SECU	UNITED STATES URITIES AND EXCHANGE COMM Washington, D.C. 20549	ISSION
-	FORM 20-F	
(Mark One)	CONTRACTOR AND	—
☐ REGISTRATION STATEMENT PURSUANT TO SEC		URITIES EXCHANGE ACT OF 1934
	OR	
	• •	
For	r the fiscal year ended December 31,	2022.
☐ TRANSITION REPORT PURSUANT TO SECTION	13 OR 15(d) OF THE SECURITIES	EXCHANGE ACT OF 1934
For	the transition period from	to
	OR	
☐ SHELL COMPANY REPORT PURSUANT TO SECT	TON 13 OR 15(d) OF THE SECURI	TIES EXCHANGE ACT OF 1934
Date	of event requiring this shell company	report
	Commission file number: 001-38313	3
	iClick Interactive Asia Group Limite	ed
(Exac	t name of Registrant as specified in its	charter)
	N/A	
(Tr	ranslation of Registrant's name into Eng	glish)
	Cayman Islands	
(Jı	urisdiction of incorporation or organiza	tion)
	15/F	
•	ity Millennia Plaza 663 King's Road, Q	- 5 5
Hong Kong S	A.R., People's Republic of China Tel:	
	(Address of principal executive offices	
	David Zhang, Chief Financial Officer	r
	15/F	
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H .V .C	663 King's Road, Quarry Bay	.052.2700.0000
Hong Kong S	A.R., People's Republic of China Tel:	+852 3700 9000
(Nama Talanhana E mail	E-mail: david.zhang@i-click.com and/or Facsimile number and Address	of Company Contact Percon)
•	red or to be registered pursuant to Secti	
Title of each class American Depositary Shares, one representing five Class A	Trading Symbol ICLK	Name of each exchange on which registered NASDAQ Global Market
ordinary shares, par value US\$0.001 per share* *Not for trading, but only in connection with the listing on the Nasdaq Global Market of American depositary shares.	1521	THIS TIQ GOOD THE HE
Securities registered or to be registered pursuant to Section 12(g)	of the Act:	
	None	
	(Title of Class)	
Securities for which there is a reporting obligation pursuant to Se	ction 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. As of December 31, 2022, there were 50,045,657 ordinary shares outstanding, par value \$0.001 per share, being the sum of 45,011,230 Class A ordinary shares and 5,034,427 Class B ordinary shares.

Indicate by check mark if the registrant is a well-know	wn seasoned issuer, as defined in Rule	405 of the Securities Act.	
	☐ Yes ⊠ N	0	
If this report is an annual or transition report, indicate Exchange Act of 1934.	by check mark if the registrant is not	required to file reports pursuant to	Section 13 or 15(d) of the Securities
	☐ Yes ⊠ N	0	
Indicate by check mark whether the registrant: (1) has preceding 12 months (or for such shorter period that to $90 \ \text{days}$.			
	⊠ Yes □ N	0	
Indicate by check mark whether the registrant has sub 232.405 of this chapter) during the preceding 12 mon			
	⊠ Yes □ N	0	
Indicate by check mark whether the registrant is a largacelerated filer" in Rule 12b-2 of the Exchange Act.		r, or a non-accelerated filer. See de	efinition of "accelerated filer and large
Large accelerated filer. \square	Accelerated filer \square	Non-accelerated filer \boxtimes	Emerging growth company \square
If an emerging growth company that prepare its finan extended transition period for complying with any ne			
Indicate by check mark whether the registrant has file reporting under Section 404(b) of the Sarbanes-Oxley			
If securities are registered pursuant to Section 12(b) α correction of an error to previously issued financial st		ther the financial statements of the	e registrant included in the filing reflect the
Indicate by check mark whether any of those error co registrant's executive officers during the relevant reco			based compensation received by any of the
Indicate by check mark which basis of accounting the	e registrant has used to prepare the fina	ncial statements included in this f	iling:
U.S. GAAP ⊠	International Financial Reporting by the International Accounting	_	Other 🗆
If "Other" has been checked in response to the previo	ous question, indicate by check mark w	hich financial statement item the i	registrant has elected to follow.
	☐ Item 17 ☐ Ite	em 18	
If this is an annual report, indicate by check mark wh	ether the registrant is a shell company	(as defined in Rule 12b-2 of the E	Exchange Act).
	□ Yes ⊠ N	0	
(APPLICABLE ONLY TO ISSUERS INVOLVED IN	N BANKRUPTCY PROCEEDINGS D	URING THE PAST FIVE YEAR	.S)
Indicate by check mark whether the registrant has file subsequent to the distribution of securities under a pla		o be filed by Sections 12, 13 or 15	5(d) of the Securities Exchange Act of 1934
	□ Yes □ N	0	
Of the 45,011,230 Class A ordinary shares as of Dece exercised (whether or not they are vested) and the opt Bank N.A., our depositary, underlying the unvested re	tions reserved for issuance under our 2	018 Šhare Incentive Plan, and (ii)	
The term "new or revised financial accounting standa after April 5, 2012.	ard" refers to any update issued by the	Financial Accounting Standards B	Board to its Accounting Standards Codification

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CONVENTIONS THAT APPLY TO THIS ANNUAL REPORT

Unless otherwise indicated and except where the context otherwise requires, references in this annual report to:

- "active profiled user" refers to a profiled user whom we are able to detect that he/she has online activities during a specific
 measurement period. A "profiled user" refers to a user whom we have collected sufficient information from his/her online
 activities to establish a descriptive understanding of the person;
- "ADSs" refers to our American depositary shares. Two ADSs represent one Class A ordinary share before November 14, 2022, and one ADS represent five Class A ordinary shares effective from November 14, 2022;
- "Beijing WFOE" refers to our wholly foreign owned enterprise, iClick Data Technology (Beijing) Limited, which is the
 primary beneficiary of the VIE;
- "China" or "PRC" refers to the People's Republic of China, including mainland China, Hong Kong and Macau and, only
 for the purpose of this annual report, excluding Taiwan; the only instances in which "China" or "the PRC" do not include
 Hong Kong or Macau are when used in the case of laws and regulations, including, among others, tax matters, adopted by
 the People's Republic of China; the legal and operational risks associated with operating in China also apply to our
 operations in Hong Kong;
- "Company" refers to iClick Interactive Asia Group Limited;
- "direct marketer clients" refers to marketers that have direct contractual relationship with us;
- "end marketers," or "marketers" refers to marketers that we serve, either directly or through marketing agencies, regardless
 if they have direct contractual relationship with us;
- "HK\$" or "Hong Kong dollars" refers to the legal currency of Hong Kong;
- "independent online marketing technology platforms" refers to online marketing technology platforms (i) which are not
 owned by any group which owns online publishing resources, or (ii) which do not own any online publishing resources;
- "marketing solutions" refers to mobile marketing solutions and other marketing solutions;
- mobile apps or websites "covered" refers to the mobile apps or websites from which we are able to receive data to build user profiles;
- "multinational companies" refer to companies that own or control production of goods or provision of services in one or more countries other than their home countries;
- "online marketing technology platforms" refers to online marketing platforms which, through a combination of marketing strategies and technologies, assist marketers in optimizing their marketing resources;
- "ordinary shares" refer to our Class A and Class B ordinary shares, par value US\$0.001 per share;
- "our clients" refers to entities which enter into sales contracts with us and incur spending during the relevant period;
- "RMB" or "Renminbi" refers to the legal currency of China;
- "software-as-a-service" refers to SaaS;
- "we," "us," "our company" or "our" refer to iClick Interactive Asia Group Limited and its subsidiaries;
- "\$," "US\$," "dollars" or "U.S. dollars" refers to the legal currency of the United States;
- "VIE" refers to Beijing OptAim Network Technology Co., Ltd.;

- "VIE entities" refers to Beijing OptAim Network Technology Co., Ltd. and its subsidiaries; and
- "WFOE" refers to wholly foreign owned enterprise under the laws of the People's Republic of China.

Our financial statements are expressed in the U.S. dollar, which is our reporting currency. Certain of our financial data in this annual report on Form 20-F are translated into U.S. dollars solely for the reader's convenience. Unless otherwise noted, all convenience translations from Renminbi to U.S. dollars, and from Hong Kong dollars to U.S. dollars, in this annual report on Form 20-F were made at a rate of RMB6.8972 to US\$1.00, and HKD7.8015 to US\$1.00, respectively, which were the exchange rates set forth in the H.10 statistical release of the Board of Governors of the Federal Reserve System on December 30, 2022. We make no representation that any Renminbi/ Hong Kong dollar or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Renminbi/ Hong Kong dollar, as the case may be, at any particular rate, at the respective rate stated above, or at all. Any discrepancies in any table between the amounts identified as total amounts and the sum of the amounts listed therein are due to rounding.

FORWARD-LOOKING STATEMENTS

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

You can identify some of these forward-looking statements by words or phrases such as "may," "will," "expect," "anticipate," "aim," "estimate," "intend," "plan," "believe," "is/are likely to," "potential," "continue" or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include statements relating to:

- our fluctuations in growth;
- our future business development, financial condition and results of operations;
- our success in implementing our mobile and new retail strategies, including extending our solutions beyond our core online marketing business;
- our success in implementing "SaaS+X" model;
- our success in structuring a customer relationship management and marketing cloud platform;
- relative percentage of our gross billing recognized as revenue under the gross and net models;
- the expected growth of online marketing industry, including online marketing technology industry in China;
- our expectations regarding demand for and market acceptance of our products and services, including marketing solutions and enterprise solutions;
- our ability to retain existing clients or attract new ones;
- our ability to integrate and realize synergies from acquisitions, investments or strategic partnerships;
- our plans to invest in our platform, solutions, data analytics capabilities, technology and technology infrastructure;
- our ability to collect and use data from various sources and the effectiveness of our algorithms and data engines;
- our ability to retain content distribution channels and negotiate favorable contractual terms;
- market competition, including from independent online marketing technology platforms as well as large and wellestablished internet companies;
- fluctuations in foreign exchange rates;
- general economic conditions and the regulatory landscape in China and other jurisdictions where we operate;
- relevant government policies and regulations relating to our industry;
- the duration of the COVID-19 outbreak, including various variants, and the control policy and measures, and their potential
 effects and after-effects on our business and financial performance; and

developments in U.S.-China relations, including the imposition of economic sanctions.

