues 67,419 — 188,288 Total revenues 5,627,373 5,238,682 4,524,686 Cost of revenues (1,515,632) (1,476,214) (867,701) Intra-Group cost of revenues (3,5648) (1,542) (18,959) Total cost of revenues (35,548) (1,41,678) (886,600) Soss pofit 407,609 3,72,004 3,638,02 Operating expenses (6,561,213) (4,37,603) 4,607,548,03 Intra-Group operating expenses (6,561,213) (4,97,030) 5,613,229 Total operating expenses (6,561,213) (4,97,030) 5,012,520 Other operating income(expense) 11,081 22,99 15,012,500 Other operating income(expense) 2,474,039 (1,987,20) 15,012,500 Non-operating income(expense) 2,474,039 (1,987,20) 13,012,500 Non-operating income(expense) 2,484,039 (1,987,20) 13,012,500 Nos form Operating activities 2,482,000 1,982,000 1,982,000 Not loss 6,111 1,982,000 <td></td> <td></td> <td></td> <td></td>				
Total revenues 5,627,373 5,238,682 4,524,686 Cost of revenues: Third-party cost of revenues (1,515,632) (1,476,216) (867,701) Intra-Group cost of revenues (35,648) (15,495) (18,959) Total cost of revenues (1,551,280) (1,491,678) (886,600) Gross profit 4,076,093 3,792,004 3,630,206 Operating expenses: (6,561,213) (4,37,603) (4,067,488) Intra-Group operating expenses (6,561,213) (4,377,603) (4,075,488) Intra-Group operating expenses (6,561,213) (4,977,030) (591,725) Other operating income/(expense) 11,081 22,992 18,659 Loss from Operating income/(expense) 2,474,039 (1,992,200) 18,659 Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,464,252) (1,996,208) (1,304,283) Income tax benefits/expense (4,811) 2 29,787 (3,195) Net loss 1,996,208 (1,314,282) (3,195)	1 0		5,238,682	
Cost of revenues (1,515,632) (1,476,216) (867,701) Third-party cost of revenues (35,648) (15,462) (18,959) Total cost of revenues (1,551,280) (1,491,678) (88,6660) Gross profit 4,076,093 3,792,004 3,638,026 Operating expenses 6,561,213 (4,357,603) (4,067,488) Intra-Group operating expenses 6,561,213 (4,902,930) (5,912,02) Third-party operating expenses 6,561,213 (4,902,930) (5,912,02) Total operating expenses (6,561,213) (4,902,930) (5,912,02) Other operating income/(expense) 11,081 22,992 18,559 Non-operating income/(expense) 2,474,039 (1,902,930) 18,259 Non-operating income/(expense) 2,474,039 (1,902,930) 13,202,82 Loss before income tax expense (2,442,522) (1,904,203) 1,342,823 Income tax benefits/expense (4,811) — (3,195) Net loss 6 filiate companies (2,469,252) (1,904,203) (1,343,609) <tr< td=""><td>•</td><td></td><td></td><td></td></tr<>	•			
Third-party cost of revenues (1,515,632) (1,476,216) (867,701) Intra-Group cost of revenues (35,648) (15,402) (18,959) Total cost of revenues (1,551,632) (1,491,678) (886,600) Gross profit 4,076,093 3,72,004 3,638,026 Operating expenses: (5,561,213) (4,357,603) (4,067,548) Intra-Group operating expenses (6,561,213) (4,902,930) (591,9250) Other operating expenses (6,561,213) (4,902,930) (5,019,250) Other operating income/(expense) 11,081 22,999 18,659 Other operating income/(expense) 2,474,039 (1,092,930) (5,019,250) Non-operating income/(expense) 2,474,039 (1,092,930) (1,302,565) Non-operating income/(expense) 2,444,039 (1,092,200) (1,302,565) Non-operating income/(expense) 2,464,252 (1,096,200) (1,302,565) Non-operating income/(expense) 2,464,252 (1,096,200) (1,302,565) Non-operating income/(expense) 2,462,252 (1,096,200) (1,30		5,627,373	5,238,682	4,524,686
Intra-Group cost of revenues (35,648) (15,462) (18,959) Total cost of revenues (1,551,280) (1,491,678) (886,660) Gross profit 4,076,093 3,79,004 3,638,026 Operating expenses: (6,561,213) (4,357,603) (4,067,548) Intra-Group operating expenses (6,561,213) (4,357,603) (5,019,250) Total operating expenses (6,561,213) (4,902,90) (5,019,250) Other operating income/(expense) 11,081 22,999 (1,362,565) Non-operating income/(expense) 2,474,039 (1,879,297) (1,362,565) Non-operating income/(expense) 2,474,039 (1,879,297) (1,322,565) Non-operating income/(expense) (2,474,039) (1,397,297) (1,322,565) Non-operating income/(expense) (2,464,252) (1,962,008) (1,301,202,208) Income tax benefits/expense (3,191,202,202,202) (2,302,202,202,202,202,202,202,202,202,20				
Total cost of revenues (1,551,280) (1,41,678) (886,600) Gross profit 4,076,093 3,79,004 3,638,026 Operating expenses: 4,076,093 3,79,004 3,638,026 Third-party operating expenses (6,561,213) (4,357,603) (4,067,548) Intra-Group operating expenses - (545,327) (951,702) Other operating income/(expense) 11,081 22,999 18,659 Loss from Operations (2,474,039) (1,087,927) (1,362,565) Non-operating income/(expense) (2,444,252) (1,096,208) (1,302,855) Non-operating income/(expense) (2,444,252) (1,096,208) (1,342,833) Income tax expense (2,444,252) (1,096,208) (1,342,833) Income tax benefits/expense (4,811) — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Net loss (2,469,063) (1,096,208) (1,343,609) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(u				
Gross profit 4,076,093 3,792,004 3,638,026 Operating expenses: Third-party operating expenses (6,561,213) (4,377,603) (4,067,848) Intra-Group operating expenses — (545,327) (951,702) Total operating expenses (6,561,213) (4,902,930) (5,019,250) Other operating income/(expense) 11,081 22,999 18,659 Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,444,239) (1,902,08) (1,340,283) Income tax benefits/expense (4,811) — (3,131) Equity in loss of affiliate companies (2,464,252) (1,902,08) (1,343,609) Net loss (2,469,063) (1,906,08) (1,343,609) Net loss (2,469,063) (1,906,08) (1,343,609) Net loss (2,469,063) (1,906,08) (1,343,609) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) (90,718)	-			
Operating expenses: Interdependence of the part o			<u> </u>	
Third-party operating expenses (6,561,213) (4,357,603) (4,067,548) Intra-Group operating expenses — (545,327) (951,702) Total operating expenses (6,561,213) (4,902,930) (5,019,250) Other operating income/(expense) 11,081 22,999 18,659 Loss from Operations (2,474,039) (1,879,277) (3,62,565) Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (4,811) — (131) Equity in loss of affiliate companies — — 3,195) Net loss (2,469,063) (1,96,208) (1,343,609) Net loss (2,469,063) (1,96,208) (1,343,609) Net cash provided by/(used in) transactions with external parties (2,469,063) (1,96,208) (3,143,609) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with external parties		4,076,093	3,792,004	3,638,026
Intra-Group operating expenses — (545,327) (951,702) Total operating expenses (6,561,213) (4,902,930) (5,019,250) Other operating income/(expense) 11,081 22,999 18,655 Loss from Operations (2,474,039) (1,97,927) (3,625,655) Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,464,252) (1,96,208) (310,828) Income tax benefitis/expense (4,811) — (131) (3,195) Equity in loss of affiliate companies (2,469,063) (1,96,208) (1,343,609) Net loss (2,469,063) (1,96,208) (1,343,609) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with external parties (60,545) (80,506) 63,047 Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used				
Total operating expenses (6,561,213) (4,902,930) (5,019,250) Other operating income/(expense) 11,081 22,999 18,659 Loss from Operations (2,474,039) (1,087,927) (1,362,565) Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (4,811) — (131) Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Net loss (2,469,063) (1,096,208) (1,343,609) Net cash flows from operating activities — — — 3(1,95) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with intra-Group entities 67,419 (297,510) (568,164) Net cash provided by/(used in) transactions with external parties 6(0,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities — — — Net cash provided by/(used in) transactions with		(6,561,213)		
Other operating income/(expense) 11,081 22,999 18,659 Loss from Operations (2,474,039) (1,987,927) (1,362,565) Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,464,252) (1,906,208) (1,340,283) Income tax benefits/expense (4,811) — (131) Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,96,208) (1,343,609) Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities — — — —				
Loss from Operations (2,474,039) (1,087,927) (1,362,565) Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,464,252) (1,096,208) (1,340,283) Income tax benefits/expense (4,811) — (131) Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Cash flows from operating activities:	Total operating expenses	(6,561,213)	(4,902,930)	(5,019,250)
Non-operating income/(expense) 9,787 (8,281) 22,282 Loss before income tax expense (2,464,252) (1,096,208) (1,340,283) Income tax benefits/expense (4,811) — (3,195) Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Cash flows from operating activities: Temperature Jule 10 Jule	Other operating income/(expense)	11,081	22,999	18,659
Loss before income tax expense (2,464,252) (1,096,208) (1,340,283) Income tax benefits/expense (4,811) — (131) Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Year temperature of December 31, 2019 2019 2020 2021 Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with intra-Group entities 67,419 (297,510) (568,164) Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with external parties — — — Net cash provided by/(used in) investing activities — — — Cash flows from financing activities: — — — Net cash provided by/(used in) investing activities — — — Cash flows from financing activities: — — —	Loss from Operations	(2,474,039)	(1,087,927)	(1,362,565)
Income tax benefits/expense(4,811)—(131)Equity in loss of affiliate companies—3,195Net loss $(2,469,063)$ $(1,096,208)$ $(1,343,609)$ Cash flows from operating activities:	Non-operating income/(expense)	9,787	(8,281)	22,282
Equity in loss of affiliate companies — — (3,195) Net loss (2,469,063) (1,096,208) (1,343,609) Equity in loss of affiliate companies Year and December 31, 2019 2020 2021 Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) operating activities (2,782,745) (391,007) (190,975) Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) investing activities — — — Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: — — — Net cash provided by/(used in) investing activities — 50,000 63,047 Cash flows from financing activities: — 50,000 63,047 Cash provided by/(used in) transactions with external parties —	Loss before income tax expense	(2,464,252)	(1,096,208)	(1,340,283)
Net loss (2,469,063) (1,096,208) (1,343,609) Year + d December 31. 2019 2020 2021 Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with intra-Group entities (2,782,745) (391,007) (190,975) Cash flows from investing activities: (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities — — — Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: — — — Net cash provided by/(used in) investing activities — 50,000 (53,044) Cash provided by/(used in) transactions with external parties — 50,000 (53,044) Cash provided by (used in) transactions with external parties — 50,000 (53,044) Cash provided by (apaid in) transactions with external parties — 50,000 </td <td>Income tax benefits/expense</td> <td>(4,811)</td> <td>_</td> <td>(131)</td>	Income tax benefits/expense	(4,811)	_	(131)
Year will December 31.Cash flows from operating activities:201920202021Net cash provided by/(used in) transactions with external parties(2,850,164)(93,497)377,189Net cash provided by/(used in) transactions with intra-Group entities67,419(297,510)(568,164)Net cash provided by/(used in) operating activities(2,782,745)(391,007)(190,975)Cash flows from investing activities:(60,546)(80,506)63,047Net cash provided by/(used in) transactions with external parties(60,546)(80,506)63,047Net cash provided by/(used in) investing activities(60,546)(80,506)63,047Cash flows from financing activities:(60,546)(80,506)63,047Cash provided by/(used in) transactions with external parties(60,546)80,506)63,047Cash provided by/(used in) transactions with external parties-50,000(53,044)Cash provided by capital contribution from intra-Group entitiesCash provided by borrowings from intra-Group entitiesCash provided by borrowings from intra-Group entities	Equity in loss of affiliate companies	_	_	(3,195)
Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with intra-Group entities 67,419 (297,510) (568,164) Net cash provided by/(used in) operating activities (2,782,745) (391,007) (190,975) Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities (60,546) (80,506) 63,047 Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (50,546) (80,506) 63,047 Cash provided by/(used in) transactions with external parties (50,546) (50,546) (50,546) Cash provided by/(used in) transactions with external parties (50,546) (50,54	Net loss	(2,469,063)	(1,096,208)	(1,343,609)
Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties (2,850,164) (93,497) 377,189 Net cash provided by/(used in) transactions with intra-Group entities 67,419 (297,510) (568,164) Net cash provided by/(used in) operating activities (2,782,745) (391,007) (190,975) Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities (60,546) (80,506) 63,047 Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties (50,546) (80,506) 63,047 Cash provided by/(used in) transactions with external parties (50,546) (80,506) (53,044) Cash provided by capital contribution from intra-Group entities (50,546) (50,				
Cash flows from operating activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities Output Outpu				
Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities Output Outp	Cash flows from operating activities:			
Net cash provided by/(used in) transactions with intra-Group entities 67,419 (297,510) (568,164) Net cash provided by/(used in) operating activities (2,782,745) (391,007) (190,975) Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities — — — — — — — — — — — — — — — — — — —	. •	(2.850.16	64) (93,497)	377,189
Net cash provided by/(used in) operating activities Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities Net cash provided by/(used in) investing activities Net cash provided by/(used in) investing activities Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities 2,859,506 462,233 137,515				
Cash flows from investing activities: Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with intra-Group entities Net cash provided by/(used in) investing activities Net cash provided by/(used in) investing activities Net cash provided by/(used in) transactions with external parties Net cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities 2,859,506 462,233 137,515		(2.782.74	(391,007)	
Net cash provided by/(used in) transactions with external parties (60,546) (80,506) 63,047 Net cash provided by/(used in) transactions with intra-Group entities — — — Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties — 50,000 (53,044) Cash provided by capital contribution from intra-Group entities — — — Cash provided by borrowings from intra-Group entities 2,859,506 462,233 137,515		(, - ,	-, (, ,	()
Net cash provided by/(used in) transactions with intra-Group entities Net cash provided by/(used in) investing activities Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities 2,859,506 462,233 137,515		(60,54	(80,506)	63,047
Net cash provided by/(used in) investing activities (60,546) (80,506) 63,047 Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties — 50,000 (53,044) Cash provided by capital contribution from intra-Group entities — — — — — — — — — — — — — — — — — — —		_	- ` _ `	_
Cash flows from financing activities: Net cash provided by/(used in) transactions with external parties Cash provided by capital contribution from intra-Group entities Cash provided by borrowings from intra-Group entities 2,859,506 462,233 137,515		(60,54	(80,506)	63,047
Cash provided by capital contribution from intra-Group entities — — — — — — — — — — — — — — — — — — —	Cash flows from financing activities:			
Cash provided by capital contribution from intra-Group entities — — — — — — — — — — — — — — — — — — —	Net cash provided by/(used in) transactions with external parties	_	50,000	(53,044)
<u> </u>		_	- —	
Net cash provided by/(used in) financing activities 2,859,506 512,233 84,471	Cash provided by borrowings from intra-Group entities	2,859,50	06 462,233	137,515
	Net cash provided by/(used in) financing activities	2,859,50	512,233	84,471

In accordance with the aforementioned VIE agreements, the Company has power to direct activities of the VIEs, and can have assets transferred out of VIEs. Therefore the Company considers that there is no asset in VIEs that can be used only to settle obligations of the VIEs, except for registered capital, as of December 31, 2020 and 2021. As the VIEs and their subsidiaries were incorporated as limited liability Company under the PRC Company Law, the creditors do not have recourse to the general credit of the Company for all the liabilities of the VIEs.

VIEs' assets comprise both recognized and unrecognized revenue-producing assets. The recognized revenue-producing assets include leasehold improvements, computers and network equipment and purchased intangible assets which are recognized in the Company's consolidated balance sheet. The unrecognized revenue-producing assets mainly consist of patents, trademarks and assembled workforce which are not recorded in the financial statements of VIEs as they did not meet the recognition criteria set in ASC 350-30-25.

There were no pledges or collateralization of the Affiliated Entities' assets. As the Company is conducting its business mainly through the Affiliated Entities, the Company may provide such support on a discretionary basis in the future, which could expose the Company to a loss.

There is no VIEs where the Company has variable interest but is not the primary beneficiary.

The Group believes that the contractual arrangements among its shareholders and WFOEs comply with PRC law and are legally enforceable. However, uncertainties in the PRC legal system could limit the Company's ability to enforce these contractual arrangements and if the shareholders of the VIEs were to reduce their interests in the Company, their interests may diverge from that of the Company and that may potentially increase the risk that they would seek to act contrary to the contractual terms.