You should read this annual report and the documents that we refer to in this annual report and have filed as exhibits to this annual report completely and with the understanding that our actual future results may be materially different from what we expect. Other sections of this annual report discuss factors which could adversely impact our business and financial performance. Moreover, we operate in an evolving environment. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of our forward-looking statements by these cautionary statements.

You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements made in this annual report relate only to events or information as of the date on which the statements are made in this annual report. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not Applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable.

ITEM 3. KEY INFORMATION

Implications of Being a Foreign Private Issuer and a China-based Company

We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers. Moreover, the information we are required to file with or furnish to the Securities and Exchange Commission (the "SEC") will be less extensive and less timely compared to that required to be filed with the SEC by U.S. domestic issuers. In addition, 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 Market ("NASDAQ") listing standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with the NASDAQ listing standards.

We are exposed to legal and operational risks associated with our operations in China. We are subject to risks arising from China's legal system, including uncertainties in the interpretation and the enforcement of the PRC laws and regulations. In addition, rules and regulations in China can change quickly with little advance notice. Recently, Chinese regulators have announced regulatory actions targeting certain sectors of China's economy, including the for-profit education sector and technology platforms that have a quantitatively significant number of users located in China. We cannot guarantee that the Chinese government will not in the future take further regulatory actions that materially adversely affect the business environment and financial markets in China as they relate to us, our ability to operate our business, our liquidity and our access to capital.

The PRC government may also intervene or influence our operations at any time, or may exert more control over offerings conducted overseas and/or foreign investment in China-based issuers, including us, at any time, substantial intervention and influence over the manner of our operations, which could result in a material change in our operations or the value of our ADSs. Any actions by the PRC government to exert more oversight and control over offerings that are conducted overseas or foreign investment in China-based issuers could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless. Recently, the PRC government initiated a series of regulatory actions and statements to regulate business operations in China with little advance notice, including cracking down on illegal activities in the securities market, enhancing supervision over China-based companies listed overseas, adopting new measures to extend the scope of cybersecurity reviews, adopting new laws and regulations related to data security, expanding the efforts in anti-monopoly enforcement, and adopting new rules to request China-based companies to fulfill relevant filing procedure and report relevant information to the CSRC for overseas offerings. While we do not believe that these regulatory changes would have any material impact on us, we cannot assure you that the regulators will agree with us or will not in the future adopt regulations that restrict our business operations or access to capital.

On July 6, 2021, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council jointly issued Opinions on Strictly Cracking Down Illegal Securities Activities in Accordance with the Law. These opinions emphasized the need to strengthen the administration over illegal securities activities and the supervision on overseas listings by China-based companies. These opinions proposed to take effective measures, such as promoting the construction of relevant regulatory systems, to deal with the risks and incidents facing China-based overseas-listed companies and the demand for cybersecurity and data privacy protection. These opinions and any related implementation rules to be enacted may subject us to additional compliance requirement. On February 17, 2023, the CSRC released a set of regulations consisting of six documents, including the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines, collectively, the Overseas Listing Filing Rules, which came into effective on March 31, 2023. According to the Overseas Listing Filing Rules, China-based companies that have already offered shares or been listed overseas prior to the implementation of such new regulations qualify as "Stock Enterprises", and Stock Enterprises are not required to apply for the filing immediately until a subsequent overseas offering or listing occurs. However, the Overseas Listing Filing Rules, among others, require the issuer or its main operational entity in the PRC to file with the CSRC for its follow-on securities offerings in the same offshore market within three business days after the completion of such offerings, and file with the CSRC for its offerings or listing in offshore stock market other than the stock market of its initial public offering or listing within three business days after the submission of offering application outside mainland China.

We had been listed on the NASDAQ prior to the implementation of the Overseas Listing Filing Rules. Therefore, we are qualified as a "Stock Enterprise" and are not required to apply for the filing immediately until a subsequent overseas offering or listing occurs according to the Overseas Listing Filing Rules. However, we are required to file with the CSRC for its follow-on securities offerings in the same offshore market within three business days after the completion of such offerings, and file with the CSRC for our offerings or listing in offshore stock market other than the stock market of our initial public offering or listing within three business days after the submission of offering application outside mainland China. Failure to comply with the filing requirements for any offering, listing or any other capital raising activities, may result in administrative penalties, such as order to rectify, warnings, fines and other penalties, on us, our controlling shareholders, actual controllers, any person directly in charge and other directly liable persons. Given the uncertainties surrounding the CSRC filing requirements at this stage, we cannot assure you that we will be able to complete the filings and fully comply with the relevant new rules on a timely basis, or at all, if we conduct listing in other offshore stock markets or follow-on offerings, issuance of convertible corporate bonds, exchangeable bonds, or other kinds of equity security in the future.

Cybersecurity and data privacy and security issues are subject to increasing legislative and regulatory focus in mainland China. For example, the State Council of the PRC promulgated the Regulations on the Protection of the Security of Critical Information Infrastructure on July 30, 2021, which took effect on September 1, 2021. This regulation requires, among others, certain competent authorities to identify critical information infrastructures. In November 2021, the Cybersecurity Administration of China (the "CAC") promulgated the Draft Administrative Regulations on Cyber Data Security, or the Draft Cyber Data Security Regulations, for public comment. These draft regulations set forth different scenarios under which data processors would be required to apply for cybersecurity review. However, there is no definite timetable as to when these draft regulations will be enacted. In addition, the CAC and a number of other departments under the State Council promulgated the Measures for Cybersecurity Review on December 28, 2021, which became effective on February 15, 2022. According to this regulation, critical information infrastructure operators purchasing network products or network platform operators carrying out data processing activities, which affect or may affect national security, are required to conduct cybersecurity review. Pursuant to the Measures for Cybersecurity Review, enterprises shall apply for the cybersecurity review under the following circumstances: (i) critical information infrastructure operators that intend to purchase network products and services; or (ii) a network platform operator that processes the personal information of more than one million people intends to be listed overseas.

As for the definition of "critical information infrastructure operators", on July 30, 2021, the State Council of the PRC published the Security Protection Regulations on the Critical Information Infrastructure (the "CII Regulations"), which took effect on September 1, 2021. Pursuant to Article 2 of the CII Regulations, critical information infrastructure refer to the important network facilities and information systems in important industries and fields such as public telecommunications, information services, energy, transportation, water conservancy, finance, public services, e-government and national defense science, technology and industry, as well as other important network facilities and information systems which, in case of destruction, loss of function or leak of data, may result in serious damage to national security, the national economy and the people's livelihood and public interests. Pursuant to Article 10 of the CII Regulations, the identity of the critical information infrastructure operator shall be determined by the PRC government authorities responsible for critical information infrastructure protection, and the identified critical information infrastructure operator shall be notified by the competent PRC government authority. As of the date of this annual report, we have not received any notice or determination from competent PRC government authorities identifying us as a critical information infrastructure operator.

As for the definition of "network platform operator", on November 14, 2021, the CAC published the Regulations on the Administration of Network Data Security (Draft for Comments) (the "Draft Data Security Regulations"). According to the Draft Data Security Regulations, "internet platform operators" refer to data processors who provide users with internet platform services such as information release, social networking, transactions, payment, and audiovisual. With reference to this definition, "platform operators" have the attributes of "platforms" and "provide specific services". According to the Guidelines for the Classification and Grade of Network Platforms (Draft for Comment) promulgated by the State Administration for Market Regulation "internet platforms" provide the connection of people, goods, services, information, entertainment, capital, and computing power through network technology. This connection enables the platform to have various functions such as trading, social interaction, entertainment, information, financing, and calculation. With reference to the Draft Data Security Regulations and the Guidelines for the Classification and Grade of Network Platforms (Draft for Comment), given that the aforementioned regulations are still at the draft stage, we cannot conclude whether we will be identified as a network platform operator.

As for the definition of "affects or may affect national security", the Measures for Cybersecurity Review provides no further explanation or interpretation for "affects or may affect national security", and the PRC government authorities may have wide discretion in the interpretation of "affects or may affect national security". According to National Security Law of the PRC issued on July 1, 2015 and became effective on the same date, national security refers to a status in which the regime, sovereignty, unity, territorial integrity, welfare of the people, sustainable economic and social development, and other major interests of the state are relatively not faced with any danger and not threatened internally or externally and the capability to maintain a sustained security status. Given the uncertainty on the interpretation of the Measures for Cybersecurity Review, our PRC legal counsel, Jingtian & Gongcheng, cannot assure that we will not be deemed as "affect or may affect national security" in the future.

Our PRC legal counsel is of the opinion that we do not need to apply for cybersecurity reviews under the current regulatory regime because we have not received any notice or determination from competent PRC government authorities identifying us as a critical information infrastructure operator as of the date of this annual report. However, we cannot rule out the possibility that the competent PRC government authorities will not initiate cybersecurity reviews on us in the future.

On September 1, 2021, the PRC Data Security Law became effective, which imposes data security and privacy obligations on entities and individuals conducting data-related activities, and introduces a data classification and hierarchical protection system. In addition, the Standing Committee of PRC National People's Congress promulgated the Personal Information Protection Law (the "PIPL") on August 20, 2021, which took effect on November 1, 2021. The PIPL further emphasizes processors' obligations and responsibilities for personal information protection and sets out the basic rules for processing personal information and the rules for cross-border transfer of personal information.