The Company's ability to control the VIEs also depends on the voting rights proxy and the effect of the share pledge under the Equity Interest Pledge Agreement and the WFOEs have to vote on all matters requiring shareholder approval in the VIEs. As noted above, the Company believes this voting right proxy is legally enforceable but may not be as effective as direct equity ownership.

(d) Functional Currency and Foreign Currency Translation

The Group uses Renminbi ("RMB") as its reporting currency. The functional currency of the Company and its subsidiaries incorporated outside of PRC is the United States dollar ("US\$"), while the functional currency of the PRC entities in the Group is RMB as determined based on the criteria of ASC 830, Foreign Currency Matters.

Transactions denominated in other than the functional currencies are re-measured into the functional currency of the entity at the exchange rates prevailing on the transaction dates. Financial assets and liabilities denominated in other than the functional currency are re-measured at the balance sheet date exchange rate. The resulting exchange differences are recorded in the consolidated statements of comprehensive loss as foreign exchange related gain / loss.

The financial statements of the Group are translated from the functional currency to the reporting currency, RMB. Assets and liabilities of the subsidiaries are translated into RMB using the exchange rate in effect at each balance sheet date. Income and expense items are generally translated at the average exchange rates prevailing during the fiscal year. Foreign currency translation adjustments arising from these are accumulated as a separate component of shareholders' deficit on the consolidated financial statement. The exchange rates used for translation on December 31, 2020 and December 31, 2021 were US\$1.00= RMB6.5249 and RMB6.3726, respectively, representing the index rates stipulated by the People's Bank of China.

(e) Convenience Translation

Translations of balances in the Group's consolidated balance sheet, consolidated statement of operations and comprehensive loss and consolidated statement of cash flows from RMB into US\$ as of and for the year ended December 31, 2021 are solely for the convenience of the readers and were calculated at the rate of US\$1 = RMB6.3726, representing the noon buying rate set forth in the H.10 statistical release of the US Federal Reserve Board on December 31, 2021. No representation is made that the RMB amounts could have been, or could be, converted, realized or settled into US\$ at that rate on December 31, 2021, or at any other rate.

(f) Fair value of financial instruments

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

The established fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The three levels of inputs that may be used to measure fair value include:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Observable, market-based inputs, other than quoted prices, in active markets for identical assets or liabilities.

Level 3: Unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

Accounting guidance also 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 Group's financial instruments consist principally of cash and cash equivalents, short-term investments, accounts receivable, equity securities, short-term borrowings, accounts payable, advance from advertising customers, registered users' loyalty payable, other liabilities, and Convertible Loan.

As of December 31, 2020 and 2021, the carrying values of cash and cash equivalents, short-term investments in time deposits, current accounts receivable, non-marketable equity securities, short-term borrowings, accounts payable, advance from customers and deferred revenue, registered users' loyalty payable and other liabilities approximated their fair values reported in the consolidated balance sheets due to the short-term maturities of these instruments.

The estimated fair value of noncurrent accounts receivable approximates the carrying value as the discounting impact is not material. The estimated fair value of the Convertible Loan approximated its carrying amount as the stated interest rate of the loan is close to the market rate. The Convertible Loan would qualify as Level 3 in the fair value hierarchy if it was to be carried at fair value due to the presence of significant unobservable inputs.

Assets and liabilities measured at fair value on a recurring basis

On a recurring basis, the Group measures its short-term investments in wealth management products and publicly traded equity security at fair value. The following table sets forth the Group's assets and liabilities that are measured at fair value on a recurring basis and are categorized using the fair value hierarchy:

As of December 31, 2020	Level 1	Level 2	Level 3	Balance at fair value
Assets				
Short-term investments — Wealth management products	_	354,847	_	354,847
Short-term investments — Equity investment in a publicly traded security	36,186	_	_	36,186
				Balance at
As of December 31, 2021	Level 1	Level 2	Level 3	fair value
Assets				
Short-term investments — Wealth management products		192,900		192,900

The Group values its investments in wealth management products issued by certain banks using quoted subscription/redemption prices published by these banks, and accordingly, the Group classifies the valuation techniques that use these inputs as Level 2.

Assets and liabilities measured at fair value on a non-recurring basis

The equity securities without readily determinable fair value are measured at fair value on a non-recurring basis, adjusted for observable transactions for identical or similar investments of the same issuer or impairment. These securities are classified as Level 3 in the fair value hierarchy because the Company estimates the value based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs such as volatility, rights, and obligations of the securities we hold.

(g) Cash and Cash Equivalents

Cash and cash equivalents include cash in bank and time deposits placed with banks or other financial institutions, which have original maturities of three months or less at the time of purchase and are readily convertible to known amounts of cash.

(h) Restricted cash

As of December 31, 2021, restricted cash of RMB75.5 million represents the cash balance that was frozen in cooperation with an ongoing investigation of two of the Group's customers.

(i) Short-term investments

Short-term investmechnts include time deposits with original maturities between three months and a year with banks in the PRC and investments in wealth management products issued by certain banks which are redeemable by the Company at any time. The company classifies investments as current based on the nature of the investments and their availability for use in current operations.

The wealth management products are unsecured with variable interest rates and primarily invested in debt securities issued by the PRC government, corporate debt securities and central bank bills. The Company measures the investments in wealth management products at fair value using the quoted subscription or redemption prices published by these banks. As of December 31, 2021, no allowance for credit losses in short-term investments was recorded. As of December 31, 2021, the short-term investments balance also includes nonmarketable equity securities that became redeemable within one year from the balance sheet date. Refer to Note 2(l) and Note 6 – Investments for additional information.

In conjunction with one of the investigations mentioned in Note 2(h) above, short-term investment account balances amounting to RMB56.8 million were also frozen as of December 31, 2021.

(j) Accounts receivable, net

Accounts receivable represents those receivables derived in the ordinary course of business, net of an allowance for any potentially uncollectible amounts, and are classified as current or long-term in accordance with customer payment terms. The Company makes estimates of expected credit and collectibility trends for the allowance for credit losses based upon its assessment of various factors, including historical experience, the age of the accounts receivable balances, credit quality of its customers, current economic conditions, reasonable and supportable forecasts of future economic conditions that may vary by geography, customer-type, or industry sub-vertical, and other factors that may affect its ability to collect from customers. Expected credit losses are recorded as general and administrative expenses on our consolidated statements of comprehensive loss.

Although the Company has historically not experienced significant credit losses, they may experience increasing credit loss risks from accounts receivable in future periods if its customers are adversely affected by economic pressures or uncertainty associated with local or global economic recessions, disruption associated with the current COVID-19 pandemic, or other customer-specific factors, and actual experience in the future may differ from their past experiences or current assessment.

(k) Property and equipment, net

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. The estimated useful lives are as follows:

Leasehold improvements

Over the shorter of lease term or estimated useful lives of the assets

Office equipment

3-5 years

Expenditures for maintenance and repairs are expensed as incurred. The gain or loss on the disposal of property and equipment is the difference between the net sales proceeds and the carrying amount of the relevant assets and is recognized in the consolidated statements of comprehensive loss.

(l) Long-term equity investments

The Company's equity investments are accounted for as follows:

• Non-marketable equity securities that do not have readily determinable fair value are measured using the measurement alternative recorded at cost less any impairment, plus or minus changes resulting from subsequent qualifying observable price changes. Any changes in carrying value of these equity investments are recorded in the consolidated statements of comprehensive loss. For the Company's long-term investment in an equity fund, the Company elected to apply the net asset value (NAV) practical expedient per ASC 820 to measure these investments at fair value. The NAV is the estimated fair value of these investments, and changes in fair value is recorded in the consolidated statements of comprehensive loss. This equity fund was reclassed to short-term investments as of December 31, 2021 since it became redeemable within one year from the latest balance sheet date.

• Equity method investments are securities that the Company does not control but is able to exert significant influence over the investments. These investments are initially recorded at cost and subsequently recognizes proportionate share of each equity investee's net income or loss and to reflect the amortization of basis differences in the consolidated statements of comprehensive loss and accordingly adjusts the carrying amount of the investments. An impairment charge is recorded if the carrying amount of the investments exceed their fair value and this condition is determined to be other-than-temporary. When the Company's share of losses in the equity investee equals or exceeds its interest in the equity investee, the Company does not recognize further losses, unless the Company has incurred obligations or made payments or guarantees on behalf of the equity investee.

The Company monitors its investments for other-than-temporary impairment by considering factors including, but not limited to, current economic and market conditions, the operating performance of the companies including current earnings trends and other company-specific information. Refer to Note 6 – Investments for additional information.

(m) Goodwill and intangible assets

Intangible assets

Intangible assets include the acquired right to operate an online audio/video content platform, which is amortized on a straight-line basis over its estimated useful life of 10 years, and computer software, which is amortized on a straight-line basis over its estimated useful life of 3-10 years.

As part of the Fun Series C Preferred Shares arrangement (see Note 20), the Company acquired intangible assets including developed technology and user data. The acquired technology is amortized over 5 years and user data related assets is amortized over 3 years, both on a straight-line basis.

The estimated life of intangible assets subject to amortization is reassessed if circumstances occur that indicate the life has changed. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

Goodwill

Goodwill represents the excess of the total cost of the acquisition over the fair value of the identifiable tangible and intangible assets acquired and liabilities assumed of the acquired entity as a result of the Company's acquisitions of interests in its subsidiaries and 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 more likely than not (that is, a likelihood of more than 50%) that the fair value of the reporting unit is less than its carrying value. 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. If the reporting unit does not pass the qualitative assessment, the Company estimates its fair value and compares the fair value with the carrying value of its reporting unit, including goodwill. If the fair value is greater than the carrying value of its reporting unit, no impairment is recorded. If the fair value is less than the carrying value, an impairment loss is recognized for the amount that the carrying amount of a reporting unit, including goodwill, exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The impairment charge would be recorded to earnings in the consolidated statements of operations.

Application of a goodwill impairment test requires significant management judgment, including the identification of reporting units, assigning assets, liabilities and goodwill to reporting units and the determination of the fair value of each reporting unit. The Company estimates the fair value of the reporting unit using a discounted cash flow model. This valuation approach considers various assumptions including projections of future cash flows, perpetual growth rates and discount rates. The assumptions about future cash flows and growth rates are based on management's assessment of a number of factors, including the reporting unit's recent performance against budget, performance in the market that the reporting unit serves, as well as industry and general economic data from third party sources. Discount rate assumptions reflect an assessment of the risk inherent in those future cash flows. Changes to the underlying businesses could affect the future cash flows, which in turn could affect the fair value of the reporting unit. Management performs its annual goodwill impairment test as of December 31. Each quarter the Company reviews the events and circumstances to determine if there are indicators that goodwill may be impaired.

As of December 31, 2020 and 2021, there is no event or any circumstance that the Company identified, which indicated that the fair value of the Company's reporting unit was substantially lower than the respective carrying value. There was no impairment of goodwill for the years ended December 31, 2019, 2020 and 2021 and there was no change in goodwill during 2020 and 2021.

(n) Impairment of long-lived assets other than Goodwill

For other long-lived assets including property and equipment, other non-current assets and intangible assets, the Group evaluates for impairment whenever events or changes (triggering events) indicate that the carrying amount of an asset may no longer be recoverable. The Group assesses the recoverability of the long-lived assets by comparing the carrying value of the long-lived assets to the estimated undiscounted future cash flows expected to receive from use of the assets and their eventual disposition. Such assets are considered to be impaired if the sum of the expected undiscounted cash flows is less than the carrying amount of the assets. The impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. There was no impairment of any long-lived assets other than goodwill for the years ended December 31, 2019, 2020 and 2021.

(o) Leases

The Company determines if an arrangement is a lease or contains a lease at inception. Operating leases are included in operating lease right-of-use ("ROU") assets, operating lease liability, and operating lease liability, non-current in the Company's consolidated balance sheets.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. When determining the lease term, the Company includes options to extend or terminate the lease when it is reasonably certain that it will exercise that option, if any. As the Company's leases do not provide an implicit rate, the Company uses its incremental borrowing rate, which it calculates based on the credit quality of the Company and by comparing interest rates available in the market for similar borrowings, and adjusting this amount based on the impact of collateral over the term of each lease.

The Company has elected to adopt the following lease policies in conjunction with the adoption of ASU 2016-02: (i) elect for each lease not to separate non-lease components from lease components and instead to account for each separate lease component and the non-lease components associated with that lease component as a single lease component; (ii) for leases that have lease terms of 12 months or less and does not include a purchase option that is reasonably certain to exercise, the Company elected not to apply ASC 842 recognition requirements; and (iii) the Company elected to apply the package of practical expedients for existing arrangements entered into prior to January 1, 2019 to not reassess (a) whether an arrangement is or contains a lease, (b) the lease classification applied to existing leases, and (c) initial direct costs.

(p) Short-term borrowings

As of December 31, 2021, the Company had short-term borrowings from one bank of RMB20.0 million in aggregate, which were repayable in less than six months. The annualized interest rates of this borrowing is approximately 3.7%.

(q) Advances from customers and deferred revenue

Certain third party advertising customers pay in advance to purchase advertising and marketing services. Cash proceeds received from customers are initially recorded as advances from advertising customers and are recognized as revenues when revenue recognition criteria are met.

Advances from customers and deferred revenue also consist of prepayments from users in the form of the purchase of the Group's virtual currency that can be used for live streaming and online games that are not yet consumed or converted into virtual items, and that upon the consumption or conversion, are recognized as revenue according to the prescribed revenue recognition policies described below.

(r) Revenue recognition

The following is a description of principal activities of the Group from which the Group generates its revenue under ASC 606.

(i) Advertising and marketing

The Group's main revenue generating activity is the provision of online advertising and marketing services. The Group generates revenue from performing specific actions, i.e. an optimized cost per thousand impressions ("oCPM") or optimized cost per click ("oCPC") basis or related advertising and marketing services. Revenue is recognized on an oCPM or oCPC basis as impressions or clicks are delivered, or when related advertising and marketing services are performed.

Whether revenues should be reported on a gross or net basis is determined by an assessment of whether the Group is acting as the principal or an agent in the transaction. In determining whether the Group acts as the principal or an agent, the Group follows the accounting guidance for principal-agent considerations. Such determination involves judgment and is based on evaluation of the terms of each arrangement.

a. Advertising and marketing service provided to advertising customers

The Group provides advertising and marketing services to advertising customers and recognizes advertising and marketing revenues on a gross basis as impressions or clicks are delivered. The Group receives refundable advance payments from advertising customers. If the advance payment deposited in the Group is not ultimately used for the advertisement on Qutoutiao, the Group refunds the advance payment back to advertising customers.

Starting from 2019, the placement of the advertising customers' advertisements is not restricted to be only on Qutoutiao's application. When advertisements cannot be placed on Qutoutiao due to capacity limit or bidding, the Group has the discretion to choose a media platform for advertisement placement. The Group determined it is the principal to the advertising customer when the Group (1) is the primary obligor ultimately responsible for delivering advertising and marketing services to the advertising customers, (2) has the discretion in pricing and (3) takes certain risks of loss due to the different settlement methods between the media platform and advertising customers. Hence, the Group recognizes the revenue on a gross basis.

In May 2019, the Group also started a new advertising and marketing service by providing integrated marketing solution to its customers based on their customized needs. The services include but are not limited to designing and executing a systematic marketing plan online and offline, coming up with best solutions for online promotion of the customers' mobile application by selecting appropriate advertisement platforms, designing the advertisement clips, monitoring advertisement effects and organizing offline marketing campaigns. The Group pays the vendors or suppliers when costs are incurred and advertisements are displayed while the Group charges the service fees to the customers based on specified achievements, i.e. a Gross Merchandise Volume ("GMV") which revenue is recognized based on number of first effective purchase, or optimized cost per action ("oCPA") basis which revenue is recognized based on number of registered new users. The Group is the principal ultimately responsible for delivering the integrated marketing services to the customers in the arrangement, it has the discretion in pricing and takes certain risks of loss as the results cannot be guaranteed while costs are incurred. The Group recognizes the integrated marketing services revenue at gross based on GMV or oCPA basis and recognizes incurred expenses to vendors or suppliers as cost of revenue.

b. Advertising and marketing services provided to advertising platforms

The Group provides advertising and marketing services to other third-party advertising platforms. In the arrangement with these advertising platforms, these advertising platforms are the customers of the Group and the performance obligation of the Group is to provide traffic service to these advertising platforms. Therefore, the Group recognizes revenue based on the net amount as impressions or clicks are delivered.