On July 7, 2022, the CAC promulgated the Measures on Security Assessment of Outbound Data Transfer, or the Measures on Security Assessment of Outbound Data Transfer, effective September 1, 2022. These measures shall apply to the security assessment of the provision of important data and personal information collected and generated by data processors in the course of their operations within the territory of the PRC by such data processors to overseas recipients, or the outbound data transfer. Where there are other provisions in laws and administrative regulations, such other provisions shall prevail. These Measures specify that an outbound data transfer by a data processor that falls under any of the following circumstances, the data processor shall apply to the CAC for the security assessment via the local provincial-level cyberspace administration authority: (i) outbound transfer of important data by a data processor; (ii) outbound transfer of personal information by a critical information infrastructure operator or a personal information processor who has processed the personal information of more than 1,000,000 people; (iii) outbound transfer of personal information by a personal information processor who has made outbound transfers of the personal information of 100,000 people cumulatively or the sensitive personal information of 10,000 people cumulatively since January 1 of the previous year; or (iv) other circumstances where an application for the security assessment of an outbound data transfer is required as prescribed by the CAC. The data we process does not involve the above circumstances. However, we cannot guarantee that the regulators will agree with us or will not in the future adopt new regulations that restrict our business operations.

On December 13, 2022, the Ministry of Industry and Information Technology of the PRC (the "MIIT") released the Administrative Measures for Data Security in Industry and Information Technology Sectors (Trial), or the Data Security Measures, which came into effect on January 1, 2023. The measures apply to data management in certain industries, including telecommunication sectors, where certain data we process is generated from. The Data Security Measures set out three categories of data: ordinary data, important data and core data. The processing of important data and core data is subject to certain filing and reporting obligations. Since the categories of important data and core data have not been released, it is uncertain how the measures will be interpreted and implemented. We have sorted and cataloged data we process and will take further measures as required.

We have been closely monitoring regulatory developments in China regarding any necessary approvals from the CSRC, the CAC, or other PRC regulatory authorities required for overseas listings or offerings. As of the date of this annual report, we have not received any inquiry, notice, warning, sanctions or regulatory objection from the CSRC or the CAC. Because these regulatory actions are relatively new and evolving, it is uncertain how soon legislative or regulatory bodies will respond and what existing or new laws or regulations or detailed implementations and interpretations will be modified or promulgated, if any, or the potential impact such modified or new laws and regulations will have on our daily business operation, our ability to accept foreign investments and listing on foreign exchanges.

Permissions Required from the PRC Authorities for Our Operations

We conduct our business primarily through our subsidiaries and consolidated affiliated entities in China. Our operations in China are governed by PRC laws and regulations. As of the date of this annual report, our PRC subsidiaries, consolidated affiliated entities and their subsidiaries have obtained the requisite licenses and permits from the PRC government authorities that are material for the business operations of our holding company, our consolidated affiliated entities in China, including, among others, ICP license, value-added telecommunication license, network culture business license, etc.. 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.

Furthermore, under current PRC laws, regulations and regulatory rules, we, our PRC subsidiaries and our consolidated affiliated entities may be required to undergo the filing procedures with the CSRC and may be required to go through cybersecurity review by 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. If we fail to obtain the relevant approval or complete other review or filing procedures for any future offshore offering or listing, we may face sanctions by the CSRC or other PRC regulatory authorities, which may include fines and penalties on our operations in China, limitations on our operating privileges in China, restrictions on or prohibition of the payments or remittance of dividends by our subsidiaries in China, restrictions on or delays to our future financing transactions offshore, or other actions that could have a material and adverse effect on our business, financial condition, results of operations, reputation and prospects, as well as the trading price of our ADSs. For more detailed information, see "—D. Risk Factors—Risks Relating to Doing Business in China—Recent regulatory developments in China may subject us to additional regulatory review and disclosure requirements, expose us to government interference, or otherwise restrict or completely hinder our ability to offer securities and raise capital outside mainland China, which could adversely affect our business operations and cause the value of our securities to significantly decline or become worthless."

Risks Associated with the Holding Foreign Companies Accountable Act

Our financial statements contained in this annual report have been audited by PricewaterhouseCoopers, an independent registered public accounting firm. It is a firm registered with the U.S. Public Company Accounting Oversight Board (the "PCAOB"), and 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. Pursuant to the Holding Foreign Companies Accountable Act, or the HFCA Act, if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the PCAOB for two consecutive years, the SEC will prohibit our ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States. On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China or Hong Kong, including our auditor. Subsequently, we were conclusively identified by the SEC as a "Commission-Identified Issuer" under the HFCA Act on June 1, 2022 in respect of our annual report for the year ended December 31, 2021 filed on May 2, 2022. Such identification under the HFCA Act to increase U.S. regulatory access to audit information could cause investment uncertainties for affected issuers, including us, which could increase the volatility of the trading price of our ADSs. On December 15, 2022, the PCAOB announced its determination that it has been able to inspect and investigate audit firms in mainland China and Hong Kong completely for purposes of the HFCA Act, and the PCAOB vacated its December 16, 2021 determinations. However, the PCAOB stated that should PRC authorities obstruct the PCAOB's ability to inspect or investigate completely in any way and at any point in the future, the PCAOB Board will act immediately to consider the need to issue new determinations consistent with the HFCA Act. If the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we continue to use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. There can be no assurance that we would not be identified as a Commission-Identified Issuer for any future fiscal year, and if we were so identified for two consecutive years, we would become subject to the prohibition on trading under the HFCA Act. In addition, while we currently do not expect the HFCA Act to prevent us from maintaining the trading of our ADSs in the U.S., uncertainties exist with respect to future determinations of the PCAOB in this respect and any further legislative or regulatory actions to be taken by the U.S. or Chinese governments that could affect our listing status in the U.S. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Risks Associated with Our Corporate Structure

Our investors hold securities of iClick Interactive Asia Group Limited, which is not an operating company but a Cayman Islands holding company with operations primarily conducted by its subsidiaries and through contractual arrangements with its variable interest entities, or VIEs, and their respective subsidiaries based in mainland China. PRC laws and regulations restrict and impose conditions on foreign investment in internet-based businesses, including holding of value-added telecommunication license by Shanghai Myhayo Technology Co., Ltd., or Myhayo, a content distribution channel and a mobile content aggregator of articles and short videos in mainland China. For more information of Myhayo's value-added telecommunication license, see "—D. Risk Factors—Risks Related to Our Business and Industry—If we fail to maintain or renew the value-added telecommunication license, or fail to obtain other requisite license, or approvals or filings in China, the business carried out by certain consolidated entity may be materially and adversely affected". Accordingly, we operate these businesses in China through Beijing OptAim Network Technology Co., Ltd., or OptAim Network, which we refer to as the VIE in this annual report, and its subsidiaries, and rely on contractual arrangements among our PRC subsidiary, the VIE and its nominee shareholder to control the business operations of the VIE entities. We are the primary beneficiary of these VIE entities for accounting purposes because of these contractual arrangements. Accordingly, under U.S. GAAP, the financial statements of the VIE are consolidated as part of our financial statements. Although these VIE agreements have been widely adopted by PRC companies seeking to list overseas, such agreements have not been tested in a court of law.

Our corporate structure is subject to risks associated with our contractual arrangements with the VIE. The Company that investors will own may never have a direct equity ownership interest in the businesses that are conducted by the VIE. If the PRC government disallow the VIE structure or deems that our contractual arrangements with the VIE do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change or are interpreted differently in the future, we and the VIE could be subject to severe penalties or be forced to relinquish our interests in those operations. This would result in the VIE being deconsolidated. Part of our assets, including the value-added telecommunication license, are held by the VIE. In 2020, OptAim Network contributed 3.3% to our gross billing and 8.7% of our net revenues. In 2021, OptAim Network contributed 3.0% to our gross billing and 7.8% of our net revenues. In 2022, OptAim Network contributed 5.3% to our gross billing and 12.7% of our net revenues. Our holding company, our PRC subsidiaries and the VIE entities, and investors of our Company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with the VIE and, consequently, significantly affect the financial performance of the VIE entities and our Company as a whole. Our ADSs may decline in value or become worthless, if we are unable to assert our contractual control rights over the assets of the VIE that conduct some or all of our operations. For a detailed description of the risks associated with our corporate structure, please refer to risks disclosed under "Item 3.D. Key Information—Risk Factors—Risks Related to Our Corporate Structure".

Cash Transfer between the Company, the Company's Subsidiaries and the VIE entities

Cash transfers between the Company, the Company's subsidiaries and the VIE entities are made in accordance with the applicable PRC laws and regulations and the VIE agreements.

To the extent the cash is in mainland China or an entity incorporated in mainland China, the funds may not be available for use outside mainland China, due to interventions in or the imposition of restrictions and limitations on the ability of the Company, the Company's subsidiaries, or the VIE entities by the PRC government to transfer cash.

The PRC government imposes controls on the convertibility of Renminbi into foreign currencies and, in certain cases, the remittance of currency out of mainland China. The Company carries out its business primarily through its subsidiaries and the VIE entities in mainland China, the income of which is primarily in Renminbi and shortages in foreign currencies may restrict their ability to pay dividends or other payments to the Company, or otherwise satisfy the Company's foreign currency denominated obligations, if any. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and expenditures from trade-related transactions, can be made in foreign currencies without prior approval from SAFE as long as certain procedural requirements are met. The PRC government may, at its discretion, impose restrictions on access to foreign currencies for current account transactions. Approval from relevant government authorities is required if Renminbi is converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies.

Furthermore, relevant PRC laws and regulations permit the companies incorporated in mainland China to pay dividends only out of their retained earnings, if any, as determined in accordance with the accounting standards and regulations in mainland China. Additionally, the Company's subsidiaries incorporated in mainland China and the VIE entities can only distribute dividends upon approval of the shareholders after they have met the PRC requirements for appropriation to the statutory reserves. As a result of these and other restrictions under the laws and regulations in mainland China, the Company's subsidiaries incorporated in mainland China and the VIE entities are restricted to transfer a portion of their net assets to the Company either in the form of dividends, loans or advances. Even though the Company currently does not require any such dividends, loans or advances from the subsidiaries incorporated in mainland China and the VIE entities for working capital and other funding purposes, the Company may in the future require additional cash resources from its subsidiaries incorporated in mainland China and the VIE entities due to changes in business conditions, to fund future acquisitions and developments, or merely declare and pay dividends to or distributions to the Company's shareholders.

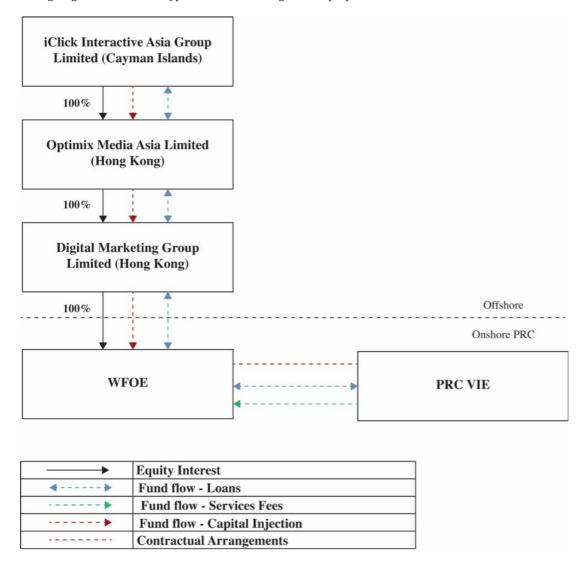
Our Beijing WFOE enjoys the economic interest in the operations of the VIE entities in the form of service fees under the contractual arrangements among the Beijing WFOE, the VIE, and shareholders of the VIE pursuant to the VIE agreements. Under the VIE agreements, the VIE agrees to pay service fee in an amount equal to 100% of its net income for the relevant period on a monthly basis, and Beijing WFOE has the right to adjust at its own discretion.

The Company has not made any dividend or distribution to its shareholders. The Company's subsidiaries and the VIE entities have not made any dividend or distribution to the Company. The VIE has not paid any service fee.

See "—D. Risk Factors—Risks Related to Doing Business in China—We rely on dividends and other distributions on equity paid by the Company's subsidiaries incorporated in mainland China to fund any cash and financing requirements we may have, and any limitation on the ability of the Company's subsidiaries incorporated in mainland China to make payments to us could have a material adverse effect on our ability to conduct our business."

In utilizing any proceeds from the Company, including any proceeds from any offering by the Company, the Company is permitted under PRC laws and regulations to provide funding to its subsidiaries incorporated in mainland China through inter-company loans or capital contributions, subject to satisfaction of applicable government registration and approval requirements. The Company cannot assure you that these government registrations or approvals can be obtained on a timely basis, if at all. See "—D. Risk Factors—Risks Related to Doing Business in China—PRC regulation of loans to and direct investment in entities incorporated in mainland China by holding companies incorporated outside mainland China and governmental control of currency conversion may delay or prevent us from using the proceeds of the fundraisings outside mainland China to make loans to or make additional capital contributions to the Company's subsidiaries incorporated in mainland China, which could materially and adversely affect our liquidity and our ability to fund and expand our business." In addition, the Company's subsidiaries incorporated in mainland China may transfer cash to the VIE entities by loans.

The following diagram illustrates the typical fund flow among the Company, its PRC subsidiaries and the VIE entities.



The following table sets forth the amount of the cash transfers among the Company, the Company's subsidiaries and the VIE entities for the periods presented.

	As o	f December 31, 2	022
	2020	2021	2022
	(US\$ in thousands)	(US\$ in thousands)	(US\$ in thousands)
Net operating cash received by VIE entities from the Company's subsidiaries ⁽¹⁾	2,141	772	153
Capital contribution to subsidiaries by the Company ⁽²⁾	(77,655)	(53)	_
Refund of capital contribution to the Company by subsidiaries ⁽³⁾	_	_	19,656
Advances from other subsidiaries to WFOE as primary beneficiary ⁽⁴⁾	(42,421)	(36,310)	(8,098)
Advances from other subsidiaries to VIE entities ⁽⁴⁾	_	(1,588)	(124)
Advances by VIE entities to other subsidiaries ⁽⁵⁾	_	554	_
Advances by WFOE as primary beneficiary to other subsidiaries ⁽⁵⁾	80,141	4,026	6,307

Notes (US\$'000):

- (1) Represents "Net operating cash received from Group companies" of the VIE entities in the Selected Condensed Consolidated Cash Flows Data, which includes the following:
 - For the years ended December 31, 2020, 2021 and 2022, cash received by the VIE entities from other entities of the Group for online advertising service and other marketing service were U\$\$3,506, U\$\$1,315 and U\$\$153, respectively.
 - For the years ended December 31, 2020, 2021 and 2022, cash paid by the VIE entities to other entities of the Group for online advertising service and SaaS services were US\$1,365, US\$543 and nil, respectively.
- (2) Represents "Capital contribution to subsidiaries" of the Parent in the Selected Condensed Consolidated Cash Flows Data.
- (3) Represents "Refund from subsidiaries of capital contribution" of the Parent in the Selected Condensed Consolidated Cash Flows Data.
- (4) Represents "Payments for advances to Group companies" of Other Subsidiaries and WFOE as Primary Beneficiary in the Selected Condensed Consolidated Cash Flows Data.
- (5) Represents "Receipts of repayments of advances from Group companies" of Other Subsidiaries and WFOE as Primary Beneficiary.
- (6) No transfer of assets other than cash has occurred among the Company, the Company's subsidiaries and the VIE entities during the years ended December 31, 2020, 2021 and 2022.

Condensed Consolidating Schedules

The following tables present the condensed consolidating schedule of financial information for the Company, its wholly owned subsidiary that is WFOE as primary beneficiary, other subsidiaries and VIE entities as of and for the years ended the dates presented.

Selected Condensed Consolidated Balance Sheets Data (US\$'000)

	As of December 31, 2022					
		Other	WFOE as Primary	VIE	Eliminating	Consolidated
	Parent	Subsidiaries	Beneficiary	Entities	Adjustments	Totals
Assets	4.400	50 50 4	4 400	4 405		00.554
Cash and cash equivalents	1,100	78,724	1,433	1,497		82,754
Time deposits	_	10	_	_	_	10
Restricted cash		22,543				22,543
Short-term investments	1,021	4,253	_	1,737	_	7,011
Amount due from an equity investee	_	312	_			312
Amounts due from Group companies (3)	_	12,845	22,773	8,374	(43,992)	
Accounts receivable, net	_	58,572	3,359	2,625		64,556
Rebates receivable	_	2,932	1	_	_	2,933
Prepaid media costs		16,140	255	99		16,494
Other current assets	161	5,050	1,694	1,142	_	8,047
Deferred tax assets		720		_		720
Property and equipment, net		241	_	_	_	241
Investment in an equity investee	279			_		279
Investments in subsidiaries and VIE entities (2)	80,015	24,376	7,689	_	(112,080)	
Other long-term investments		5,970		_		5,970
Intangible assets	_	991	_	_	_	991
Goodwill				_		
Right-of-use assets	_	1,292		_	_	1,292
Other non-current assets		3,508	4,111	10		7,629
Total assets	82,576	238,479	41,315	15,484	(156,072)	221,782
T 1.190						
Liabilities		20.404	4.500	2.000		44 500
Accounts payable		38,194	1,526	2,008		41,728
Deferred revenue		16,561	385	29	_	16,975
Accrued liabilities and other current Liabilities	5,575	22,114	1,989	861		30,539
Amounts due to Group companies (3)		31,117	11,815	1,060	(43,992)	
Lease liabilities		3,247	149	135		3,531
Bank borrowing		42,693	_	1,590	_	44,283
Income tax payable		1,539	4.075	501		2,040
Deferred tax liabilities		187	1,075	64	_	1,326
Other liabilities	2,071					2,071
Total liabilities	7,646	155,652	16,939	6,248	(43,992)	142,493
Equity						
Shareholders' equity (2)	74,930	80,015	24,376	7,689	(112,080)	74,930
Non-controlling interests	, -1 ,550	2,812	24,570	1,547	(112,000)	4,359
-	74,930	82,827	24,376	9,236	(112,080)	79,289
Total equity	74,330	02,027	24,370	3,230	(112,000)	73,203
Total liabilities and equity	82,576	238,479	41,315	15,484	(156,072)	221,782

Selected Condensed Consolidated Balance Sheets Data (US\$'000)

	As of December 31, 2021					
	Parent	Other Subsidiaries	WFOE as Primary Beneficiary	VIE Entities	Eliminating Adjustments	Consolidated Totals
Assets						
Cash and cash equivalents	789	37,450	523	2,681	_	41,443
Time deposits	_	11,128	_	_	_	11,128
Restricted cash	3,657	32,489	_	_	_	36,146
Short-term investments	_	7,771	_	_	_	7,771
Amount due from an equity investee		276	_	_	_	276
Amounts due from Group companies (3)	_	12,184	23,171	5,879	(41,234)	_
Accounts receivable, net	_	181,107	2,568	3,586	_	187,261
Rebates receivable	_	5,523	52	_	_	5,575
Prepaid media costs		35,410	148	1,151	_	36,709
Other current assets	549	14,803	8,339	1,266	_	24,957
Deferred tax assets	254	931	_	_	_	1,185
Property and equipment, net	_	1,821	45	65	_	1,931
Investment in an equity investee	354		_	_	_	354
Investments in subsidiaries, VIE and VIE's subsidiaries (2)	285,824	32,585	5,797	_	(324,206)	_
Other long-term investments	510	8,010	2,361	1,233	_	12,114
Intangible assets	_	53,350	223	140	_	53,713
Goodwill		80,058	1,616	_	_	81,674
Right-of-use assets	_	3,402	48	384	_	3,834
Other non-current assets		1,663				1,663
Total assets	291,937	519,961	44,891	16,385	(365,440)	507,734
Liabilities						
Accounts payable		63,404	921	2,262	_	66,587
Deferred revenue	_	22,244	470	88	_	22,802
Accrued liabilities and other current liabilities	7,126	20,442	723	1,444	_	29,735
Amounts due to Group companies (3)		29,026	10,088	2,120	(41,234)	_
Lease liabilities	_	3,172	48	384	_	3,604
Bank borrowing	_	73,641	_	1,889	_	75,530
Income tax payable		3,475	_	575	_	4,050
Deferred tax liabilities	_	13,223	56	99	_	13,378
Other liabilities	459	_	_	_	_	459
Total liabilities	7,585	228,627	12,306	8,861	(41,234)	216,145
Equity						
Shareholders' equity (2)	284,352	285,824	32,585	5,797	(324,206)	284,352
Non-controlling interests	ZU -1 ,33Z	5,510	رن ح	1,727	(324,200)	7,237
	284,352	291,334	32,585	7,524	(324,206)	291,589
Total equity	204,332	291,334	32,305	7,324	(324,206)	291,369
Total liabilities and equity	291,937	519,961	44,891	16,385	(365,440)	507,734