(ii) Other services

a. Agent and platform service

The Group also provides agent and platform service by facilitating the advertising customers to select third-party advertising platforms to display their advertisements. The Group recognizes revenue from the advertising customers based on the net amount equal to certain agreed percentage of the gross revenue earned by the third-party advertising platforms when impressions or clicks are successfully delivered.

b. Live streaming

In January 2019, the Group started operating its own live streaming platform. It generates revenue from sales of virtual items in the platform. Users can access the platforms and view the live streaming content showed by the performers for free. The Group shares a portion of the sales proceeds of virtual items ("revenue sharing fee") with performers and talent agencies in accordance with their revenue sharing arrangements.

The Group evaluates and determines that it is the principal and views users to be its customers. The Group reports live streaming revenues on a gross basis. Accordingly, the amounts paid by users to purchase virtual items are recorded as revenues and revenue sharing fee paid to performers and talent agencies are recorded as cost of revenues. Where the Group is the principal, it controls the virtual items before they are transferred to users. Its control is evidenced by the Group's sole ability to monetize the virtual items before they are transferred to users, and is further supported by the Group being primarily responsible to users and having a level of discretion in establishing pricing.

The Group designs, creates and offers various virtual items for sales to users with pre-determined selling price. Users can purchase and present virtual items to performers to show support for their favorite performers and virtual items are consumed and used upon purchase. Accordingly, live streaming revenue is recognized immediately when virtual items are used. The Group does not have further obligations to the user after the virtual items are consumed immediately.

The Group may also enter into contracts that can include various combinations of virtual items and privileges such as priority speaking rights or special symbols, which are generally capable of being distinct and accounted for as separate performance obligations, such as the VIP member program. Judgments are required as follow: 1) determining whether those virtual items and privilege are considered distinct performance obligations that should be accounted for separately versus together, 2) determining the standalone selling price for each distinct performance obligation, and 3) allocating of the arrangement consideration to the separate accounting of each distinct performance obligation based on their relative standalone selling prices. In instances where standalone selling price is not directly observable as the Group does not sell the virtual item or privilege separately, the Group determines the standalone selling price based on pricing strategies, market factors and strategic objectives. The Group recognizes revenue for each of the distinct performance obligations identified in accordance with the applicable revenue recognition method relevant for that obligation. For consumable virtual items, revenues is recognized immediately when the virtual item is used. For durable virtual items, revenue is recognized over the estimated user relationship periods. For the years ended December 31, 2019, 2020 and 2021, the VIP membership program was not material.

c. Online games

The Group generates revenues from offering virtual items in online games developed by third parties to game players.

Users play games on the Group's various mobile applications free of charge and are charged for purchases of consumable virtual items, which can be utilized in the online games to enhance their game-playing experience.

Pursuant to contracts signed between the Group and the respective game developers, although game developers own the games' copyrights and other intellectual property, in general the Group controls the games and takes the main responsibilities to operate the games, maintains a functioning gaming environment for the players, sets the pricing of virtual items, collects the in-game purchase payment from the players and shares the revenue based on a pre-agreed scheme to the game developers. The users make the purchases in the games operated and managed by the Group and the Group provides the game services to the users. Accordingly, the Group is the principal in the arrangements. The revenues derived from these online games are recorded on a gross basis and the amount paid to game developers are recorded as cost of revenue.

Online games revenue is recognized immediately when the consumable virtual item is purchased and used. The Group does not have further obligations to the user after the virtual items are consumed immediately.

In addition, the Group sells the advertisement spots placed in the online games to the advertisers and gets paid based on views/clicks. The advertisements price is negotiated and determined by the Group with a shared fee to be paid to the game developer. Similar to the advertising and marketing service provided to advertising customers described above in 2(r)(i) a, the Group is the principal in the arrangement and revenue is recognized on a gross basis as clicks or impressions are delivered with fees paid to game developers as cost of revenue.

C. Disaggregation of revenue

In the following table, revenue is disaggregated by major service line and gross vs net recognition.

Year ended December 31,			
2019	2020	202	
RMB	RMB	RMB	US\$ (Note 2(e))
4,339,602	3,857,233	2,533,327	397,534
1,075,718	1,189,602	1,557,056	244,336
33,155	7,904	22,004	3,453
104,445	193,141	140,269	22,011
17,161	37,315	86,947	13,644
154,761	238,360	249,220	39,108
5,570,081	5,285,195	4,339,603	680,978
	RMB 4,339,602 1,075,718 33,155 104,445 17,161 154,761	2019 2020 RMB RMB 4,339,602 3,857,233 1,075,718 1,189,602 33,155 7,904 104,445 193,141 17,161 37,315 154,761 238,360	2019 2020 202 RMB RMB RMB 4,339,602 3,857,233 2,533,327 1,075,718 1,189,602 1,557,056 33,155 7,904 22,004 104,445 193,141 140,269 17,161 37,315 86,947 154,761 238,360 249,220

(1) For the years ended December 31, 2019, 2020 and 2021 revenue in advertising services provided to advertising customers which recorded gross include integrated marketing solution services which amounted to RMB381.8 million, RMB248.2 million and RMB39.8 million.

(s) Cost of revenues

The Group's cost of revenues consists primarily of (i) bandwidth and server costs, (ii) costs incurred to vendors and suppliers for advertising and marketing services, (iii) content procurement costs paid to third-party professional media companies and freelancers, (iv) direct cost related to in-house content, rental cost, depreciation, salary and welfare for cost personnel and other miscellaneous costs, (v) costs incurred for mobile gaming and live streaming content, (vi) cultural development fee and surcharges. The Group is subject to a cultural development fee on the provision of advertising services in the PRC. The applicable tax rate prior to June 30, 2019 was 3% of the net advertising revenues, and was changed to 1.5% effective from July 1, 2019 to December 31, 2024. Due to the COVID-19 pandemic, the Group was exempt from the cultural development fee for 2020 and 2021.

(t) Research and development expenses

Research and development expenses consist primarily of (i) salary and welfare for research and development personnel, (ii) stock-based compensation for research and development personnel (iii) office rental expenses (iv) IT service fees and (v) depreciation of office premise and servers utilized by research and development personnel. Costs incurred during the research stage are expensed as incurred. Costs incurred in the development stage, prior to the establishment of technological feasibility, which is when a working model is available, are expensed when incurred.

The Company accounts for internal use software development costs in accordance with guidance on intangible assets and internal use software. This requires capitalization of qualifying costs incurred during the software's application development stage and to expense costs as they are incurred during the preliminary project and post implementation/operation stages. For the years ended December 31, 2019, 2020 and 2021, the Company has not capitalized any costs related to internal use software because the inception of the Group software development costs qualified for capitalization have been insignificant.

(u) Sales and marketing expenses

Sales and marketing expenses consist primarily of (i) rewards to registered users related to loyalty programs, (ii) advertising and marketing expenses, (iii) charges for short mobile message service to registered users (iv) salary and welfare for sales and marketing personnel and (iv) stock-based compensation expenses for sales and marketing personnel. The advertising and marketing expenses amounted to RMB 2,863.8 million, RMB1,728.1 million and RMB2,662.0 million during the years ended December 31, 2019, 2020 and 2021, respectively.

(v) General and administrative expenses

General and administrative expenses also consist of (i) salary and welfare for general and administrative personnel, (ii) office expense, (iii) professional service fees, (iv) stock-based compensation expense and (v) bad debt expense.

(w) User loyalty programs

The Group has loyalty programs for its registered users primarily in its mobile Qutoutiao and Midu to enhance user engagement, loyalty and to incentivize word-of-mouth referrals. Through the programs, the Group give users loyalty points and in certain cases cash credits for taking specific actions. Such actions primarily include referring new users to register on the platforms or through the viewing or sharing of content, providing valuable comments and encourage inactive users to continue to the platforms. The cost of users' loyalty points is recognized as sales and marketing expenses in the consolidated statements of operations and comprehensive loss.

On Qutoutiao, the Group's users can redeem earned rewards, which is in a form of cash credits reflecting the same amount of cash value, upon redemption. The Group offers its users the flexibility to choose a number of rewards payment options, including i) online cash out, when the cash credits balance exceeds a certain cash out threshold or at a lower cash out threshold if the users log on Qutoutiao for a certain number of consecutive days, ii) purchasing virtual items in live streaming and online games, iii) purchasing merchandise through Qutoutiao's online market place. On *Midu*, the loyalty program is operated in a similar manner as *Qutoutiao*.

The Group also has a number of other loyalty programs for various applications. As of December 31, 2021, the loyalty program volume associated with these applications are immaterial.

For *Qutoutiao*'s loyalty program, rewards to its users are cleared from their accounts and will not be redeemable after the users have been inactive for 90 days. Other loyalty programs also have similar rewards clearing policies after the users have been inactive for up to 90 days.

The Group's experience indicates that a certain portion of rewards is never redeemed in cash by its users, which the Group refers to as a "breakage". The liability accrued for the reward is reduced by the estimated breakage that is expected to occur. The Group estimates breakage based upon its analysis of relevant reward history and redemption pattern as well as considering the expiration period of the rewards under the users agreement. In the assessment of breakage, each individual user's account is categorized into certain pools of different range of outstanding rewards, and then further grouped into certain sub-groups on the basis of inactivity days. The past reward redemption pattern in those sub-groups was used to estimate the respective breakage for the outstanding rewards in each sub-group at each period end. For the years ended December 31, 2019, 2020 and 2021, total costs related to the users' rewards granted (before estimated breakage) amounted to RMB2,708.2 million, RMB1,663.9 million and RMB673.8 million respectively, and total rewards redeemed in cash amounted to RMB2,514.8 million, RMB1,509.3 million and RMB673.8 million respectively. The Company also reversed the accrued rewards of users who have not been active for the period specified in accordance with its rewards clearance policies, which amounted to non-cash adjustments of RMB293.5 million, RMB213.9 million and RMB81.4 million for the years ended December 31, 2019, 2020 and 2021, respectively, which were recorded as a reduction of sales and marketing expense. As of December 31, 2019, 2020 and 2021, the total estimated breakage not accrued approximated to RMB36.5 million, RMB27.8 million and RMB15.3 million, respectively. For the years ended December 31, 2019, 2020 and 2021, rewards consumed by purchasing the virtual items in live streaming and online games amounted to RMB18.0 million, RMB35.8 million and RMB80 million respectively. The consumption was recorded as a reduction of revenue.

Once the amount of accumulated unredeemed rewards for individual user exceeds the cash out threshold or the continuous log-on criteria is reached, the Group reclassifies the balance as "registered users' loyalty payable" in consolidated balance sheet as a monetary liability and reverses the amount of breakage originally assumed. The registered users' loyalty payable is derecognized only if (1) the Group pays the user and is relieved of its obligation for the liability by paying the users, including delivery of cash or (2) the Group is legally released from the liability.

The actual cost to settle the estimated liability may differ from the estimated liability recorded. As of December 31, 2020 and 2021, users' reward recorded in "Registered users' loyalty payable" were RMB72.6 million and RMB61.7 million, respectively, and estimated users' rewards recorded in "Accrued liabilities related to users' loyalty programs" were RMB100.1 million and RMB99.4 million, respectively.

(x) Employee social security and welfare benefits

Employees of the Group in the PRC are entitled to staff welfare benefits including pension, work-related injury benefits, maternity insurance, medical insurance, unemployment benefit and housing fund plans through a PRC government-mandated multi-employer defined contribution plan. The Group is required to contribute to the plan based on certain percentages of the employees' salaries, up to a maximum amount specified by the local government.

The PRC government is responsible for the medical benefits and the pension liability to be paid to these employees and the Group's obligations are limited to the amounts contributed and no legal obligation beyond the contributions made.

(y) Income taxes

Current income taxes are provided on the basis of net income for financial reporting purposes, adjusted for income and expense items which are not assessable or deductible for income tax purposes, in accordance with the regulations of the relevant tax jurisdictions.

Deferred income taxes are accounted for using an asset and liability method. Under this method, deferred income taxes are recognized for the tax consequences of temporary differences by applying enacted statutory rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. The tax base of an asset or liability is the amount attributed to that asset or liability for tax purpose. The effect on deferred taxes of a change in tax rates is recognized in the consolidated statements of comprehensive loss in the period of change. A valuation allowance is provided to reduce the amount of deferred tax assets if it is considered more likely than not that some portion of, or all of the deferred tax assets will not be realized.

Uncertain tax positions

The guidance on accounting for uncertainties in income taxes prescribes a more likely than not threshold for financial statements recognition and measurement of a tax position taken or expected to be taken in a tax return. Guidance was also provided on derecognition of income tax assets and liabilities, classification of current and deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, accounting for income taxes in interim periods, and income tax disclosures. Significant judgment is required in evaluating the Group's uncertain tax positions and determining its provision for income taxes. The Group recognizes interests and penalties, if any, under accrued expenses and other current liabilities on its consolidated balance sheets and under other expenses in its statements of operations and comprehensive loss. The Group did not recognize any significant interest and penalties associated with uncertain tax positions for the years ended December 31, 2019, 2020 and 2021. As of December 31, 2020 and 2021, the Group did not have any significant unrecognized uncertain tax positions.

(z) Treasury Stock

The Group accounts for treasury stock using the cost method. Under this method, the cost incurred to purchase the shares is recorded in the treasury stock account in the consolidated balance sheets. At retirement, the ordinary shares account is charged only for the aggregate par value of the shares. The excess of the acquisition cost of treasury shares over the aggregate par value is allocated between additional paid-in capital (up to the amount credited to the additional paid-in capital upon original issuance of the shares) and retained earnings. In the event that treasury stock is reissued at an amount different from the cost the Company paid to repurchase the treasury stock, the Company will recognize the difference in additional paid-in capital by using the specified identification method.

Effective May 28, 2019, the Board of Directors approved a share repurchase program to repurchase in the open market up to US\$50 million of outstanding ADSs of the Company, from time to time over the next 12 months. For the year ended December 31, 2010, 4,665,700 outstanding ADSs (1,166,425 ordinary shares) were repurchased and held in treasury stock with a total consideration of RMB142.2 million. No additional shares were repurchased during 2020 or 2021. As of December 31, 2021, no repurchased shares have been retired or reissued.

(aa) Share-based compensation

Share-based compensation costs are measured at the grant date. The share-based compensation expenses have been categorized as either cost of revenue, general and administrative expenses, selling and marketing expenses or research and development expenses, depending on the job functions of the grantees.

Option granted to employees

For the options granted to employees, the compensation expense is recognized using the straight-line method over the requisite service period. Forfeitures are estimated at the time of grant, with such estimate updated periodically and with actual forfeitures recognized currently to the extent they differ from the estimate. In determining the fair value of the Company's share options, the binomial option pricing model has been applied.

Option granted to non-employee

For share-based awards granted to non-employees, the Group accounts for the related share-based compensation expenses in accordance with ASC subtopic, 505-50 ("ASC 505-50"), Equity-Based Payments to Non-Employees. Under the provision of ASC 505-50, options of the Company issued to non-employees are measured based on fair value of the options which are determined by using the binomial option pricing model. These options are measured as of the earlier of the date at which either: (1) commitment for performance by the non-employee has been reached; or (2) the non-employee's performance is complete. Subsequent to the completion of the performance, the share-based award is assessed in accordance with ASC 815 to determine whether the award meets the definition of a derivative. In 2020, the entity adopted ASU 2018-07, and from the adoption date the Company applied the same guidance to both employee and nonemployee share-based awards, which nonemployee share-based payment equity awards are measured at the grant-date fair value of the equity instruments, similar to employee share-based payment equity awards.

(ab) Government grants

Government grants are recognized as other income/ (expenses) when received. For the years ended December 31, 2019, 2020 and 2021, the Group received financial subsidies of RMB9.5 million, RMB5.8 million and RMB7.2 million from the local PRC government authorities, respectively. These subsidies were non-recurring, not refundable and with no conditions attached. There are no defined rules and regulations to govern the criteria necessary for companies to enjoy such benefits and the amount of financial subsidy is determined at the discretion of the relevant government authorities.

(ac) Statutory reserves

The Group's subsidiaries, consolidated VIEs 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 was not done so.

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.

(ad) Related parties

Parties are considered to be related if one party has the ability, directly or indirectly, to control the other party or exercise significant influence over the other party in making financial and operating decisions. Parties are also considered to be related if they are subject to common control or significant influence, such as a family member or relative, shareholder, or a related corporation.

(ae) Dividends

Dividends are recognized when declared. No dividends were declared for the years ended December 31, 2019, 2020 and 2021, respectively. The Group does not have any present plan to pay any dividends on ordinary shares in the foreseeable future. The Group currently intends to retain the available funds and any future earnings to operate and expand its business.

(af) Loss per share

Basic loss per share is computed by dividing net loss attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the year using the two class method. Ordinary shares issuable for little or no cash consideration are also included as outstanding shares once all of their conditions have been met as they are considered contingently issuable shares. Using the two class method, net loss is allocated between ordinary shares and other participating securities (i.e. preferred shares) based on their participating rights.