Selected Condensed Consolidated Balance Sheets Data (US\$'000) (Continued)

			As of Decen	ıber 31, 202	0	
	Parent	Other Subsidiaries	WFOE as Primary Beneficiary	VIE Entities	Eliminating Adjustments	Consolidated Totals
Assets						
Cash and cash equivalents	402	40,273	9,444	2,113	_	52,232
Time deposits	46	43	_	_	_	89
Restricted cash	5,266	36,879		_	_	42,145
Short-term investments	_	23,172	548	_	_	23,720
Amount due from an equity investee	_	218	_	_	_	218
Amounts due from Group companies (3)	_	23,295	12,571	6,643	(42,509)	_
Accounts receivable, net	_	31,022	110,400	1,720	_	143,142
Rebates receivable	_	10,964	_	_	_	10,964
Prepaid media costs	_	25,470	7,471	1,587	_	34,528
Other current assets	1,095	11,705	326	1,012	_	14,138
Deferred tax assets	194	759	_	_	_	953
Property and equipment, net	_	915	116	82	_	1,113
Investment in an equity investee	460		_	_	_	460
Investments in subsidiaries and VIE entities (2)	278,874	37,470	8,381	_	(324,725)	_
Prepayments for long-term investments	_	2,924	_	_	_	2,924
Other long-term investments	1,522	7,129	_	_	_	8,651
Intangible assets	_	56,095		336	_	56,431
Goodwill	_	74,419	_	_	_	74,419
Right-of-use assets	_	2,809	128	484	_	3,421
Other non-current assets	_	452	103	12	_	567
Total assets	287,859	386,013	149,488	13,989	(367,234)	470,115
Liabilities						
Accounts payable	_	13,100	29,669	371	_	43,140
Deferred revenue	_	27,555	´ —	644	_	28,199
Accrued liabilities and other current liabilities	7,627	5,701	14,484	1,519	_	29,331
Amounts due to Group companies (3)	<u> </u>	12,571	28,060	1,878	(42,509)	_
Lease liabilities	_	2,713	131	484		3,328
Bank borrowing	_	18,245	37,338	457	_	56,040
Income tax payable	_	3,699		483	_	4,182
Contingent consideration payable	7,755	_	_	_	_	7,755
Deferred tax liabilities		14,010	_	146	_	14,156
Other liabilities	375	4,521	_	_	_	4,896
Total liabilities	15,757	102,115	109,682	5,982	(42,509)	191,027
Equity						
Shareholders' equity (2)	272,102	278,874	39,806	6,045	(324,725)	272,102
Non-controlling interests	2/2,102	5,024	55,000	1,962	(327,723)	6,986
Total equity	272,102	283,898	39,806	8,007	(324,725)	279,088
					(5, -5)	
Total liabilities and equity	287,859	386,013	149,488	13,989	(367,234)	470,115

Selected Condensed Consolidated Statements of Operations Data (US\$'000)

	For the year ended December 31, 2022					
	Parent	Other Subsidiaries ⁽⁸⁾	WFOE as Primary Beneficiary	VIE Entities ⁽⁸⁾	Eliminating Adjustments	Consolidated Totals
Net revenues						
Third-party net revenues		138,287	9,331	21,462		169,080
Inter-company net revenues (1)	_	4,727	1,472	601	(6,800)	
Cost of revenues						
Third-party costs	_	(151,968)	(3,566)	(17,678)	_	(173,212)
Inter-company costs (1)		(1,759)	(4,446)	(285)	6,490	_
Gross profit/(loss)		(10,713)	2,791	4,100	(310)	(4,132)
Operating expenses						
Research and development expenses	_	(5,902)	(2,156)	(1,158)	_	(9,216)
Sales and marketing expenses (1)		(38,347)	(2,789)	(3,787)	310	(44,613)
General and administrative expenses	(7,160)	(37,594)	(6,467)	(447)	_	(51,668)
Impairment of long-lived assets		(4,201)	(202)	_		(4,403)
Impairment of goodwill		(78,521)	(1,616)			(80,137)
Total operating expenses	(7,160)	(164,565)	(13,230)	(5,392)	310	(190,037)
Share of (losses)/profits of subsidiaries, VIE and VIE's						
subsidiaries ⁽²⁾	(185,431)	(9,063)	(1,366)	_	195,860	_
Finance costs, net		(866)	344	(57)		(579)
Other (losses)/gains, net	(7,925)	(14,310)	3,126	(56)	_	(19,165)
(Loss)/profit before share of loss from an equity investee						
and income tax (expense)/credit	(200,516)	(199,517)	(8,335)	(1,405)	195,860	(213,913)
Share of loss from an equity investee	(75)	_	_	_	_	(75)
Income tax (expense)/credit	(284)	12,156	(728)	38		11,182
Net (loss)/income	(200,875)	(187,361)	(9,063)	(1,367)	195,860	(202,806)
Net loss attributable to non-controlling Interests		1,930	_	1		1,931
Net (loss)/income attributable to iClick Interactive Asia						
Group Limited's ordinary shareholders	(200,875)	(185,431)	(9,063)	(1,366)	195,860	(200,875)

Selected Condensed Consolidated Statements of Operations Data (US\$'000) (Continued)

	For the year ended December 31, 2021					
	Parent	Other Subsidiaries	WFOE as Primary Beneficiary ⁽⁷⁾	VIE Entities	Eliminating Adjustments	Consolidated Totals
Net revenues						
Third-party net revenues	_	278,881	5,984	22,837	_	307,702
Inter-company net revenues ⁽¹⁾	_	2,704	22,183	1,028	(25,915)	_
Cost of revenues						
Third-party costs	_	(177,282)	(22,885)	(18,382)	_	(218,549)
Inter-company costs (1)		(23,074)	(2,675)	(49)	25,798	
Gross profit	_	81,229	2,607	5,434	(117)	89,153
Operating expenses						
Research and development expenses	_	(8,037)	(430)	(1,060)	_	(9,527)
Sales and marketing expenses (1)	_	(45,788)	(2,211)	(4,990)	117	(52,872)
General and administrative expenses	(17,574)	(17,245)	(4,238)	(586)		(39,643)
Total operating expenses	(17,574)	(71,070)	(6,879)	(6,636)	117	(102,042)
Share of profits/(losses) of subsidiaries, VIE and VIE's						
subsidiaries ⁽²⁾	4,406	(2,162)	(610)	_	(1,634)	_
Finance costs, net	_	(3,265)	_	_	_	(3,265)
Other (losses)/gains, net	(242)	(476)	2,533	388		2,203
(Loss)/profit before share of loss from an equity investee						
and income tax (expense)/credit	(13,410)	4,256	(2,349)	(814)	(1,634)	(13,951)
Share of loss from an equity investee	(107)	_	_	_	_	(107)
Income tax (expense)/credit	(114)	(2,527)	187	(86)		(2,540)
Net (loss)/income	(13,631)	1,729	(2,162)	(900)	(1,634)	(16,598)
Net loss attributable to non-controlling Interests	_	2,677		290		2,967
Net (loss)/income attributable to iClick Interactive Asia						
Group Limited's ordinary Shareholders	(13,631)	4,406	(2,162)	(610)	(1,634)	(13,631)

		For	the year ended	December 3	1, 2020	
	Parent	Other Subsidiaries	WFOE as Primary Beneficiary	VIE Entities	Eliminating Adjustments	Consolidated Totals
Net revenues						
Third-party net revenues		87,227	150,177	17,341		254,745
Inter-company net revenues ⁽¹⁾	_	3,193	4,371	4,761	(12,325)	_
Cost of revenues						
Third-party costs	_	(41,841)	(122,603)	(17,038)	_	(181,482)
Inter-company costs ⁽¹⁾		(3,375)	(7,954)	(996)	12,325	
Gross profit	_	45,204	23,991	4,068	_	73,263
Operating expenses						
Research and development expenses	_	(2,055)	(1,915)	(1,379)	_	(5,349)
Sales and marketing expenses ⁽¹⁾		(28,358)	(5,103)	(4,567)		(38,028)
General and administrative expenses	(13,598)	(5,865)	(11,875)	(310)	_	(31,648)
Total operating expenses	(13,598)	(36,278)	(18,893)	(6,256)	_	(75,025)
Share of profits/(losses) of subsidiaries, VIE and VIE's						
subsidiaries ⁽²⁾	17,477	1,605	(1,317)	_	(17,765)	_
Finance income/(costs), net		309	(1,662)	_	_	(1,353)
Other (losses)/gains, net	(409)	7,218	(1,349)	392	_	5,852
Fair value losses on derivative liabilities	(11,466)	_	_	_	_	(11,466)
Fair value losses on convertible notes	(4,433)					(4,433)
(Loss)/profit before share of loss from an equity investee						
and income tax (expense)/credit	(12,429)	18,058	770	(1,796)	(17,765)	(13,162)
Share of loss from an equity investee	(111)	_	_	_	_	(111)
Income tax (expense)/credit	(78)	(2,008)	412	41		(1,633)
Net (loss)/income	(12,618)	16,050	1,182	(1,755)	(17,765)	(14,906)
Net loss attributable to non-controlling interests	_	1,427	_	861	_	2,288
Net (loss)/income attributable to iClick Interactive Asia						
Group Limited's ordinary shareholders	(12,618)	17,477	1,182	(894)	(17,765)	(12,618)

Selected Condensed Consolidated Cash Flows Data (US\$'000)

	For the year ended December 31, 2022						
		Other	WFOE as Primary	VIE	Eliminating	Consolidated	
	Parent (6)	Subsidiaries ⁽⁸⁾	Beneficiary	Entities ⁽⁸⁾	Adjustments	Totals	
Net operating cash received from/(paid to) Group companies (4)	_	(1,031)	878	153	_	_	
Net operating cash (paid to)/ received from third parties	(7,754)	82,012	(2,027)	(1,127)	_	71,104	
Net cash (used in) provided by operating activities	(7,754)	80,981	(1,149)	(974)		71,104	
Refund from subsidiaries of capital contribution (3)	19,656	_	_		(19,656)	_	
Payments for advances to Group companies (3)	_	(8,222)	_	_	8,222	_	
Receipts of repayments of advances from Group companies (3)	_	6,307	_	_	(6,307)	_	
Other investing activities	(7,742)	3,382	383	_	_	(3,977)	
Net cash provided by (used in) investing activities	11,914	1,467	383		(17,741)	(3,977)	
Refund of capital contribution to the parent company ⁽³⁾		(19,656)			19,656	_	
Receipts of advances from Group companies (3)	_	_	8,098	124	(8,222)	_	
Repayments for advances from Group companies (3)	_	_	(6,307)	_	6,307	_	
Other financing activities	(7,506)	(29,569)	_	(214)		(37,289)	
Net cash (used in) provided by financing activities	(7,506)	(49,225)	1,791	(90)	17,741	(37,289)	

Selected Condensed Consolidated Cash Flows Data (US\$'000) (Continued)

	For the year ended December 31, 2021						
	Parent (6)	Other Subsidiaries	WFOE as Primary Beneficiary ⁽⁷⁾	VIE Entities	Eliminating Adjustments	Consolidated Totals	
		(= = = =)					
Net operating cash (paid to)/received from Group companies (4)	_	(8,208)	7,436	772	_	_	
Net operating cash (paid to)/received from third Parties	(3,217)	13,377	(27,380)	(2,453)		(19,673)	
Net cash used in operating activities	(3,217)	5,169	(19,944)	(1,681)		(19,673)	
Capital contribution to subsidiaries (3)	(53)	_	_	_	53	_	
Payments for advances to Group companies (3)	_	(37,898)	_	_	37,898	_	
Receipts of repayments of advances from Group companies (3)	_	4,580	_	_	(4,580)		
Other investing activities	(4,936)	(5,364)	(12,076)	(14)		(22,390)	
Net cash used in investing activities	(4,989)	(38,682)	(12,076)	(14)	33,371	(22,390)	
Capital contribution from Group companies (3)	_	53	_	_	(53)		
Receipts of advances from Group companies (3)	_	_	36,310	1,588	(37,898)	_	
Repayments for advances from Group companies (3)	_	_	(4,026)	(554)	4,580	_	
Other financing activities	6,984	16,598		1,161		24,743	
Net cash provided by financing activities	6,984	16,651	32,284	2,195	(33,371)	24,743	

Selected Condensed Consolidated Cash Flows Data (US\$'000) (Continued)

	For the year ended December 31, 2020					
	Parent (6)	Other Subsidiaries	WFOE as Primary Beneficiary	VIE Entities	Eliminating Adjustments	Consolidated Totals
Net operating cash received from/(paid to) Group companies (4)	_	3,722	(5,863)	2,141	_	_
Net operating cash (paid to)/received from third parties	(3,461)	(41,547)	27,485	(2,110)	_	(19,633)
Net cash (used in) provided by operating activities (5)	(3,461)	(37,825)	21,622	31		(19,633)
Capital contribution to Group companies (3)	(77,655)				77,655	_
Payments for advances to Group companies (3)	_	(42,421)	_	_	42,421	_
Receipts of repayments of advances from Group companies (3)	_	80,141	_	_	(80,141)	_
Other investing activities	(1,135)	(25,927)	(602)	(29)	_	(27,693)
Net cash (used in) provided by investing activities (5)	(78,790)	11,793	(602)	(29)	39,935	(27,693)
Capital contribution from Group companies (3)		77,655			(77,655)	_
Receipts of advances from Group companies (3)	_	_	42,421	_	(42,421)	_
Repayments for advances from Group companies (3)	_	_	(80,141)	_	80,141	_
Other financing activities	64,530	(5,781)	20,777	457		79,983
Net cash provided by (used in) financing activities ⁽⁵⁾	64,530	71,874	(16,943)	457	(39,935)	79,983

Notes (US\$'000):

(1) It represents the elimination of intercompany transactions at the consolidation level.

Services from the VIE entities to other group companies

The VIE entities provide online advertising service to other group companies. For the years ended December 31, 2020, 2021 and 2022, the intercompany online advertising service revenues recognized by the VIE entities were US\$4,761, US\$911 and US\$291, respectively. These transactions are eliminated at the consolidation level.

The VIE entities also provide other marketing services to other group companies. For the years ended December 31, 2020, 2021 and 2022, the intercompany other marketing service revenues recognized by the VIE entities were nil, US\$117 and US\$310, respectively. These transactions are eliminated at the consolidation level.

Services from other group companies to the VIE entities

WFOE as primary beneficiary and other subsidiaries of the Group provide online advertising service and SaaS services to the VIE entities. For the years ended December 31, 2020, 2021 and 2022, the intercompany online advertising and SaaS service revenues from the VIE entities recognized by WFOE as primary beneficiary and other subsidiaries of the Group were US\$996, US\$49 and US\$285, respectively. These transactions are eliminated at the consolidation level.

As of December 31, 2020, 2021 and 2022, there were no balances for management fees charged to VIEs.

- (2) It represents the elimination of the investments in subsidiaries and the VIE entities by the Company.
- (3) It represents the elimination of intercompany balances among the Company, WFOE as primary beneficiary, other subsidiaries and the VIE entities. The Parent transfers cash to its wholly-owned subsidiaries by making capital contributions or interest-free advances to subsidiaries in Hong Kong, and the subsidiaries in Hong Kong transfer cash to the WFOE which is the primary beneficiary of the VIE and other PRC subsidiaries by making capital contributions or interest-free advances.
- (4) For the years ended December 31, 2020, 2021 and 2022, cash received by the VIE entities from other entities of the Group for online advertising service and other marketing service were US\$3,506, US\$1,315 and US\$153, respectively.

For the years ended December 31, 2020, 2021 and 2022, cash paid by the VIE entities to other entities of the Group for online advertising service and SaaS services were US\$1,365, US\$543 and nil, respectively.

- (5) The "net cash used in operating activities" and "net cash provided by/used in investing activities" of the Parent for the year ended December 31, 2020, and "investments in subsidiaries and the VIE entities" as of December 31, 2020 have been revised from amounts previously disclosed in the notes to the consolidated financial statements of the Group. See Note 28 to our consolidated financial statements.
- (6) See Note 28 of Consolidated Financial Statements for more details of the gross investing activities and financing activities of the Parent.
- As a result of an internal restructuring within the Group in 2021 to move the VIE structure from the pre-existing WFOE as primary beneficiary (the "Original WFOE PB") to another wholly-owned WFOE of the Company (the "New WFOE PB"), on November 1, 2021, the VIE contractual agreements were amended and restated whereby the New WFOE PB became the primary beneficiary of the VIE. Amounts of "WFOE as Primary Beneficiary" presented in the above tables (i) as of and for each of the two years ended December 31, 2022 and December 31, 2021, and (ii) as of and for each of the year ended December 31, 2020 represent the financial information of (i) the New WFOE PB and (ii) the Original WFOE PB, respectively.
- (8) As a result of an internal restructuring within the Group in 2022, one of the subsidiaries of the VIE became an indirectly-held legally-owned subsidiary of the Company in June 2022. Financial information of this entity (i) as of and for the year ended December 31, 2022, and (ii) as of and for each of the two years ended December 31, 2021, was presented in the corresponding tables above under (i) "Other Subsidiaries", and (ii) "VIE Entities", respectively.

A. [Reserved]

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

Our business, financial condition and results of operations are subject to various changing business, competitive, economic, political and social conditions. In addition to the factors discussed elsewhere in this annual report, the following are some of the important factors that could adversely affect our operating results, financial condition and business prospects, and cause our actual results to differ materially from those projected in any forward-looking statements.

Summary of Risk Factors

- We have experienced fluctuations in growth in recent periods, and our historical growth may not be indicative of our future growth.
- We face intense competition for our marketing solutions and enterprise solutions, and if we fail to maintain and enhance our capabilities, our results of operations could be materially and adversely affected.
- We have incurred significant net losses and cash outflows in the past, all of which may continue in the future.
- We have recorded significant impairment charges, and may continue to do so in the future.