Diluted loss per share is calculated by dividing net loss attributable to ordinary shareholders as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary 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. Ordinary share equivalents consist of the ordinary shares issuable upon the conversion of the stock options, using the treasury stock method. Except for voting rights, the Class A and Class B ordinary shares have all the same rights and therefore the loss per share for both classes of shares are identical.

(ag) Comprehensive loss

Comprehensive loss is defined as the change in shareholders' deficit of the Company during a period arising from transactions and other events and circumstances excluding transactions resulting from investments by shareholders and distributions to shareholders.

Comprehensive loss is reported in the consolidated statements of comprehensive loss. Accumulated other comprehensive losses of the Group include the foreign currency translation adjustments.

(ah) Segment reporting

Operating segments are defined as components of an enterprise engaging in businesses activities for which separate financial information is available that is regularly evaluated by the Group's chief operating decision makers in deciding how to allocate resources and assess performance. The Group's chief operating decision maker has been identified as the Chief Executive Officer, who reviews consolidated results including revenue, gross profit and operating profit at a consolidated level only. The Group does not distinguish between markets for the purpose of making decisions about resources allocation and performance assessment. Hence, the Group has only one operating segment and one reportable segment.

(ai) Recent adopted accounting pronouncements

In December 2019, the FASB issued ASU 2019-12—Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes. This update simplifies the accounting for income taxes as part of the FASB's overall initiative to reduce complexity in accounting standards. The amendments in ASU 2019-12 simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740. The amendments also improve consistent application of and simplify GAAP for other areas of Topic 740 by clarifying and amending existing guidance. ASU 2019-12 is effective for the Company beginning on January 1, 2021. Early adoption of the amendments is permitted. The adoption of this standard did not have a material impact on the Company's disclosures.

(aj) Recent issued accounting pronouncements

In January 2020, the FASB issued ASU 2020-01, Investments—Equity Securities (Topic 321), Investments—Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815), Clarifying the Interactions between Topic 321, Topic 323, and Topic 815, which clarifies the interaction of the accounting for equity investments under Topic 321 and investments accounted for under the equity method of accounting in Topic 323 and the accounting for certain forward contracts and purchased options accounted for under Topic 815. ASU 2020-01 is effective for the Company in the fiscal years beginning after December 15, 2021, including interim periods within those fiscal years, with early adoption permitted. The adoption of this standard is not expected to have a material impact on the Company's disclosures.

3. Significant equity transactions

(a) Follow-on public offering

On April 5, 2019, the Company completed a follow-on public offering of ADS equivalent to 831,967 ordinary shares by the Company and ADS equivalent to 1,668,033 ordinary shares by several shareholders (the "Selling Shareholders"). The net proceeds to the company raised from the follow-on public offering amounted to approximately RMB 212.1 million (approximately US\$ 31.9 million) after deducting issuance costs.

(b) Issuance of ordinary shares to The Paper

On September 23, 2019, Qutoutiao Inc. obtained the relevant PRC government approval and completed a share purchase agreement with The Paper. The Company issued 1,480,123 Class A ordinary shares for an aggregate cash consideration of US\$20,408,467 (RMB 144.4 million), amounting to a cash consideration of US\$13.79 per share.

As part of the share issuance, The Paper will also carry out the performance of certain strategic cooperation agreements for an annual fee charge to Jifen VIE, for five years. The difference of US\$1,201,625 (RMB8.4 million) between the fair value of the shares issued to The Paper (i.e. the share price on issuance day) and the cash consideration paid is also considered an incremental cooperation service fee and will be amortized to expense over a service period of five years.

In addition, Jifen VIE issued equity interests representing 1% of its enlarged share capital to The Paper at a nominal price (Note 2(b)).

4. Risks and Concentration

(a) PRC regulations

(1) VIEs

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 law and regulations prohibiting or restricting foreign ownership of companies that engage in such operations and businesses. If a finding were made by PRC authorities that the Group's operation of certain of its operations and businesses through VIEs is prohibited, 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 consolidated VIEs and the shareholders of such 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. As of the date of this report, the validity and enforceability of the contracts among the Group, the consolidated VIEs and the shareholders of such VIEs, and, to the knowledge of the Group, of any similar contracts entered into by other PRC-based companies, have never been considered or determined by a PRC court. 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 VIEs' 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 in place.

The Group's operations and businesses rely on the operations and businesses of its VIEs, which hold certain assets that are important to the operation of the Group's business. The VIEs' assets comprise both recognized and unrecognized revenue-producing assets. The recognized revenue-producing assets include leasehold improvements, computers and network equipment and purchased intangible assets which are recognized in the Group's consolidated balance sheet. The unrecognized revenue-producing assets mainly consist of patents, trademarks and assembled workforce which are not recorded in the financial statements of VIEs as they did not meet the recognition criteria set in ASC 350-30-25. The Group's operations and businesses may be adversely impacted if the Group loses the ability to use and benefit from assets held by these VIEs.

(2) Inability to fully comply with Audio-visual Program Provisions

Pursuant to the Administrative Provisions on Internet Audio-visual Program Service, or the Audio-visual Program Provisions, which was issued by the State Administration of Radio, Film and Television (the predecessor of GAPPRFT), or SARFT, and MIIT on December 20, 2007 and came into effect on January 31, 2008 and was amended on August 28, 2015, online transmission of audio and video programs requires an Internet audio-visual program transmission license and online audio-visual service providers must be either wholly state-owned or state-controlled. In a press conference jointly held by SARFT and MIIT to answer questions with respect to the Audio-visual Program Provisions in February 2008, SARFT and MIIT clarified that online audio-visual service providers that had already been operating lawfully prior to the issuance of the Audiovisual Program Provisions may re-register and continue to operate without becoming state-owned or controlled, provided that such providers have not engaged in any unlawful activities. This exemption will not be granted to online audio/video service providers established after the Audio-visual Program Provisions was issued.

Although the Group has been taking measures to ensure compliance, the Group may not be able to fully comply with Audio-visual Program Provisions. As a result, the Group may face, according to Audio-visual Program Provisions, administrative sanctions including receiving a warning and be ordered to pay a fine of not more than RMB30,000. In the case of severe contravention, the Group may be ordered to cease transmission of audio and video programs, be subject to a penalty equal to one to two times our total investment in the affected business and the devices the Group used for such operation may be confiscated. Furthermore, according to the Audio-visual Program Provisions, the telecommunications administrative authorities may, based on written opinions of GAPPRFT, and in accordance with the relevant laws and regulations on supervision of telecommunications and Internet, close the Group's mobile platform, revoke the license for the provision of Internet information services, or the ICP license, and order the relevant network operation entity which provides the Group signal access services to stop such provision of services.

The Group believes that the risks of material loss related to inability to fully comply with Audio-visual Program Provisions and fines or penalties are remote.

(b) Foreign exchange risk

The Group's sales, purchase and expense transactions are generally denominated in RMB and a significant portion of the Group's liabilities are denominated in RMB. RMB is not freely convertible into foreign currencies.

In the PRC, foreign exchange transactions are required by law to be transacted only by authorized financial institutions at exchange rates set by the People's Bank of China. In addition, the Group's cash denominated in US\$ subject the Group to risks associated with changes in the exchange rate of RMB against US\$ and may affect the Group's results of operations going forward.

(c) Credit and Concentration risk

The Group's credit risk arises from cash and cash equivalents, short-term investments, prepayments and other current assets, and accounts receivable. The carrying amounts of these financial instruments represent the maximum amount of loss due to credit risk.

The Group expects that there is no significant credit risk associated with the cash and cash equivalents and short-term investments which are held by reputable financial institutions in the jurisdictions where the Company, its subsidiaries and the Affiliated Entities are located. The Group believes that it is not exposed to unusual risks as these financial institutions have high credit quality.

The Group has no significant concentrations of credit risk with respect to its prepayments.

Accounts receivable are typically unsecured and are derived from revenue earned through third party advertising platforms and customers as well as related parties. The risk with respect to accounts receivable is mitigated by credit evaluations performed on them, and the Company maintains an allowance for estimated credit losses.

(i) Concentration of revenues

For the years ended December 31, 2019, no single customer accounted for more than 10% of total net revenues of the Group.

For the years ended December 31, 2020 and 2021, Customer A contributed 11% and 18% of total net revenue of the Group, respectively.

(ii) Concentration of accounts receivable

The Group has not experienced any significant recoverability issue with respect to its accounts receivable. The Group conducts credit evaluations on its platforms and customers and generally does not require collateral or other security from such platforms and customers. The Group periodically evaluates the creditworthiness of the existing platforms in determining an allowance for doubtful accounts primarily based upon the age of the receivables and factors surrounding the credit risk of specific customers.

The following table summarized customers with greater than 10% of the accounts receivables, including accounts receivable from related parties:

	As of	Ī
	December 31, 2020	December 31, 2021
Customer A — advertising platform	13%	*
Customer B — advertising and marketing customer	*	11%
Customer C — advertising and marketing customer (related		
party – Note 21)	23%	14%
Customer D — advertising and marketing customer	*	22%

Less than 10%

5. Cash and cash equivalents

Cash and cash equivalents represent cash on hand and time deposits placed with banks or other financial institutions with original maturities less than three months, which are unrestricted as to withdrawal or use. Interest income associated with these deposits amounted to RMB16.0 million, RMB4.1 million and RMB2.4 million in the consolidated statements of comprehensive loss for the years ended December 31, 2019, 2020 and 2021.

The following table sets forth a breakdown of cash and cash equivalents by currency denomination and jurisdiction as of December 31, 2020 and 2021:

							RMB tho	usands equi	valent	Total in RMB
	RN	AB thousand	ds	RMB thousan	nds equivalen	t (US\$)	(HK	D/SGD/IDR)	thousands
	Overseas	Chi	ina	Overseas	China	1	Overseas	Chin	a	
	<u> </u>	Non VIE	VIE		Non VIE	VIE		Non VIE	VIE	
December 31, 2020	_	84,261	12,084	361,937	35,966		227		_	494,475
December 31, 2021	80	11,570	19,783	102,565	89,494	_	16,859	_	_	240,351

6. Investments

As of December 31, 2020 and 2021, the Company's short-term investments are comprised of the following:

	As of		
	December 31, 2020	December 31, 2021	
Time Deposits (maturity dates between 3 − 12 months)		105,199	
Wealth management products	354,847	192,900	
Publicly traded equity security	36,186	_	
Non-marketable equity securities ⁽¹⁾		44,918	
Total short-term investments	391,033	343,017	

For time deposits with original maturities between three months and a year, its interest income amounted to RMB3.4 million, RMB6.3 and RMB3.1 million in the consolidated statements of comprehensive loss for the years ended December 31, 2019, 2020 and 2021, respectively.

The change in fair value of short-term investments in wealth management products was recorded as investment income which amounted to RMB6.3 million, RMB5.9 million and RMB9.0 million for the years ended December 31, 2019, 2020 and 2021, respectively.

During 2020, the Company invested RMB20.0 million in a publicly traded security listed on the Hong Kong Stock Exchange and the investment was sold in 2021. The unrealized gain (loss) for the security was recorded as investment income (loss) which amounted to RMB16.7 million and (RMB15.3 million) for the years ended December 31, 2020 and 2021.

As of December 31, 2020 and 2021, the Company's long-term investment in equity securities are comprised of the following:

		As of		
	December 31, 2020	December 31, 2021		
Non-marketable equity securities ⁽¹⁾	55,300	_		
Equity method investments ⁽²⁾	27,589	1,416		
Total long-term equity investments	82,889	1,416		

(1) The Company's investments in non-marketable equity securities primarily consist of an investment in an equity fund (see below) and small, non-controlling investments in companies for which the Company has equity ownership with preferential rights but cannot exert significant influence. During 2021, equity securities of RMB8.0 million without readily determinable fair value were either disposed or impaired and had nil carrying value as of December 31, 2021.

During the first quarter of 2020, the Company subscribed to shares of an equity fund as a limited partner, with an initial cost of RMB106.0 million. The investment in the fund is nonredeemable for two years after the subscription date and the directors of the fund can extend the non-redemption period for another two years. The investment is measured under the NAV practical expedient. Unrealized losses of RMB54.4 million and RMB1.2 million was recorded in investment income (loss) in the consolidated statements of comprehensive loss for the years ended December 31, 2020 and 2021, respectively. As of December 31, 2021, the fair value of investments measured at NAV was RMB44.9 million and was classified as a short-term investment as it is now redeemable within one year.

(2) As of December 31, 2020, the Company's equity method investment is an investment of RMB27.6 million as a limited partner in a venture fund. During 2021, this equity method investment was fully impaired as the Company determined that it is unlikely their investment is recoverable due to the deterioration of the investment environment and capital market.

During 2021, the Company deconsolidated one of its subsidiaries when a third-party investor purchased 60% of the subsidiary's equity ownership. On the date the subsidiary was deconsolidated, the Company recorded the difference of RMB23.1 million between the fair value consideration received and the carrying value of the subsidiary's net assets as a disposal gain in Other Income (Expenses). The remaining 40% equity ownership in the subsidiary was recorded as an equity method investment.

7. Accounts receivable, net

	As o	f
	December 31, 2020	December 31, 2021
Accounts receivable, gross – current	824,487	1,106,760
Accounts receivable, gross – non-current	54,639	_
Less: allowance for credit losses ⁽¹⁾	(86,698)	(335,841)
Accounts receivable, net	792,428	770,919

Movement of allowance for credit losses was as follows:

	Year ended December 31,		
	2019	2020(1)	2021(1)
At beginning of the period	_	_	(86,698)
ASC 326 Adoption impact	_	(6,889)	
Additional provisions	_	(79,809)	(249,143)
Write-off			
At the end of the period	_	(86,698)	(335,841)

(1) The allowance for credit losses reflects the Group's estimated probable incurred losses and includes the adoption impact of RMB6.9 million which was recorded to the accumulated deficit on January 1, 2020. The Group assesses the creditworthiness and collectability of the portfolios of respective accounts receivables, mainly based on credit risk, industry risk, historical collection pattern, payment terms and reputations of respective customers with accounts receivable, using an established systematic process on a pooled basis within each credit risk levels of the customers. When assigning customers into different credit risk levels, factors like capital condition, reputation, industry, collection history, and external credit references of the customers are considered. In the consideration of above factors, the Group determines that each portfolio of respective accounts receivables subject to credit losses within each credit risk level is homogenous with similar credit characteristics.

8. Prepayments and other assets

The other assets consist of the following:

	As	As of	
	December 31, 2020	December 31, 2021	
Prepayment and other current assets			
Value-added tax receivable	52,412	79,009	
Deposit to third-party payment service providers ⁽¹⁾	19,839	19,359	
Prepayment for the use of contents ⁽³⁾	224,975	17,512	
Deposit to third-party advertising platforms ⁽⁴⁾	15,145	14,981	
Loans and advance to employees ⁽⁵⁾	11,309	14,934	
Lease deposits-current portion	10,059	5,646	
Prepayments of advertisement fee ⁽²⁾	23,343	4,216	
Prepayments of business insurance	3,132	2,600	
Cooperation service fee-current portion (Note 3b)	1,568	1,532	
Prepayments of IT service fee	420	1,042	
Prepayment of office lease	43	187	
Others	2,864	11,859	
	365,109	172,877	

Non-current

	As	of
	December 31, 2020	December 31, 2021
Prepayment for intangible assets (Note 20)	136,133	
Long-term cooperation service fee (Note 3b)	4,266	2,644
Long-term lease deposits	3,892	2,165
Prepayment for purchase of intangible asset	3,800	_
Total	148,091	4,809

- (1) Deposit to third party payment service providers represent cash prepaid to the Group's third party on-line payment service providers, which will be used to settle the Group's obligation for outstanding user loyalty payable or content procurement fee to professional third party media companies and freelancers. As of December 31, 2020 and 2021, no allowance for current expected credit losses was provided for the prepayment.
- (2) Prepayments of advertisement fee represent prepayments made to service providers for future services to promote the Company's mobile applications through online and media advertising. Such service providers charge expenses based on activities during the month, and once confirmed by the Company, the expenses will be deducted from the prepayments already made by the Company. Prepayments of advertising fee is recorded when prepayments are made to service providers and are expensed as services are provided.
- (3) Prepayment for the use of contents represents the payment to the content providers for the use of the content on the Company's mobile applications for a period from 6 to 12 months. In December 2020, the Company entered into an agreement with an external investor for use of their content library on the Company's mobile applications for an amount of RMB220.6 million as part of the consideration for the issuance of Fun Series C Preferred Shares (Note 20). Access to the literature content library includes rights to existing content as well as all content that is still to be released and will be continuously updated throughout the contract term. As the nature of the arrangement includes continuous content updates which the Company will receive over time, the related fees were recorded and expensed evenly over the contract period.
- (4) Deposit to third-party advertising platforms represents the deposit made to third-party advertising platforms that the Group provides agent and platform service by facilitating the advertising customers to select third-party advertising platforms to display the advertisements. The deposit is used to secure the timely payment of the agent and platform service fee received by the Group to the third-party platforms.
- (5) Loans to employees mainly represents loans to the employees to meet their personal needs for a period within one year.

9. Property and equipment, net

Property and equipment consist of the following:

	As	As of	
	December 31, 2020	December 31, 2021	
Cost:			
Office equipment	24,262	20,445	
Leasehold improvements	17,948	25,204	
Total cost	42,210	45,649	
Less: Accumulated depreciation	(24,997)	(32,788)	
Property and equipment, net	17,213	12,861	

Depreciation expense recognized for the years ended December 31, 2019, 2020 and 2021 are summarized as follows:

	Year o	Year ended December 31,	
	2019	2020	2021
Cost of revenues	3,183	3,463	3,024
Research and development expenses	5,076	6,653	6,150
Sales and marketing expenses	960	974	622
General and administrative expenses	785	1,054	1,312
Total	10,004	12,144	11,108

10. Intangible assets, net

Intangible assets consist of the following:

	As of	
	December 31, 2020	December 31, 2021
Cost:		
Acquired user data	_	127,133
Acquired right to operate an online audio/video content platform		
including deferred tax liabilities impact	96,130	96,130
Computer software	12,176	12,290
Developed technology	_	9,000
Total cost	108,306	244,553
Less: Accumulated amortization	(25,183)	(79,283)
Intangible assets, net	83,123	165,270

The right to operate an online audio/video content platform was acquired on November 1, 2018 through an acquisition of 100% equity interests of a company for a total cash considerations of RMB 72.1 million and is owned by a consolidated VIE of the Group upon the completion of the transaction. The acquisition was accounted for as an asset acquisition rather than a business combination as what the company acquired did not meet the criteria of a business and substantially all of the fair value of the gross assets acquired was concentrated in a single asset, which met the screen test criteria to be an asset acquisition for the adopted ASU 2017-01. A deferred tax liability of RMB 24.0 million arising from the difference between the accounting basis and tax basis of the identifiable intangible asset is recognized and will be realized over 10 years which is in line with the acquired right's amortization period. The recognition of the deferred tax liability related to the intangible asset in turn increases the book basis of the asset. The acquired right to operate an online audio/video content platform with amount of RMB 96.1 million is amortized over 10 years on a straight-line basis.

The Company also acquired intangible assets of RMB136.1 million including developed technology and user data (Note 20). The transfer of the intangible assets was completed in January 2021. The acquired technology with amount of RMB9 million will be amortized over 5 years and user data related assets of RMB127.1 million will be amortized over 3 years, both on a straight-line basis.

Amortization expense for intangible assets for the years ended December 31, 2019, 2020 and 2021 is as follows:

	Y6	Year ended December 31,	
	2019	2020	2021
Cost of revenues	9,6	13 9,613	9,613
Research and development expenses	_	- —	825
Sales and marketing expenses	_	- —	38,846
General and administrative expenses	94	42 3,413	4,815
Total	10,55		54,099

Future intangible asset amortization as of December 31, 2021 is as follows:

Year ended December 31,	Amortization Expense
2022	56,712
2023	54,682
2024	14,969
2025	11,437
2026	9,787
Thereafter	17,683
Total	165,270

11. Leases

The Company leases facilities under non-cancellable operating leases expiring on different dates. The terms of substantially all of these leases are three years or less. When determining the lease term, the Company includes options to extend or terminate the lease when it is reasonably certain that it will exercise that option, if any. All of the Company's leases qualify as operating leases. With the adoption of the new leasing standard, the Company has recorded a right-of-use asset and corresponding lease liability, by calculating the present value of future lease payments, discounted at 5.7%, the Company's incremental borrowing rate, over the expected term. Short-term leases (lease terms less than 12 months) expenses are recognized as incurred. Currently, the Company does not have any variable lease costs.

(a) The components of lease expenses were as follows:

Year ended December 31,	
2020	2021
39,371	23,772
1,834	1,873
6,093	
47,298	25,645
	39,371 1,834 6,093

(b) Supplemental cash flow information related to leases was as follows:

		Year ended December 31,	
	2020	2021	
Other information			
Cash paid for amounts included in the measurement of lease liabilities:			
Operating lease payments	39,073	22,122	
Right-of-use assets obtained in exchange for lease obligations:	20,449	5,650	

(c) Supplemental balance sheet information related to leases was as follows:

	Year ended December 31,	
	2020	2021
Operating leases		
Operating lease right-of-use assets	50,319	26,342
Operating lease liabilities, current	(20,760)	(11,897)
Operating lease liabilities, non-current	(23,756)	(15,985)
Total operating lease liabilities	(44,516)	(27,882)

	As of Decen	nber 31,
	2020	2021
Weighted-average remaining lease term		
Operating leases	2.5 years	2.1 years
Weighted-average discount rate		
Operating leases	5.7%	<u>5.7</u> %

(d) Maturities of lease liabilities were as follows:

Γ	December 31, 2021
2022	13,022
2023	11,481
2024	5,182
Total undiscounted lease payments	29,685
Less: imputed interest	(1,803)
Total lease liabilities	27,882

(e) Future minimum lease payments for the Group's operating leases were as follows:

	As of
	December 31, 2021
2022	13,022
2023	11,481
2024	5,182
	29,685

12. Tax payable

		As of
	December 31, 2020	December 31, 2021
Value added tax	73,805	23,868
Corporate income tax	5,374	6,916
Individual income tax withholding	16,517	10,651
Urban maintenance and construction tax	712	1,376
Stamp duty	736	1,068
Total	97,144	43,879

The Group's revenues are subject to value-added tax at a rate of approximately 6%.

13. Accrued liabilities and other liabilities

	As of		
	December 31, 2020	December 31, 2021	
Accrued liabilities and other current liabilities			
Accrued advertising and marketing expense	610,331	1,185,312	
Tax surcharges and other fees ⁽¹⁾	134,174	134,821	
Accrued professional service fees	4,381	5,876	
Refund from depositary bank (2)	2,470	2,407	
Accrued convertible redeemable preferred shares issuance cost of a subsidiary	3,135	_	
Others	8,942	6,187	
	763,433	1,334,603	
Non-current			
Non-refundable incentive payment from depositary bank (2)	4,256	1,733	
Total	767,689	1,336,336	

- (1) This balance is primarily related to a cultural development fee on the provision of advertising services in the PRC that the Group is subject to. The applicable tax rate was 3% of the net advertising revenues up until June 30, 2019, and was updated to 1.5% effective July 1, 2019. Due to the COVID-19 pandemic, the Group was exempt from the cultural development fee for 2020 and 2021.
- (2) The Company received non-refundable incentive payment of USD 1.8 million (RMB 12.5 million) from depositary bank in September 2018, and the amount will be recorded ratably over a 5 year arrangement period. For the years ended December 31, 2020 and 2021, the Company recorded amount of RMB2.5 million each year as a reduction in general and administrative expenses.

14. Convertible Loan

On March 28, 2019, the Company entered into a convertible loan agreement with Alibaba Investment Limited ("Alibaba"), pursuant to which Alibaba advanced approximately US\$171.1 million (RMB1,147.0 million) in aggregate principal amount, which will mature on April 4, 2022 (the "Convertible Loan"). The Convertible Loan will bear interest at a rate of 3.00% per annum, which will be waived in case of conversion or payable at maturity. The Convertible Loan will be unsecured and unsubordinated and mature in three years after the drawdown, unless previously repaid or converted in accordance with their terms prior to such date.

The Convertible Loan may be converted at Alibaba's option on or after (i) the date falling thirty-eight (38) months after the initial drawdown of the loan or (ii) upon the occurrence of an event of default (as defined in the indenture agreement) at a conversion price of US\$60.00 per ordinary share, subject to adjustment under the terms of the indenture agreement.

The Company assessed the Convertible Loan under ASC 815 and concluded that:

- Since the conversion option is considered indexed to the Company's own stock, bifurcation of conversion option from the Convertible Loan is not required as the scope exception prescribed in ASC 815-10-15-74 is met;
- There was no BCF attribute to the Convertible Loan as the set conversion price for the Convertible Loan was greater than the fair value of the ordinary share price at date of issuance;

Considering the above, the Company has accounted for the Convertible Loan in accordance with ASC 470 as a single instrument as a long-term liability; the value of the Convertible Loan was measured by the cash received of US\$ 171.1 million (RMB1,147.0 million). The debt issuance cost was recorded as a reduction to the Convertible Loan and is amortized as interest expense using the effective interest method, over the term of the Convertible Loan. As of December 31, 2021, the carrying value of the Company's Convertible Loan, including accrued interest of RMB92.4 million, was RMB1,183.0 million. Interest expenses recorded amounted to RMB26.9 million, RMB36.8 million and RMB35.4 million for the years ended December 31, 2019, 2020 and 2021, respectively. The Company and Alibaba entered into supplemental agreements to the original convertible loan agreement on March 28, 2022 and April 29, 2022 (see Note 25).

15. Ordinary Share

On July 17, 2017, Qutoutiao Inc. was incorporated as Limited Liability Company with authorized share capital of US\$50,000 divided into 50,000 shares with par value US\$1.00 each. On September 1, 2017, the authorized share capital of US\$50,000, which represented 50,000 issued shares, was subdivided into 500,000,000 shares.

In February 2018, the Company established a trust to hold 10,000,000 of the Company's issued shares. These ordinary shares were contributed by the founder and held in trust for the benefit of the employees who are under the 2017 Plan to be issued based on the discretion of the board of directors of the Company. The ordinary shares issued to the trust are accounted for as treasury shares of the Company and presented as such for all periods presented. The trust does not hold any other assets or liabilities as at December 31, 2020 and 2021, nor earn any income nor incur any expenses for the years presented.

Upon the completion of the IPO in 2018, all classes of preferred shares of the Company were converted and designated as Class A ordinary shares on a one-for-one basis. 34,248,442 ordinary shares were designated as Class B ordinary share on a one-for-one basis. All the remaining ordinary shares were designated as Class A ordinary shares on a one-for-one basis. In respect of all matters subject to shareholders' vote, each holder of Class A ordinary share is entitled to one and each holder of Class B ordinary share is entitled to ten votes.

Effective December 10, 2021, the Company changed the ratio of ADSs to its Class A ordinary shares (the "ADS Ratio") from the current ADS Ratio of four ADSs to one Class A ordinary share to a new ADS Ratio of two ADSs to five Class A ordinary shares.

16. Share-based compensation

(a) Share option plan

In January 2019, the board of the directors of the Company approved a 2019 Equity incentive plan. The equity incentive plan replaced the 2017 equity incentive plan and 2018 equity incentive plan that the Company previously adopted in their entirety and assumed the awards previously granted under these two plans.

Share-based compensation expense related to the option awards granted to the employees amounted to approximately RMB272.0 million, RMB463.2 million and RMB200.2 million for the years ended December 31, 2019, 2020 and 2021. From time to time some employees of companies under common control of the founder resigned and joined the Group as employees. The related unvested options granted were not modified in connection with the change in status, but future service is still necessary to earn the award over the remaining periods. Accordingly, the share-based compensation expense related to the unvested options were measured as if the related unvested options were newly granted at the date of the change and recognized over the remaining vesting periods. On the date of transfer, total share-based compensation expense measured at fair value amounted to RMB7.5 million, nil and nil for the years ended December 31, 2019, 2020 and 2021, respectively. These expenses are recognized over the remaining vesting periods.

Weighted

The following table summarizes the share option activity for the years ended December 31, 2019, 2020 and 2021:

	Number of options	Weighted Average Exercise Price RMB	Weighted Average Remaining Contractual Life In Years	Aggregate Intrinsic Value RMB'000	Average Grant Date Fair Value RMB
Outstanding at January 1, 2019	12,175,583	0.0007	8.1	1,939,500	33.95
Granted	3,538,204	0.0007			270.11
Exercised	(2,197,104)	0.0007			
Forfeited	(2,170,302)	0.0007			
Outstanding at December 31, 2019	11,346,381	0.0007	7.7	1,079,661	96.29
Granted	2,607,249	0.0007			104.85
Exercised	(3,144,786)	0.0007			
Forfeited	(1,378,694)	0.0007			
Outstanding at December 31, 2020	9,430,150	0.0007	7.2	391,330	78.35
Granted	1,041,585	0.0007			46.77
Exercised	(3,049,281)	0.0007			
Forfeited	(1,041,366)	0.0007			
Outstanding at December 31, 2021	6,381,088	0.0007	6.5	45,236	47.97
Vested and expected to vest at December 31, 2021	6,183,397	0.0007	6.4	43,835	43.29
Exercisable at December 31, 2021	5,317,951	0.0007	5.9	37,700	35.99

The aggregate intrinsic value is calculated as the difference between the exercise price of the options and the estimated fair value of the underlying shares of RMB95.20, RMB41.50 and RMB7.1 (US\$1.11) at December 31, 2019, 2020 and 2021.

The total fair value of share options vested during the years ended December 31, 2019, 2020 and 2021 was RMB326.5 million, RMB346.5 million and RMB115.2 million, respectively. The total intrinsic value of options exercised during the years ended December 31, 2019, 2020 and 2021 were RMB428.3 million, RMB265.2 million and RMB296.7 million, respectively.

As of December 31, 2021, there was RMB122.9 million of unrecognized share-based compensation expense related to share options granted, which were expected to be recognized over a weighted-average vesting period of 0.2 to 1.2 years, respectively. To the extent the actual forfeiture rate is different from the Company's estimate, the actual share-based compensation related to these awards may be different from the expectation.

The binomial option pricing model is used to determine the fair value of the share options granted to employees and non-employees. The fair values of share options granted during the years ended December 31, 2019, 2020 and 2021.

	Options Granted in the year ended December 31, 2019	Options Granted in the year ended December 31, 2020	Options Granted in the year ended December 31, 2021
Expected volatility	49.92%-50.65%	57.77%-58.65%	60.31%-61.94%
Risk-free interest rate	1.80%-2.52%	0.82%-1.09%	1.66%-1.96%
Exercise multiple	2.8	2.8	2.8
Expected dividend yield	— %	— %	— %
Contractual term	10	10	10
Expected forfeiture rate (post-vesting)	0-20%	0-20%	0-20%
Fair value of the common share on the date of option grant			
(RMB)	94.96-310.64	41.50-77.78	7.09-60.19

Notes:

- (i) The risk-free interest rate of periods within the contractual life of the share option is based on the market yield of the Chinese sovereign bond/US government bond with a maturity life equal to the expected life to expiration.
- (ii) The Company has no history or expectation of paying dividends on its ordinary shares.
- (iii) Expected volatility is estimated based on the average of historical volatilities of the comparable companies in the same industry as at the valuation dates.

17. Employee benefits

The full-time employees of the Company's subsidiaries and VIEs that are incorporated in the PRC are entitled to staff welfare benefits including medical insurance, basic pensions, unemployment insurance, work injury insurance, maternity insurance and housing funds. These companies are required to contribute to these benefits based on certain percentages of the employees' salaries in accordance with the relevant regulations and charge the amount contributed to these benefits to the consolidated statements of comprehensive loss. The total amounts charged to the consolidated statements of comprehensive loss for such employee benefits amounted to RMB144.7 million, RMB97.1 million and RMB98.7 million for the years ended December 31, 2019, 2020 and 2021, respectively. The PRC government is responsible for the welfare and medical benefits and ultimate pension liability to these employees.

18. Income Taxes

(a) Cayman Islands

Under the current tax laws of Cayman Islands, the Company is not subject to income, corporation or capital gains tax, and no withholding tax is imposed upon the payment of dividends.

(b) Hong Kong Profits Tax

One of the Company's subsidiaries incorporated in Hong Kong is subject to Hong Kong profit tax at the rate of 8.25% for profit of up to HK\$2.0 million and 16.5% for the remainder of taxable income Dividends income received from subsidiaries in China are not subject to Hong Kong profits tax.

(c) PRC Enterprise Income Tax ("EIT")

On March 16, 2007, the National People's Congress of the PRC enacted an Enterprise Income Tax Law ("EIT Law"), under which Foreign Investment Enterprises ("FIEs") and domestic companies would be subject to EIT at a uniform rate of 25%. The EIT law became effective on January 1, 2008.