- We face risks related to natural disasters, health epidemics and other outbreaks, which could significantly disrupt our
 operations. In particular, we have been, may continue to be, materially and adversely affected by COVID-19, and changes
 we have made to our business may not be successful in dealing with the effects or the after-effects of the pandemic.
- We cannot assure the success of "SaaS+X" model and our enterprise solutions business.
- A downturn in global economy could reduce the customers' demand and their ability to pay for our solutions, which could
 materially and adversely affect our business and results of operations.
- Our sales cycle may become more time-consuming and expensive under enterprise solutions, we may encounter pricing
 pressure and implementation and configuration challenges, and we may have to delay revenue recognition for some
 complex transactions, all of which could harm our business and operating results.
- Our net revenues, net revenues as a percentage of gross billing, gross profit margin and the comparability of our financial results may be affected by our revenue models.
- Failure to retain existing clients or attract new ones could adversely impact our business and results of operations.
- Loss of any marketing agency client may materially and adversely affect our business and results of operations.
- Loss of any content distribution channel and changes in the contract terms with any content distribution channel may
 materially and adversely affect our business and results of operations.
- The independent online marketing technology market is highly fragmented and intensely competitive. Independent online
 marketing technology platforms also face competitive pressure from well-established internet companies, marketing
 agencies and traditional media. In addition, as we continue to expand into the enterprise solution market, we also face
 increasingly intensified competition.
- We may not be able to obtain additional capital when desired, on favorable terms or at all.
- We are subject to many of the economic and political risks associated with emerging markets due to our operations in mainland China and Hong Kong. Adverse changes in mainland China or Hong Kong's economic, political and social conditions as well as government policies could adversely affect our business and prospects.
- Developments in U.S.-China relations, including any escalation of political or trade tensions, could negatively affect our business and the market for our ADSs.
- Recent litigation and negative publicity surrounding China-based companies listed in the U.S. may result in increased
 regulatory scrutiny of us and negatively impact the trading price of the ADSs and could have an adverse effect upon our
 business, including our results of operations, financial condition, cash flows and prospects.
- The PCAOB had historically been unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections of our auditor in the past had deprived our investors with the benefits of such inspections.
- Our ADSs may be prohibited from trading in the United States under the HFCA Act, if the PCAOB is unable to inspect or
 fully investigate auditors located in mainland China or Hong Kong. The delisting of our ADSs, or the threat of their being
 delisted, may materially and adversely affect the value of your investment.
- Our dual-class share structure with different voting rights will limit your ability to influence corporate matters and could
 discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs
 may view as beneficial.

- The Company is a Cayman Islands holding company with no equity ownership in the VIE entities. We conduct our operations in China through (i) our PRC subsidiaries and (ii) the VIE entities with which we have maintained contractual arrangements. Investors in the ADSs thus are not purchasing equity interest in the VIE entities in China but instead are purchasing equity interest in a Cayman Islands holding company. We are subject to the legal and operational risks associated with being based in or having the majority of our operations in China, and are subject to complex and evolving laws and regulations in China. There are substantial uncertainties regarding the interpretation and application of PRC laws, regulations, and rules relating to such agreements that establish the VIE structure for the majority of our operations in China. In addition, there are uncertainties in the PRC legal system. Some rules and regulations in China might change quickly with little advance notice. These risks could result in a material change in our operations and/or the value of the securities we have listed or could significantly limit or completely hinder our ability to continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless. See "—D. Risk Factors—Risks Related to the Corporate Structure—We are a Cayman Islands holding company with no equity ownership in the VIE and we conduct our operations in China through (i) our PRC subsidiaries and (ii) the VIE entities with which we have maintained contractual arrangements." and "—Risks Related to the Corporate Structure—We rely on the contractual arrangements that establish the structure for certain of our operations in China."
- Recently, the PRC government has indicated an intent to exert more oversight and control over China-based issuers, and initiated a series of regulatory actions and made a number of public statements, some of which are published with little advance notice, including cracking down on illegal activities in the securities market, enhancing supervision over China-based companies listed overseas using a variable interest entity structure, adopting new measures to extend the scope of cybersecurity reviews, and expanding efforts in anti-monopoly enforcement. Since these statements and regulatory actions are new, it is highly uncertain how soon legislative or administrative regulation making bodies will respond and what existing or new laws or regulations or detailed implementations and interpretations will be modified or promulgated, if any, and the potential impact of such modified or new laws and regulations will impact our ability to conduct business, accept foreign investments, or continue to list on a U.S. or other foreign exchange. For a detailed description, see "—D. Risk Factors—Risks Related to the Corporate Structure—Recent regulatory developments in China may subject us to additional regulatory review and disclosure requirements, expose us to government interference, or otherwise restrict or completely hinder our ability to offer securities and raise capital outside mainland China, which could adversely affect our business operations and cause the value of our securities to significantly decline or become worthless."

Risks Related to Our Business and Industry

We have experienced fluctuations in growth in recent periods, and our historical growth may not be indicative of our future growth.

We have experienced fluctuations in growth in recent periods. We may not be able to sustain our historical growth rates, or at all. In 2022, our total revenue declined mainly due to the scale-down of our marketing solutions business, uncertainties in the macroeconomic environment from pandemic impact and the changing regulatory environment, which led to reduced budget and spending from clients and a broad-based slowdown in the advertising market in China, lockdowns and other pandemic control measures, which affected the progress of our client on-boarding and solution implementation, and increased competition in the SaaS market. You should not consider our historical growth in gross billing and net revenues as indicative of our future performance.

We believe our business, prospects and results of operations depend on a number of factors, some of which are described in more details in this section, including our ability to:

- successfully execute our mobile strategy;
- successfully execute and upgrade our "SaaS+X" model;
- retain existing clients while continuing to optimize our client base;
- attract new clients and further diversify our client base especially on enterprise solutions;
- adapt our solutions and service offerings to meet evolving business needs, including to address market trends such as the migration of consumers from PCs to mobile devices;
- leverage our data assets and experience and expertise in online marketing to extend our solutions beyond online marketing and achieve market acceptance;

- maintain the proper functioning of our technology architecture as our business continues to grow;
- maintain and grow our data assets in order to help marketers identify, engage and convert their audience;
- maintain a high level of customer satisfaction;
- anticipate and adapt to changing market conditions;
- adapt to an evolving and complex regulatory environment;
- acquire or invest in businesses, products and technologies and to integrate and realize synergies from acquisitions and strategic investments;
- increase awareness of our brand among marketers on a global basis in a cost-effective manner; and
- maintain sufficient working capital for business growth.

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

We face intense competition for our marketing solutions and enterprise solutions, and if we fail to maintain and enhance our capabilities, our results of operations could be materially and adversely affected.

Our recent growth was primarily driven by our expansion since 2014 into mobile channels to identify, engage and convert mobile marketing, as well as our expansion into enterprise solutions since 2018. We have experienced and expect to continue to face intense competition in respect of our mobile marketing solutions and enterprise solutions. To deliver, maintain and enhance our mobile capabilities, it is important that we further integrate with a wider range of mobile technologies, systems, networks and standards that we do not control. To further develop and execute our "SaaS+X" model, we have to continuously strength our technological innovation and R&D capabilities and outpace competitors in the market. We may not be successful in developing solutions that operate effectively with these technologies, systems, networks or standards. Any of these could have a material adverse effect on our business, prospects and results of operations.

In light of the rising demand for SasS products, and marketing via mobile app, mobile app publishers, especially popular mobile app publishers, tend to command stronger bargaining power compared to their non-mobile app publisher counterparts. All of these have resulted in a downward pricing pressure on, and increased media costs for, our enterprise solutions and marketing solutions. In addition, the gross margin for our enterprise solutions and marketing solutions may fluctuate in future. As we continue to face increasing competition and pricing pressure, our profit margin could be materially and adversely affected.

We have incurred significant net losses and cash outflows in the past, all of which may continue in the future.

We incurred net losses of US\$14.9 million in 2020, US\$16.6 million in 2021 and US\$202.8 million in 2022. As of December 31, 2022, we had an accumulated deficit of US\$422.1 million. We recorded net operating cash outflows of US\$19.6 million in 2020 and US\$19.7 million in 2021. We will need to generate increased revenue or gross profit levels in future periods to become profitable, and, even if we do, we may not be able to improve our profitability as we intend to continue to expend funds to grow our enterprise solutions business, develop and enhance our data analytic capabilities, and scale our data center infrastructure and services capabilities. Our efforts to grow our business may be more costly than we expect, and we may not be able to increase our revenue or gross profit enough to offset our operating expenses. We may incur significant losses in the future for a number of reasons, including the other risks described in this annual report, and unforeseen expenses, difficulties, complications and delays and other unknown events. If we are unable to achieve or sustain profitability, the market price of our ADSs may significantly decrease. We also face unfavorable capital market in recent years. If there would be no significant fund raising in the future, we may have cash shortage which would impact our strategy on prudent cash management and impact the business, prospects and results of operations.

We have recorded significant impairment charges and may continue to do so in the future.

We have recorded significant impairment charges in 2022, and may continue to do so in future. Goodwill represents the excess of the purchase consideration over the fair value of assets and liabilities of businesses acquired. As of December 31, 2022, due to (i) the underperformance of our acquired businesses, which were adversely affected by the COVID-19 outbreak and the macroeconomic conditions, (ii) a revision of our forecasted future earnings due to intensified industry competition, and (iii) a decline in our market capitalization in 2022, we recorded goodwill impairment of US\$80.1 million. As of December 31, 2022, our goodwill has been fully impaired. In addition, we recorded impairment charges of US\$53.3 million in long-lived assets relation to intangible assets (other than goodwill), property and equipment, and right-of-use assets. We also recorded impairment on our long-term investments of US\$10.8 million in 2022, compared to US\$4.0 million in 2021.

Impairment assessment requires significant management judgement. Any changes in our judgmental assumptions would cause a change in the recoverable amounts of goodwill and long-lived assets and determination of investment's impairment. In addition, we could be required to evaluate the recoverability of goodwill, long-lived assets and investment's impairment prior to the annual assessment if there are any impairment indicators, including experiencing disruptions to the business, unexpected significant declines in operating results, divestiture of a significant component of our business or market capitalization declines, any of which could be caused by our failure to manage our acquired companies and to successfully integrate their operations with our other operations, and our failure to manage our long-term investments in other companies. Impairment charges could negatively affect our reported earnings and financial ratios in the periods of such charges and limit our ability to obtain financing in the future. See "Item 5. Operating and Financial Review and Prospects—A. Operating Results —Critical Accounting Estimates" for more information.

We face risks related to natural disasters, health epidemics and other outbreaks, which could significantly disrupt our operations. In particular, we have been, and may continue to be, materially and adversely affected by the COVID-19 pandemic, and changes we have made to our business may not be successful in dealing with the effects or the after-effects of the pandemic.