The EIT Law also provides that an enterprise established under the laws of a foreign country or region but whose "de facto management body" is located in the PRC be treated as a resident enterprise for PRC tax purposes and consequently be subject to the PRC income tax at the rate of 25% for its global income. The implementing Rules of the EIT Law merely define the location of the "de facto management body" as "the place where the exercising, in substance, of the overall management and control of the production and business operation, personnel, accounting, properties, etc., of a non-PRC company is located."

The EIT Law also imposes a withholding income tax of 10% on dividends distributed by a FIE to its immediate holding company outside of China, if such immediate holding company is considered as a non-resident enterprise without any establishment or place within China or if the received dividends have no connection with the establishment or place of such immediate holding company within China, unless such immediate holding company's jurisdiction of incorporation has a tax treaty with China that provides for a different withholding arrangement. The Cayman Islands, where the Company incorporated, does not have such tax treaty with China. According to the arrangement between Mainland China and Hong Kong Special Administrative Region on the Avoidance of Double Taxation and Prevention of Fiscal Evasion in August 2006, dividends paid by a FIE in China to its immediate holding company in Hong Kong will be subject to withholding tax at a rate of no more than 5% if the immediate holding company in Hong Kong owns directly at least 25% of the shares of the FIE and could be recognized as a Beneficial Owner of the dividend from PRC tax perspective.

Jifen obtained in 2016 its HNTE certificate with a valid period of three years. Therefore, Jifen is eligible to enjoy a preferential tax rate of 15% from 2016 to 2018 to the extent it has taxable income under the EIT Law, as long as it maintains the HNTE qualification and duly conducts relevant EIT filing procedures with the relevant tax authority. The HNTE certificate was renewed in 2019 and is valid for another three years (from 2019 to 2021). However, Jifen has not yet enjoyed the above-mentioned preferential tax treatments due to its loss position and as such there is no impact of these tax holidays on earnings or earnings per share.

In 2020, the Company's subsidiary, Chenxing, was approved the Software Enterprise Status. In accordance with PRC EIT Law, Chenxing is entitled to enjoy full income tax exemption for 2020 and 2021, and a preferential income tax rate of 12.5% for 2022 to 2024.

Reconciliation of the differences between statutory tax rate and the effective tax rate

A reconciliation between the effective income tax rate and the PRC statutory income tax rate is as follows:

	Year e	Year ended December 31,		
	2019 2020		2021	
	%	%	%	
PRC Statutory income tax rates	25.0%	25.0%	25.0%	
Change in valuation allowance	(23.2%)	(13.9%)	(16.9%)	
Permanent book — tax difference	(2.0%)	(9.2%)	(6.1%)	
Difference in EIT rates of certain subsidiaries	0.0%	(2.2%)	(2.5%)	
Total	(0.2%)	(0.3%)	(0.5%)	
Change in valuation allowance Permanent book — tax difference Difference in EIT rates of certain subsidiaries	% 25.0% (23.2%) (2.0%) 0.0%	% 25.0% (13.9%) (9.2%) (2.2%)	% 25. (16. (6. (2.	

Loss from domestic and foreign components before income tax expense (benefit)

The loss before income tax expenses (benefit) for domestic and foreign components' are as follows:

	Year	Year ended December 31,		
	2019	2020	2021	
Domestic	2,404,676	558,657	870,174	
Foreign	279,749	547,517	363,757	
Total	2,684,425	1,106,174	1,233,931	

Composition of income tax expense (benefit)

The current and deferred portions of income tax expense (benefit) included in the consolidated statements of comprehensive loss are as follows:

	Year en	Year ended December 31,		
	2019	2020	2021	
Current income tax expense	7,246	1,396	5,453	
Deferred income tax benefit	(2,403)	(2,404)	(2,403)	
Income tax expense (benefit)	4,843	(1,008)	3,050	

Deferred tax assets and liabilities

The following table sets forth the significant components of the deferred tax assets and deferred tax liabilities:

	As of	
	December 31, 2020	December 31, 2021
Deductible temporary difference to accruals and others	467,706	522,692
Tax losses carried forward	588,548	787,270
Less: Valuation allowance	(1,056,254)	(1,309,962)
Total of deferred tax assets		
Taxable temporary difference related to acquired right to operate an online		
audio/video content platform	18,825	16,422
Total of deferred tax liabilities	18,825	16,422

Deferred tax liability of RMB16.4 million represents the difference between the accounting basis and tax basis of the acquired right to operate an online audio/video content platform (Note 10) and will be realized over 10 years which is in line with the acquired right's amortization period.

As of December 31, 2019, 2020 and 2021, the PRC entities of the Group had tax loss carryforwards of approximately RMB 2,372.1 million, RMB 2,409.4 million and RMB3,311.9 million, respectively, which can be carried forward to offset taxable income. The carryforwards period for net operating losses under the EIT Law is five years. The net operating loss carryforwards of the Group will start to expire in varying amounts between 2022 and 2027. Other than the expiration, there are no other limitations or restrictions upon the Group's ability to use these operating loss carryforwards. There is no expiration for the advertising expenses carryforwards.

Valuation allowance is provided against deferred tax assets when the Group determines that it is more likely than not that the deferred tax assets will not be utilized in the future. In making such determination, the Group considered factors including future taxable income exclusive of reversing temporary differences and tax loss carry forwards. Valuation allowance was provided for net operating loss carry forward because it was more likely than not that such deferred tax assets will not be realized due to lack of profitable history to support the Group's estimate of its future taxable income. If events occur in the future that allow the Group to realize part or all of its deferred income tax, an adjustment to the valuation allowances will result in a decrease in tax expense when those events occur.

As of December 31, 2020 and 2021, valuation allowances of RMB1,056.3 million and RMB1,310.0 million were provided because it was more likely than not that the Group will not be able to utilize certain tax losses carry forwards and other deferred tax assets generated by its subsidiaries and Affiliated Entities. If events occur in the future that allow the Group to realize more of its deferred tax assets than the presently recorded amount, an adjustment to the valuation allowances will increase income when those events occur.

Movement of valuation allowance is as follows:

	Year	Year ended December 31,		
	2019	2020	2021	
Beginning balance	326,336	985,440	1,056,253	
Current year additions	665,361	100,629	434,837	
Current year reversals	(6,257)	(29,816)	(181,128)	
Ending balance	985,440	1,056,253	1,309,962	

19. Other Operating Income

The Chinese tax bureau implemented a new tax rule which states that for the period between April 1, 2019 to December 31, 2021, companies from selected service industries (i.e. postal services, telecommunication services, modern services and lifestyle services) qualify for, an additional 10 percent super deduction of input VAT in addition to the existing, deductible input VAT. The Company obtained the relevant certificate in 2019 and recorded a benefit from the super deduction of RMB30.3 million, RMB48.7 million and RMB33.1 million in other operating income for the years ended December 31, 2019, 2020 and 2021, respectively. In 2020 and 2021, other operating income also included a VAT related refund of RMB30.0 million and RMB73.0 million, respectively, which was recorded upon receipt.

20. Redeemable non-controlling interests and non-controlling interests

(a) Redeemable non-controlling interests

In November 2018, Fun literature, one of the Company's wholly owned subsidiaries, entered into preferred share purchase agreements with certain third party investors to issue 3,763,440 shares of series A redeemable convertible preferred shares (Fun Series A Preferred Shares) for an aggregate issuance price of US\$14.0 million (RMB 97.1 million).

In March 2019, Fun Literature entered into an additional preferred share agreement with a new third party investor to issue 1,097,212 series A redeemable preferred shares for an aggregate issuance price of US\$4.0 million (RMB27.5 million).

Pursuant to the preferred share agreement, the Fun Series A preferred shareholders have the right to convert all or any portion of their preferred shareholdings into ordinary shares of Fun literature at the initial conversion ratio of 1:1 at any time after the date of issuance of the preferred shares, and the conversion ratio is subject to adjustment for dilution, including but not limited to stock splits, stock dividends and recapitalization. In addition, the Fun Series A Preferred Shares will automatically convert into the Fun Literature's ordinary shares upon the occurrence of a qualified initial public offering (as defined in the share purchase agreement), at the then effective and applicable conversion price.

The other main rights, preferences and privileges of Fun Preferred Shares are as follows:

Dividend rights

If the board of Fun literature declares dividend, the Investors have the same rights as the ordinary shareholders.

Liquidation preferences

In the event of any liquidation, dissolution or winding up of Fun literature, either voluntarily or involuntarily, the Fun preferred shareholders rank pari passu with the ordinary shareholders.

Redemption rights

The Fun preferred shareholders have the right to require Fun literature to purchase all the shares from the Fun preferred shareholders within five years after the closing of the issuance by the holders in the event that (i) a qualified initial public offering has not occurred, or (ii) any material breach of representations and warranties, covenants or obligations made or borne by the Company that cause material adverse effect on any Fun preferred shareholders, or (iii) any the Company engages in willful or fraudulent misconducts that cause material adverse effect on any Fun preferred shareholders. The redemption need to be done within 60 days from the date on which the Fun preferred shareholders raise their written request. The redemption price equals initial investment plus 10% annual compound interests.

Voting rights

The Fun preferred shareholders have the number of votes as equal to the number of shares they hold.

In September 2019, Fun Literature issued 8,794,903 shares of Series B redeemable convertible preferred shares ("Fun Series B Preferred Shares") each to CMC Capital and the Company for cash consideration of US\$50,000,000 from each of them.

In addition to the same preferential rights specified for the Fun Series A preferred shareholders as described above, the Fun Series B preferred shareholders are entitled to (1) a conversion price adjustment down if certain operating metrics are not met around mid 2020 (2) put option to Fun Literature's parent company ("the Company") to purchase at the initial investment plus any declared or accrued but unpaid dividends in the event that a certain business milestone is not met by June 30, 2020, and (3) put option whereas both the Fun Series A and B preferred shareholders have the right to require Fun Literature's parent company to purchase all the shares from them upon (i) an unsuccessful IPO within 5 years starting from the Fun Series B Preferred Shares issuance date or (ii) any material adverse effect caused by Fun Literature Limited or the Company (The preferred shares put option redemption price equals the initial investment plus 4% annual simple interest rate for both Fun Series A and B Preferred Shares).

During 2020, as certain operating metrics were not met, the conversion price to Series B investors was adjusted down to US\$4.307. Furthermore, the Series B put option to Fun Literature's parent mentioned in (2) above was waived. During the fourth quarter of 2020, Fun Literature also transferred 4,643,603 of CMC Capital's Series B preferred shares to the Company for a total consideration of \$20 million.

In December 2020, Fun Literature issued 9,776,007 and 17,676,002 shares of Series C redeemable convertible preferred shares ("Fun Series C Preferred Shares") to certain third-party investors, respectively, for a total consideration of US\$111.8 million (RMB733.2 million), which is net of issuance costs amounting to US\$0.5 million (RMB3.1 million).

The consideration was comprised of US\$55.0 million cash (RMB360.6 million), acquired intangible assets of US\$20.8 million (RMB136.1 million) mainly including developed technology and user data, and contents of US\$36.6 million (RMB240.0 million) from one of the investors (Note 8) which were all measured at fair value on the date of exchange. The acquisition was accounted for as an asset acquisition rather than a business combination because the purchase did not meet the definition of a business under ASU 2017-01. While the Series C preferred shares were issued in December 2020, the transfer of the intangible assets was not completed until January 2021 and therefore the purchased assets are recorded as other-long term assets as of December 31, 2020.

In addition to the same preferential rights specified for the Fun Series A and B preferred shareholders as described above, the Fun Series C preferred shareholders are entitled to (1) a performance-based share transfer feature if certain operating and financial metrics are not met during 2021 (2) call option whereas if certain operating or financial metrics are met, one of the investors has the right to purchase the outstanding shares held by the other preferred share investors and Fun Literature's parent company at a variable exercise price. The performance-based transfer feature did not have material accounting impact and was expired in 2021 with no transfer of shares incurred.

Upon the Fun Series C Preferred Shares issuance, the earliest redemption date for the Fun Series A and B Preferred Shares has been extended to December 31, 2024.

Accounting for redeemable non-controlling interests

Since the Fun Series A, B and C Preferred Shares are redeemable at a determinable price on a determinable date, at the option of the holder, or upon occurrence of an event that is not solely within the control of Fun Literature, the Fun Series A, B and C Preferred Shares are accounted for as redeemable non-controlling interests in the Group's consolidated balance sheets.

Subsequently, the redeemable non-controlling interests should be carried at the higher of (1) the carrying amount after the attribution of net income of the Company (2) the expected redemption value. The Company accretes for the difference between the initial carrying value and the ultimate redemption price using the effective interest rate method (10% annual compound interests) from the issuance dates to the earliest possible redemption date, which is December 31, 2024.

The Company assessed the impact of the extension of the earliest redemption date on the Series A and B Preferred Shares, and concluded that the amendment represented a modification rather than an extinguishment of the preferred shares. The difference of the fair value for the Fun Series A and B Preferred Shares before and after the modification is not material.

For the other preferential rights described above including the conversion price adjustment and the Fun Series A, B and C preferred shareholders' put options to the Company, with the exception of the Series C call option discussed below, the Company concluded that these embedded features do not need to be bifurcated from their host contract as they are either clearly and closely related to the equity host or they do not meet the definition of a derivative.

In terms of the Series B Preferred Shares activity for the year, the downward adjustment of the conversion price did not result in a BCF that needed to be recorded as the ordinary share value on the contingency settlement date was less than the revised conversion price. The waiver of the Series B put option also did not have a material modification impact. For the repurchase of Series B preferred shares by Fun Literature's parent company, the Company's mezzanine equity balance was reduced by the carrying value of the preferred shares, and the difference between the consideration paid of \$20 million (RMB 135.4 million) and the carrying value of RMB14.8 million was recorded in accumulated deficit.

Specifically for the Series C call option, the Company concluded that the option should be separately accounted for and remeasured at fair value at the end of each reporting period as it represents a freestanding financial instrument. For the years ended December 31, 2020 and 2021, the value of the call option was not material.

The Company's redeemable non-controlling interests activities for the years ended in December 31, 2019, 2020 and 2021 are summarized as follows:

	Year	Year ended December 31,		
	2019	2020	2021	
Beginning balance	96,937	495,845	1,093,526	
Issuance of Fun Preferred Shares, net of issuance costs	380,260	733,238	_	
Foreign exchange impact	(1,900)	(37,374)	(30,204)	
Repurchase of Series B Preferred Shares	_	(146,460)	_	
Accretion to redemption value of redeemable non-controlling interests	20,548	48,277	108,896	
Ending balance	495,845	1,093,526	1,172,218	

(b) Non-controlling interests

Non-controlling interests mainly represent the Group's overseas subsidiary's cumulative results of operations and changes in deficit attributable to non-controlling shareholders. The subsidiary was set up by the group and the non-controlling shareholders in May 2018 with nominal capital injection and the Group and non-controlling shareholders own 62.23% and 37.77% equity interests in that subsidiary, respectively. The non-controlling shareholders transferred all their equity interest in the subsidiary to the Company during 2021 for no consideration. The transaction did not have a material accounting impact.

21. Related Party transactions

For the years ended December 31, 2019, 2020 and 2021, the transactions and balance amount due to/from related parties was as follows:

Transaction amount with related parties

	Year ended December 31,		
	2019	2020	2021
Services provided by the Group			
Advertising and marketing service provided to related parties ⁽¹⁾	473,216	250,875	40,263
	Year e	ended Decemb	er 31,
	2019	2020	2021
Services received by the Group			
Advertisement costs charged from a related party ⁽²⁾	35,606	29,206	103,275
Gaming cost sharing charged from a related party ⁽³⁾	6,806	1,845	11
Others advertising and promotional costs charged from a related party ⁽⁴⁾	3,284	4,192	15,840

Balance amount with related parties

	As	of
	December 31, 2020	December 31, 2021
Amount due from related parties ⁽¹⁾	383,594	259,863
Amount due to related parties ^{(2)& (3)}	9,427	6,928
Loan from a related party ⁽⁵⁾	13,050	_

(1) For the year ended December 31, 2019, 2020 and 2021, the service fee of RMB473.2 million, RMB250.9 million and RMB39.8 million charged to related parties represents advertising and marketing services provided to companies under the common control of the founder, to help promote these companies' online applications, which were developed in late 2018.

As of December 31, 2020 and 2021, the amounts due from related parties that pertains to accounts receivable from related party revenues generated was RMB368.5 million and RMB246.5 million respectively.

Out of the accounts receivable from related parties of RMB259.9 million as of December 31, 2021, a total of RMB204.0 million of the balance is overdue. A majority amount of RMB191.5 million of the overdue balance was collected as of this report date. Although the overdue receivables were settled after the due date, and the settlement of the remaining receivables may still be after the due date, as these companies are under the common control of the founder and they have demonstrated an ability to continuously pay off their balances, the Company did not view this delay in payment as a sign of collectability risk.

For the revenue recognized in 2021, payments have not been received as the balances as of December 31, 2021 are still within the nine to twelve months payment terms and expect to be settled within the payment terms.

As of December 31, 2020, in addition to accounts receivable from revenues generated there was also RMB15.1 million which was a fee that the Company prepaid to a related party to place advertisements on behalf of their customers on the related party platform. The balances are settled and recorded as cost of revenues as the advertisement services are provided, and the prepayment was fully utilized during 2021.

- (2) In 2019 the Group entered into CPM (cost per impression) arrangements with media platforms under the common control of the founder for the Group's customer's advertisement placement. The total service fee charged from related parties amounted to RMB35.6 million, RMB29.2 million and RMB103.3 million for the years ended December 31, 2019, 2021 and 2021, respectively.
- (3) In July 2019, the Company invested RMB3.0 million in a game developing company which the founder's controlled entity has significant influence in. The investment was measured using the measurement alternative recorded at cost less any impairment since it does not have a readily determinable fair value. The investment was fully impaired as of December 31, 2021 (Note 6).

In 2019 the Group entered into a game cooperation agreement with this company and the Group is the principal in the arrangement. The total service fee represents the amount paid to this company in relation to the arrangement.

- (4) For the years ended December 31, 2019, 2020 and 2021, the service fee charged from related parties represented the expense charged from companies under common control of the founder which provided the Group advertising and marketing related promotion services.
- (5) The Company borrowed an interest free loan of RMB13.0 million from an entity under common control of the founder in December 2020. The loan was repaid in the first quarter of 2021.

22. Basic and diluted net loss per share

(a) Basic and diluted net loss per share

Basic loss per share and diluted loss per share have been calculated in accordance with ASC 260 on computation of earnings per share for the years ended December 31, 2019, 2020 and 2021 as follows:

	Year ended December 31, 2019	Year ended December 31, 2020	Year ended December 31, 2021
Numerator:			
Net loss attributable to Qutoutiao Inc.	(2,688,681)	(1,104,439)	(1,239,617)
Accretion on redemption value of Series A convertible redeemable preferred shares of a subsidiary (Note 20)	(12,172)	(13,509)	(14,089)
Accretion on redemption value of Series B convertible redeemable preferred shares of a subsidiary (Note 20)	(8,376)	(33,188)	(21,726)
Accretion on redemption value of Series C convertible redeemable preferred shares of a subsidiary (Note 20)	_	(1,580)	(73,081)
Gains on repurchase of convertible redeemable preferred shares of a subsidiary (Note 20)	_	14,842	
Net loss attributable to ordinary shareholders-Basic and diluted	(2,709,229)	(1,137,874)	(1,348,513)
Denominator:			
Denominator for basic and diluted loss per share Weighted- average ordinary shares outstanding			
Basic and diluted	68,749,981	72,513,077	75,767,532
Basic and diluted loss per share	(39.41)	(15.69)	(17.80)
Denominator for basic and diluted loss per ADS Weighted-average ADS outstanding			
Basic and diluted	27,499,992	29,005,231	30,307,013
Basic and diluted loss per ADS	(98.52)	(39.23)	(44.50)

Note:

(1) Options exercisable for a minimal exercise price are included in the denominator of basic loss per share calculation once there are no further vesting conditions or contingencies associated with them, as they are considered contingently issuable shares. Accordingly, the weighted average number of shares of 5,329,287 (2,131,7,15ADSs), 6,141,679 (2,456,672 ADSs) and 5,891,689 (2,356,676ADSs) related to these options, for which the exercise price is RMB 0.0007 per share, are included in the denominator for the computation of basic EPS for the years ended December 31, 2019, 2020 and 2021, respectively.

(2) On December 2, 2021, the Company announced its plans to change the ratio of its American Depositary Shares ("ADSs") to its Class A ordinary shares (the "ADS Ratio") from the current ADS Ratio of four (4) ADSs to one (1) Class A ordinary share to a new ADS Ratio of two (2) ADSs to five (5) Class A ordinary shares. The change in the ADS Ratio became effective on December 10, 2021. For all the periods presented, basic and diluted loss per ADS, including the contingently issuable shares mentioned in (1) above, have been revised assuming the change of ADS ratio from a ratio of four ADSs to one Class A ordinary share to a new Ratio of two ADSs to five Class A ordinary shares occurred at the beginning of the earliest period presented.

Pursuant to ASC 260, "Earnings Per Share," the effects of all other outstanding share options have been excluded from the computation of diluted loss per share for the years ended December 31, 2019, 2020 and 2021 due to their anti-dilutive effect. The following potential ordinary shares were excluded from the computation of diluted net loss per ordinary share for the periods presented because including them would have had an anti-dilutive effect:

	Year e	Year ended December 31,		
	2019	2020	2021	
Share options — weighted average	4,119,918	1,353,808	546,035	

23. Commitments and contingencies

(a) Content fee

The Group has entered into non-cancelable agreements for the use of contents owned by certain content providers. As of December 31, 2021, future minimum payments with respect to these agreements consist of the following:

	RMB	US\$ (Note 2 (e))
Years Ending December 31,		
2022	175,000	27,461
2023	162,000	25,421

(b) Capital and other commitments

As of December 31, 2021, future minimum payments under non-cancellable capital expenditure of the following:

	RMB	US\$ (Note 2 (e))
Years Ending December 31,		
2022	1,344	211
2023	188	30
2024	_	

(c) Litigation

In the ordinary course of the business, the Group is subject to periodic legal or administrative proceedings. In relation to such matters, the Company currently believes that there are no existing claims or proceedings that are likely to have a material adverse effect on its financial position, results of operations or cash flows, within the next twelve months, or the outcome of these matters is currently not determinable. There are many uncertainties associated with any litigation, and these actions or other third-party claims against the Company may cause the Company to incur costly litigation and/or substantial settlement charges. If any of those events were to occur, the Company's business, financial condition, results of operations, and cash flows could be adversely affected. The actual liability in any such matters may be materially different from the Company's estimates, which could result in the need to adjust the liability and record additional expenses.

Shanghai Jifen was named as the defendant in a lawsuit filed in the People's Court of Jiading District in Shanghai in December 2019 on contractual dispute regarding certain advertising placement agreement between Shanghai Jifen and the plaintiff, Shanghai Wenji Culture Communications Co., Ltd. The plaintiff withdrew the original lawsuit and filed it again in the Shanghai No.2 Intermediate People's Court on January 20, 2020 and sought a total payment of RMB103.2 million (US\$14.9 million). The Company had recorded the related marketing expenses under the agreement in the financial statements for fiscal years 2019 and 2020. During 2021, the case was settled and the Company did not incur any litigation charges and the previously frozen cash accounts were also unfrozen during the year.

On August 20, 2020, the Company and certain of its current and former directors and officers were named as defendants in a putative shareholder class action lawsuit filed in the United States District Court for the Southern District of New York. This action is brought on behalf of a putative class of persons who purchased or acquired the Company's securities pursuant or traceable to the Company's September 2018 initial public offering or April 2019 secondary public offering, or otherwise acquired the Company's securities between September 14, 2018 and December 16, 2020 (the "Putative Class Period"). The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933, Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and Rule 10b-5 promulgated thereunder based on alleged materially false or misleading statements or omissions in offering documents and/ or issued throughout the Putative Class Period. Lead Plaintiff was appointed, and a consolidated amended complaint was filed on January 15, 2021. The Company filed a motion to dismiss such amended complaint and there were no significant developments in the case. No loss contingency was accrued as of December 31, 2021, since it is not probable that a liability has been incurred and the amount of loss cannot be reasonably estimated.

24. Restricted net assets

Relevant PRC laws and regulations permit payments of dividends by the Group's subsidiary and the VIEs incorporated in the PRC only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. In addition, the Group's subsidiary and the VIEs in the PRC are required to annually appropriate 10% of their net after-tax income to the statutory general reserve fund prior to payment of any dividends, unless such reserve funds have reached 50% of their respective registered capital. As a result of these and other restrictions under PRC laws and regulations, the Group's subsidiary and the VIEs subsidiary incorporated in the PRC are restricted in their ability to transfer a portion of their net assets to the Company either in the form of dividends, loans or advances. There are no significant differences between US GAAP and PRC accounting standards in connection with the reported net assets of the legally owned subsidiary in the PRC and the VIEs. Even though the Company currently does not require any such dividends, loans or advances from the PRC entities for working capital and other funding purposes, the Company may in the future require additional cash resources from them due to changes in business conditions, to fund future acquisitions and development, or merely to declare and pay dividends or distributions to our shareholders. Furthermore, cash transfers from the Company's PRC subsidiaries to their parent companies outside of China are subject to PRC government control of currency conversion. Shortages in the availability of foreign currency may temporarily delay the ability of the PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to the Company, or otherwise satisfy their foreign currency denominated obligations. Except for the above, there is no other restriction on use of proceeds generated by the Group's subsidiary and the VIEs to satisfy any obligations of the Company.

Since the Group has a consolidated shareholders' deficit, its net asset base for purposes of calculating the proportionate share of restricted net assets of consolidated subsidiaries should be zero. Therefore, the restrictions placed on the net assets of the Company's PRC subsidiaries with positive equity would result in the 25 percent threshold being exceeded and a corresponding requirement to provide parent company financial information (See Additional Information: Condensed Financial Statements of Parent Company).

25. Subsequent events

The Company and Alibaba entered into supplemental agreements to the original convertible loan agreement on March 28, 2022 and April 29, 2022, which has extended the maturity date to May 28, 2022. The April 29, 2022 supplement agreement also provides that the maturity date of the Convertible Loan shall not be extended beyond May 28, 2022 without the prior consent of Alibaba. The Company has made several undertakings under the supplemental agreement dated April 29, 2022, including, among others, an undertaking to pay US\$3,000,000 as a part of the accrued interest of the Convertible Loan to Alibaba no later than May 15, 2022. The interest rate of the Convertible Loan has also been amended from the original compound rate of 3% per annum to a compound rate of 9% per annum plus a simple rate of 3% per annum, calculated from the original loan drawdown date of April 4, 2019. The principal and accumulated interest of the Convertible Loan, including the incremental interest under the supplemental agreements as mentioned above, will amount to approximately US\$240.4 million (RMB1.5 billion) as of May 28, 2022. The Convertible Loan is convertible into the Company's Class A ordinary shares at Alibaba's option on the 60th calendar day following the maturity date or a date falling on or after the occurrence of an event of default.

ADDITIONAL INFORMATION: CONDENSED FINANCIAL STATEMENTS OF PARENT COMPANY

Rules 12-04(a) and 4-08(e)(3) of Regulation S-X require condensed financial information as to the financial position, cash flows and results of operations of a parent company as of and for the same periods for which the audited consolidated financial statements have been presented when the restricted net assets of the consolidated and unconsolidated subsidiaries together exceed 25% of consolidated net assets as of the end of the most recently completed fiscal year.

The following condensed financial statements of the Parent Company have been prepared using the same accounting policies as set out in the Company's consolidated financial statements except that the Parent Company used the equity method to account for its investment in its subsidiaries and VIEs. Such investment is presented on the separate condensed balance sheets of the Parent Company as "Payables to subsidiaries and VIEs". The Parent Company, its subsidiaries and VIEs were included in the consolidated financial statements whereby the inter-company balances and transactions were eliminated upon consolidation. The Parent Company's share of income from its subsidiaries and VIEs is reported as share of income from subsidiaries and VIEs in the condensed financial statements.

The Parent Company is a Cayman Islands company and, therefore, is not subjected to income taxes for all years presented. The footnote disclosures contain supplemental information relating to the operations of the Company and, as such, these statements should be read in conjunction with the notes to the consolidated financial statements of the Company. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted.

As of December 31, 2021, there were no material commitments or contingencies, significant provisions for long-term obligations or guarantees of the Company, except for those which have been separately disclosed in the consolidated financial statements, if any.

Condensed Financial Information of the Parent Company

BALANCE SHEETS

		As of	
	December 31, 2020 RMB	December	31, 2021 US\$ (Note2(e))
ASSETS	RNIB	RMB	US\$ (Note2(e))
Current assets:			
Cash and cash equivalents	1,933	19,633	3,081
Short-term investments	_	_	_
Amount due from subsidiaries and VIEs of the Company	3,612,625	3,521,857	552,656
Prepayments and other current assets	3,619	4,605	723
Total current assets	3,618,177	3,546,095	556,460
Other non-current assets	4,266	2,645	415
Long-term Investment	27,589		_
Total non-current assets	31,855	2,645	415
Total assets	3,650,032	3,548,740	556,875
LIABILITIES, MEZZANINE EQUITY AND SHAREHOLDERS' DEFICIT	5,050,052	5,5 10,7 10	550,075
Current liabilities:			
Accrued expenses and other current liabilities	2,512	3,312	519
Amounts due to subsidiaries and VIEs of the Company	153,504	281,201	44,127
Convertible loan - current		1,182,963	185,633
Total current liabilities	156,016	1,467,476	230,279
Non-current liabilities:	150,010	1,407,470	250,275
Convertible loan	1,174,868	_	_
Other non-current liabilities	4,256	1,733	272
Investment deficit of subsidiaries and VIEs	3,595,666	4,469,087	701,297
Total non-current liabilities	4,774,790	4,470,820	701,569
Total liabilities	4,930,806	5,938,296	931,848
Shareholders' deficit:	4,330,000	3,330,230	331,040
Class A ordinary shares (US\$0.0001 par value, 50,000,000 shares authorized as of			
December 31, 2020 and 2021; 40,812,245 shares issued as of December 31, 2020 and 2021,			
35,321,611 shares and 38,370,892 shares outstanding as of December 31, 2020 and 2021)	23	26	4
Class B ordinary shares (US\$0.0001 par value; 34,248,442 shares authorized as of	20	20	
December 31, 2020 and 2021; 32,937,193 shares issued and outstanding as of December 31,			
2020 and 2021)	24	24	4
Additional paid-in capital	4,784,315	4,979,353	781,369
Treasury stock (US\$0.0001 par value; 7,490,634 and 4,441,353 shares as of December 31, 2020 and			,
December 31, 2021, respectively)	(142,229)	(142,229)	(22,319)
Accumulated other comprehensive loss	84,320	129,010	20,245
Accumulated deficit	(6,007,227)	(7,355,740)	(1,154,276)
Total shareholders' deficit	(1,280,774)	(2,389,556)	(374,973)
Total liabilities and shareholders' deficit	3,650,032	3,548,740	556,875
			

STATEMENTS OF COMPREHENSIVE LOSS

		Year ended December 31,		
	2019	2020		021
O	RMB	RMB	RMB	US\$ (Note 2 (e))
Operating expenses: General and administrative	(207.027)	(471 720)	(200 504)	(22.722)
	(287,027)	(471,730)	(208,594)	(32,733)
Total operating expenses	(287,027)	(471,730)	(208,594)	(32,733)
Loss from operations	(287,027)	(471,730)	(208,594)	(32,733)
Investment income (loss)	_	_	(27,589)	(4,330)
Interest income	44,271	2,819	_	_
Interest expense	(26,878)	(36,774)	(30,683)	(4,814)
Foreign exchange related gains, net	_	(7)	_	_
Other income/(expenses), net	_	(42)	(41)	(6)
Loss from subsidiaries and VIEs	(2,419,047)	(598,705)	(972,710)	(152,640)
Loss before provision for income taxes	(2,688,681)	(1,104,439)	(1,239,617)	(194,523)
Provision for income taxes	_	_		_
Net loss	(2,688,681)	(1,104,439)	(1,239,617)	(194,523)
Accretion to convertible redeemable preferred shares redemption value	_			_
Accretion to redemption value of convertible redeemable preferred shares of a				
subsidiary	(20,548)	(48,277)	(108,896)	(17,088)
Gains on repurchase of convertible redeemable preferred shares of a subsidiary	_	14,842	_	_
Net loss attributable to ordinary shareholders	(2,709,229)	(1,137,874)	(1,348,513)	(211,611)
Net loss	(2,688,681)	(1,104,439)	(1,239,617)	(194,523)
Foreign currency translation adjustment, net of nil tax	(1,505)	102,254	44,690	7,013
Comprehensive loss	(2,690,186)	(1,002,185)	(1,194,927)	(187,510)

STATEMENTS OF CASH FLOWS

	2019	2020		2021
	RMB	RMB	RMB	US\$ (Note 2 (e))
Cash flows provided by/(used in) operating activities	39,183	(354)	(14,807)	(2,323)
Cash flows provided by/(used in) investing activities	(3,327,606)	(10,008)	(32,506)	(5,101)
Cash flows provided by/(used in) financing activities	1,397,382	(135,744)	_	_
Effect of exchange rate changes on cash	15,904	(240)	1	
Net increase in cash and cash equivalents	(1,875,137)	(146,346)	17,700	2,778
Cash and cash equivalents, beginning of year	2,023,416	148,279	1,933	303
Cash and cash equivalents, end of year	148,279	1,933	19,633	3,081

Amounts previously reported for 2020 have been revised, which revisions, in the opinion of management, are immaterial. The impact of the revisions was eliminated in consolidation. There is no impact on the previously reported consolidated financial position, results of operations or cash flows.

The intercompany payables due to subsidiaries and VIE's as of December 31, 2020 have been revised to reflect reclassification adjustments with an increase of RMB3.6 billion in current assets (amounts due from subsidiaries and VIEs of the Company), an increase of RMB27.6 million in non-current assets (long-term investment), an increase of RMB153.5 million in current payables (amounts due to subsidiaries and VIEs of the Company), and an increase of RMB3.5 billion in non-current liabilities (investment deficit of subsidiaries and VIEs).

THIRD SUPPLEMENTAL AGREEMENT

THIS THIRD SUPPLEMENTAL AGREEMENT (this "**Agreement**") is made effective as of April 29, 2022 by and between QUTOUTIAO INC., an exempted company with limited liability incorporated under the laws of the Cayman Islands and listed on NASDAQ with stock code "QTT" (the "**Borrower**" or the "**Company**"), and ALIBABA.COM HONG KONG LIMITED, a business company incorporated under the laws of Hong Kong (the "**Lender**", and together with the Company, the "**Parties**").

WITNESSETH

WHEREAS, the Company and ALIBABA INVESTMENT LIMITED (the "Original Lender") are parties to that certain Convertible Loan Agreement dated March 28, 2019 (the "Original Convertible Loan Agreement"), as amended by certain extension letter agreements dated October 3, 2019, March 21, 2020, September 20, 2020 and September 19, 2021, respectively, that a supplemental agreement dated December 25, 2020 and a second supplemental agreement dated March 28, 2022 (the "Second Supplemental Agreement") (the Original Convertible Loan Agreement together with aforementioned extension letters and supplement agreements, the "Loan Agreement"), whereby the Company had borrowed from the Original Lender an aggregate principal amount of US\$171,050,940 (the "Loan").

WHEREAS, the Original Lender has assigned the Loan, together with all of its rights and obligations under the Loan Agreement, to the Lender pursuant to that certain assignment and assumption agreement dated March 24, 2020.

WHEREAS, the Parties desire to further amend the Loan Agreement and the Second Supplemental Agreement in certain respects.

NOW, **THEREFORE**, in consideration of the mutual covenants contained herein, and intending to be legally bound hereby, the Parties hereby agree as follows:

- 1. Capitalized terms used but not otherwise defined in this Agreement shall have the meaning given in the Loan Agreement or the Second Supplemental Agreement, as the case may be.
- 2. Notwithstanding anything to the contrary contained in the Loan Agreement or the Second Supplemental Agreement, the Parties hereby agree that:
 - (a) in order to induce the Lender to agree to extend the Initial Repayment Date pursuant to Section 2(c) below, the Company agrees and undertakes to the Lender that it will use its best efforts to prepare and deliver (i) an annual budget and business plan of the Group (excluding Fun Literature and its Subsidiaries solely for the purposes of this Section 2, the "QTT Group") for the twelve-month period from June 1, 2022 to May 31, 2023 (the "Target Period") on a monthly basis (the "QTT Target Budget"), (ii) an annual budget and business plan of Fun Literature and its Subsidiaries (for the avoidance of doubt including any entity Controlled by Fun Literature through contractual arrangements, the "Fun Literature Group") for the Target Period on a monthly basis (the "Fun Literature Target Budget"), and (iii) a repayment plan in reasonable detail for all principal amounts outstanding in respect of the Loan, all accrued and unpaid interest and any other amounts due or outstanding under the Loan Agreement, and in each case of the foregoing (i) to (iii), to the Lender's satisfaction and as soon as practicable after the date of this Agreement but in any event no later than May 28, 2022;

- (b) notwithstanding any provision to the contrary contained in the Loan Agreement and in order to induce the Lender to agree to extend the Initial Repayment Date pursuant to Section 2(c) below, the Company agrees and undertakes to the Lender that (i) it will repay (or cause to be repaid) US\$3,000,000 as a part of the interest accrued under the Loan Agreement to the Lender as soon as practicable after the date of this Agreement but in any event no later than May 15, 2022; and (ii) following the date hereof, without the Lender's prior written consent it will not directly or indirectly (x) make any investment in Fun Literature Group, (y) provide any loan to, or security in favour of, Fun Literature Group or (z) otherwise increase the Net Liabilities owed by Fun Literature Group to QTT Group; "Net Liabilities" means the product of (A) the aggregate Liabilities owed by Fun Literature Group to QTT Group; minus (B) the aggregate Liabilities owed by QTT Group to Fun Literature Group (if any), and "Liability" means any liability or obligation whether known or unknown, whether asserted or unasserted, whether determined, determinable or otherwise, whether absolute or contingent, whether accrued or unaccrued, whether liquidated or unliquidated, whether directly incurred or consequential, whether due or to become due, which for the avoidance of doubt shall include, without limitation, any shareholder loan and interest thereon and accounts payable; and
- (c) in consideration of the undertakings made by the Company in Section 2(a) to Section 2(b) above, the Lender agrees that the Initial Repayment Date shall be further extended to May 28, 2022; provided that in no event shall the Initial Repayment Date or the Repayment Date be further extended after May 28, 2022 without the Lender's prior written consent, which consent may be withheld, delayed or conditioned in the sole and absolute discretion of the Lender.
- 3. Each Party hereby represents and warrants to the other Party that (i) it has all requisite power, authority and capacity to enter into this Agreement, and to perform its obligations hereunder; (ii) this Agreement has been duly authorized, executed and delivered by it; and (iii) this Agreement, when executed and delivered by it, will constitute its valid and legally binding obligations.
- 4. The Company will take all necessary actions and sign all necessary documents to provide all necessary waivers, consents and approvals, and to procure all of its shareholders to provide all necessary waivers, consents and approvals, in respect of the execution, delivery and performance of this Agreement and the transactions contemplated hereby.
- 5. The Company hereby acknowledges and agrees that this Agreement forms an integral part of the Loan Agreement for all purposes thereof. Any reference to the Loan Agreement shall hereinafter be deemed to be a reference to the Loan Agreement, as amended by this Agreement.
- 6. To the extent that any of the provisions of this Agreement are inconsistent with the provisions in the Loan Agreement and/or the Second Supplemental Agreement, the provisions of this Agreement shall prevail. To the extent not inconsistent with the provisions in this Agreement, the Loan Agreement remains unchanged, unaltered and in full force and effect and is hereby reaffirmed in its entirety.
- 7. This Agreement may not be amended except by a written agreement executed by the Parties.
- 8. The following provisions of the Loan Agreement shall be expressly incorporated herein by reference (and read so as to apply to this Agreement): Clauses 10 (Assignment), 11 (Notices and Service of Proceedings), 12 (Miscellaneous) and 13 (Governing Law; Jurisdiction).

[Signature Pages Follow]

The party hereto has caused this Agreement to be duly executed by its authorized directors or officers as of the date first written above.

Borrower

/s/ TAN Siliang

For and on behalf of **QUTOUTIAO INC.**Name: TAN Siliang
Title: Director

[Signature Page to Third Supplemental Agreement to Convertible Loan Agreement—Qutoutiao Inc.]

The party hereto has caused this Agreement to be duly executed by its authorized directors or officers as of the date first written above.

<u>Lender</u>

ALIBABA.COM HONG KONG LIMITED

By: /s/ OU CHIA-LIN

Name: OU CHIA-LIN Title: Authorised Signatory

[Signature Page to Third Supplemental Agreement to Convertible Loan Agreement—Qutoutiao Inc.]

LIST OF PRINCIPAL SUBSIDIARIES AND CONSOLIDATED VARIABLE INTEREST ENTITY AND ITS SUBSIDIARIES OF QUTOUTIAO INC.

Subsidiaries	Jurisdiction of Incorporation
InfoUniversal Limited	Hong Kong
Qtech USA Inc.	Delaware, United States
QTT Asia Ltd.	British Virgin Islands
Fun Literature Limited	Cayman Islands
Fun Literature (HK) Limited Shanghai Quyun Internet Technology Co. Ltd * L海斯薩國教科共左照八哥	Hong Kong
Shanghai Quyun Internet Technology Co., Ltd.* 上海趣蕴网络科技有限公司	PRC
Shanghai Dianguan Internet Technology Co., Ltd.* 上海点冠网络科技有限公司	PRC
Shanghai Zhicao Information Technology Co., Ltd.* 上海纸草信息科技有限公司	PRC
Shanghai Chenxing Software Technology Co., Ltd.* 上海臣星软件技术有限公司	PRC
Shanghai Yanmo Software Technology Co., Ltd.* 上海研墨软件技术有限公司	PRC
Shanghai Shuqin Information Technology Co., Ltd.* 上海书沁信息科技有限公司	PRC
Shanghai Wennuo Information Technology Co., Ltd.*上海闻诺信息技术有限公司	PRC
Hainan Mengbang Network Technology Co., Ltd. *海南萌邦网络科技有限公司	PRC
Shanghai Luoshi Software Technology Co., Ltd.*上海洛时软件技术有限公司	PRC
Shanghai Xiaying Software Technology Co., Ltd.*上海夏映软件技术有限公司	PRC
Consolidated Variable Interest Entity ("VIE")	Jurisdiction of Incorporation
Shanghai Jifen Culture Communications Co., Ltd.* 上海基分文化传播有限公司	PRC
Beijing Churun Internet Technology Co., Ltd.* 北京础润网络科技有限公司	PRC
Shanghai Big Rhinoceros Horn Information Technology Co., Ltd.* 上海大犀角信息科技有限公司	PRC
Anhui Zhangduan Internet Technology Co., Ltd.* 安徽掌端网络科技有限公司	PRC
Shanghai DragonS Information Technology Co., Ltd.* 上海龙殊信息科技有限公司	PRC
Hubei Rapid Information Technology Co., Ltd.* 湖北捷兔信息科技有限公司	PRC
Shanghai Tuohuan Information Technology Co., Ltd.*上海拓欢信息科技有限公司	PRC
Shanghai Ququanquan Information Technology Co., Ltd.*上海趣圈圈信息科技有限公司	PRC
Shanghai Xunkai Information Technology Co., Ltd.*上海迅凯信息科技有限公司	PRC
Huaian Beixia Information Technology Co., Ltd.*淮安北夏信息技术有限公司	PRC
Shanghai Douzao Internet Technology Co., Ltd.*上海豆皂网络科技有限公司	PRC
Shanghai Yuanyin Information Technology Co., Ltd. *上海元迎信息科技有限公司	PRC
Shanghai Kuaishen Information Technology Co., Ltd. *上海快盛信息技术有限公司	PRC
Shanghai Guatian Network Technology Co., Ltd. *上海瓜甜网络科技有限公司	PRC
2g	1110
Subsidiaries of the Consolidated VIE	Jurisdiction of Incorporation
Beijing Qukandian Internet Technology Co., Ltd.* 北京趣看点网络科技有限公司	PRC
Shanghai Xike Information Technology Service Co., Ltd.*上海溪客信息技术服务有限公司	PRC
Shanghai Tuile Information Technology Co., Ltd.* 上海推乐信息技术服务有限公司	PRC
Tianjin Quwen Internet Technology Co., Ltd.* 天津趣闻网络科技有限公司	PRC
Beijing Supreme Pole International Sports Promotion Co., Ltd.* 北京太极国际体育发展有限责任公司	PRC
Shanghai Heitu Internet Technology Co., Ltd.*上海黑兔网络科技有限公司	PRC
Shanghai Zheyun Internet Technology Co., Ltd.*上海喆云网络科技有限公司	PRC
Shanghai Manchuan Information Technology Co., Ltd.*上海漫川信息科技有限公司	PRC
Shanghai Yunxi Information Technology Co., Ltd.*上海芸晞信息科技有限公司	PRC
Hubei Xijie Information Technology Co., Ltd.*湖北熙捷信息科技有限公司	PRC
Shanghai Songmang Internet Technology Co., Ltd.*上海松芒网络科技有限公司	PRC
Shanghai Miaoqu Internet Technology Co., Ltd.*上海妙趣网络科技有限公司	PRC
Shanghai Xixia Information Technology Co., Ltd.*上海夕夏信息科技有限公司	PRC

Shanghai Mili Information Technology Co., Ltd.*上海米立信息科技有限公司 Shanghai Kunjie Information Technology Co., Ltd.*上海昆捷信息科技有限公司	PRC PRC
Hubei Qingluo Information Technology Co., Ltd.*湖北青螺信息科技有限公司	PRC
Hubei Qingluo Information Technology Co., Ltd. Shanghai Branch *湖北青螺信息科技有限公司上海游胜信息科技	1110
分公司	PRC
Shanghai Guanji Information Technology Co., Ltd. *上海观际信息科技有限公司	PRC
Shanghai Yimao Information Technology Co., Ltd. *上海艺猫信息科技有限公司	PRC
Shanghai Xier Information Technology Co., Ltd.* 上海西耳信息科技有限公司	PRC
Shanghai Yixun Information Technology Co., Ltd.* 上海亿汛信息科技有限公司	PRC
Hainan Jingxuan Information Technology Co., Ltd. *海南槿轩信息科技有限公司	PRC

^{*} The English name of this subsidiary, consolidated VIE or subsidiary of consolidated VIE, as applicable, has been translated from its Chinese name.

Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Eric Siliang Tan, certify that:

- 1. I have reviewed this annual report on Form 20-F of Qutoutiao Inc. (the "Company");
- 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 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: May 2, 2022

By: /s/ Eric Siliang Tan

Name: Eric Siliang Tan

Title: Chairman and Chief Executive Officer

Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Xiaolu Zhu, certify that:

- 1. I have reviewed this annual report on Form 20-F of Qutoutiao Inc. (the "Company");
- 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 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: May 2, 2022

By: /s/ Xiaolu Zhu

Name: Xiaolu Zhu

Title: Chief Financial Officer

Certification by the Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Qutoutiao Inc. (the "Company") on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Eric Siliang Tan, 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: May 2, 2022

By: /s/ Eric Siliang Tan

Name: Eric Siliang Tan

Title: Chairman and Chief Executive Officer

Certification by the Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Qutoutiao Inc. (the "Company") on Form 20-F for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Xiaolu Zhu, 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: May 2, 2022

By: /s/ Xiaolu Zhu

Name: Xiaolu Zhu

Title: Chief Financial Officer

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-229673 and 333-257224) and Form F-3 (No. 333-234779) of Qutoutiao Inc. of our report dated May 2, 2022 relating to the financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers Zhong Tian LLP Shanghai, People's Republic of China May 2, 2022



上海市淮海中路999号 上海环贸广场写字楼一期16-18层 邮编200031

17th Floor, One ICC, Shanghai ICC 999 Huai Hai Road 200031 Shanghai P. R. China

T +86 21 2412 6000 F +86 21 2412 6150

www.kwm.com

May 2, 2022

To: Qutoutiao Inc.

Building No. 8, Shanghai Pudong Software Park 519 Yi De Road, Pudong New Area Shanghai 200124 People's Republic of China +86-21-5889-0398

Re: Annual Report on Form 20-F of Qutoutiao Inc.

Dear Sirs:

We are qualified lawyers of the People's Republic of China (the "PRC", for purposes of this consent, excluding the Hong Kong Special Administrative Region, the Macau Special Administrative Region and Taiwan) and as such, are qualified to advise on the laws and regulations of the PRC effective as at the date hereof.

We are acting as the PRC counsel to Qutoutiao Inc. (the "Company"), an exempted company incorporated under the laws of the Cayman Islands, in connection with the Company's Annual Report on Form 20-F for the fiscal year ended December 31, 2021 (the "2021 Annual Report").

We consent to the reference to our firm under the headings "Item 3. Key Information—D. Risk Factors" and "Item 4. Information on the Company—D. Organizational Structure" in the Company's 2021 Annual Report, which will be filed with the Securities and Exchange Commission (the "SEC"). We also consent to the filing with the SEC of this consent letter as an exhibit to the 2021 Annual Report.

In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, or under the Securities Exchange Act of 1934, in each case, as amended, or the regulations promulgated thereunder.

Yours faithfully,

/s/ King & Wood Mallesons

King & Wood Mallesons