Our business, results of operations, financial condition and prospects have been materially and adversely affected by the COVID-19. The COVID-19 pandemic has resulted in quarantines, travel restrictions, home office policies, and temporary closure of stores and facilities in China and many other jurisdictions. These control measures have slowed down the development of the China's economy and adversely affected the global economic conditions and financial markets. In 2022, in view of various control measures implemented by the government in different regions in China, substantial uncertainties remained around the macro-economic conditions, which led to reduced budget and spending from clients and a broad-based slowdown in the advertising market in China. This has adversely affected our revenue and outlook, resulting in a reduction in our revenue and significant impairment charges. See "—We have experienced fluctuations in growth in recent periods, and our historical growth may not be indicative of our future growth." and "—We have recorded significant impairment charges and may continue to do so in the future." In addition, the travel restrictions and lockdowns materially reduced the efficiency of communication between our employees and clients, which materially and adversely affected our client on-boarding and solution implementation.

China began to modify its zero-COVID policy at the end of 2022. There were significant surges of COVID-19 cases in many cities in China subsequently. The rapid spread of COVID-19 virus in a relatively short period of time has compelled people to stay at home and reduced business activities, which adversely affected our client on-boarding and solution delivery. The pandemic situation has been improving in China since early 2023. In early May, the World Health Organization declared that COVID-19 no longer represented a global health emergency, and the risk remains of new variants emerging that cause new surges in cases and deaths. The full and long-term implications from COVID-19 on our business and results of operations remain uncertain. Any significant resurgence of COVID-19 may have an adverse effect on our results of operations, financial condition, business and prospects. Any potential impact on our results will depend on, to a large extent, future developments and new information that may emerge regarding the duration of COVID-19 and the actions taken by governmental authorities and other entities to contain COVID-19 or treat its impact, which are mostly beyond our control. Additionally, to the extent the COVID-19 adversely affects our business, results of operations, cash flows, financial condition and/or prospects, it may also have the effect of heightening many of the other risks described herein.

Our business could also be adversely affected by the effects of other epidemics, including monkey pox (mpox), Ebola virus disease, Zika virus disease, H1N1 flu, H7N9 flu, avian flu, Severe Acute Respiratory Syndrome, or SARS. We are also vulnerable to natural disasters and other calamities. Fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks or similar events may give rise to server interruptions, breakdowns, system failures, technology platform failures or internet failures, which could cause the loss or corruption of data or malfunctions of software or hardware as well as adversely affect our ability to provide solutions and services. Most of our system hardware and back-up systems are hosted in leased facilities in Hong Kong, Shanghai, Beijing and Guangzhou, and most of our directors, senior management and employees are based in Hong Kong, Shanghai and Beijing. Therefore, if any of the above-mentioned natural disasters, health epidemics or other outbreaks were to occur in these regions, our operations may experience material disruptions, such as temporary closure of our offices and suspension of services, which may materially and adversely affect our business and results of operations.

We cannot assure the success of "SaaS+X" model and our enterprise solutions business.

The development of our enterprise solutions is affected by a variety of factors, which mainly include:

- Our enterprise solutions are primarily initiated and established on our cooperation with Tencent Holdings Limited, or Tencent. For example, we help our clients put in place data-management platforms which are currently built primarily on Tencent Cloud and Enterprise WeChat Work. As a result, we rely on the functionality and stability of Tencent's cloud and WeChat's infrastructure in providing our enterprise solutions. In addition, we rely on Tencent's proprietary API connections to gather and analyze customer data and create consumer profiles. Any disruption or termination of this cooperative relationship, including due to regulatory reasons or changes, could deteriorate our ability to operate our enterprise solutions, which could negatively affect our business, financial condition and results of operations. See "—Developments in U.S.-China relations, including any escalation of political or trade tensions, could negatively affect our business and the market for our ADSs." for more information.
- We may face increased competition as we expand into the market of enterprise solutions. We may face competitions from local companies that are working on new cloud computing, artificial intelligence, business intelligence and digitalization service, and other types of enterprise solutions. We may also face potential competition from international SaaS companies, which have longer operating histories, greater financial, technical, marketing, distribution, professional services or other resources and greater name recognition. If we fail to upgrade our technologies and differentiate our enterprise solutions to effectively identify and address clients' needs, our business, results of operations and prospects could be materially and adversely affected.
- We have been making efforts to promote our enterprise solutions to clients in various industries, including through cross-selling or upselling to existing clients and referral from existing clients. We cannot assure you that these promotion and marketing efforts will be successful. As a result, the success of our enterprise solutions depends on the continued growth of these sectors. In addition, to the extent businesses do not find our enterprise solutions an effective or efficient way of customer management and to the extent there are any potential new developments in their sectors, our enterprise solutions may be less attractive to clients, and our results of operations and business growth prospects may be adversely affected.
- We have been executing "SaaS+X" model in our enterprise solutions business. The development of our enterprise solutions business depends on our ability to generate and maintain ongoing, profitable client demand for our SaaS products and related operational services, including through the adaptation and expansion of our services in response to the ongoing technology changes. As a result, a significant reduction in such demand or an inability to deliver services in the evolving technological environment could materially affect our results of operations. In addition, since the margin of providing services is generally lower than providing pure SaaS products, our overall margin could be lower along with the ramp up of our "SaaS+X" model.

We may also face unexpected new risks as we conduct our enterprise solutions business. If we cannot successfully address new challenges and compete effectively, we may not be able to develop a sufficient client base, recover costs incurred for developing and marketing our business, and, consequently, our future results of operations and growth prospects may be materially and adversely affected.

A downturn in global economy could reduce the customers' demand and their ability to pay for our solutions, which could materially and adversely affect our business and results of operations.

The global financial markets have experienced significant disruptions in the past decade. In particular, eruptions of regional tensions, such as the ongoing military conflict involving Ukraine and Russia, and the related sanctions against Russia have resulted in major economic shocks worldwide and substantial volatility across global financial markets. It is unclear whether these challenges and uncertainties will be contained or resolved, and what effects they may have on the global political and economic conditions in the long term.

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, China and Europe. The stock markets around the world have experienced extreme volatility, in reaction to the COVID-19 pandemic and governments' responses thereto, including the rate increments by the Federal Reserve in 2022. The Federal Reserve has signaled its intention to raise interest rate in the United States in order to combat inflation. It is unclear whether these challenges and uncertainties will be contained or resolved, and what effects they may have on the global political and economic conditions in the long term. Economic conditions in China are sensitive to global economic conditions and COVID-19 pandemic. The spending, liquidity and financial conditions of our clients in China were adversely impacted. In the event that our clients fail to pay for our solutions in a timely manner, or at all, the recoverability of our accounts receivables could be adversely affected and we may have to make provisions or write off the relevant bad debt. Any prolonged slowdown in the global economy may further reduce client demand and spending for our solutions, cause delays in the payment and have a negative impact on our business, results of operations and financial condition. Additionally, continued turbulence in the international markets may adversely affect our ability to access the capital markets to meet liquidity needs, which also leads to adopting other strategies on prioritizing cash, liquidity management and balanced resources allocation with our business growth.

Our sales cycle may become more time-consuming and expensive under enterprise solutions, we may encounter pricing pressure and implementation and configuration challenges, and we may have to delay revenue recognition for some complex transactions, all of which could harm our business and operating results.

As the development cycle on enterprise solutions is subject to the complexity of the clients' needs and requirements, industries, scale of operation, etc., we may face greater costs, longer sales cycles and less predictability in completing some of our sales. In this market segment, clients' decision to use our services may be an enterprise-wide decision and, if so, these types of sales would require us to provide greater levels of education regarding the use and benefits of our services, as well as education regarding privacy and data protection laws and regulations to prospective clients with international operations. As a result of these factors, these sales opportunities may require us to devote greater development, sales support and professional services resources to individual clients, driving up costs and time required to complete the transactions, while potentially requiring us to delay revenue recognition on some of these transactions until the technical or implementation requirements have been met.

Our net revenues, net revenues as a percentage of gross billing, gross profit margin and the comparability of our financial results may be affected by our revenue models.

We derive revenue primarily from four sources and report them on either the net or gross basis. For our marketing solutions, we derive revenue from (i) incentives earned from the website publishers, for which we act as a sales agent for their content distribution opportunities, or the sales agency arrangement, which is reported on a net basis, (ii) performing cost-plus marketing campaigns, which is reported on a net basis, (iii) performing specified actions marketing campaigns (i.e., a CPM and CPC basis), which is reported on a gross basis. For our enterprise solutions, we derive revenue from the offering of SaaS products and services, which is reported on a gross basis and a net basis. Please see "Item 5. Operating and Financial Review and Prospects—A. Operating Results—Key Components of Results of Operations—Net Revenues" for more details.

The gross profit margins for our sales agency arrangement and cost-plus marketing campaigns are higher than that for our specified action marketing campaigns as cost of revenues for our sales agency arrangement and cost-plus marketing campaigns does not include media cost. Consequently, an increase in the percentage of gross billing recognized as net revenues from performing specified actions marketing campaigns will have a positive impact on our net revenues and a negative impact on our gross profit margin. On the other hand, an increase in the percentage of gross billing recognized as net revenues from our sales agency arrangement and from performing cost-plus marketing campaigns will have a negative impact on our net revenues and a positive impact on gross profit margin. As the relative percentage of gross billing from incentives earned from the website publisher under our sales agency arrangement and from performing cost-plus marketing campaigns, on the one hand, and from performing specified actions marketing campaigns on the other hand, changes from time to time, the relative proportions of gross billing recognized as net revenues on a gross basis and a net basis also fluctuate, which would consequently impact our net revenues and gross profit margin.

Our marketing solutions and enterprise solutions each represent a mixture of revenue recognized on a gross basis and on a net basis and the proportion of each fluctuates from period to period. Therefore, our net revenues, net revenues as a percentage of gross billing, gross profit margin and the comparability of our financial results in one period to another may be affected by the relative percentage of gross billing recognized as net revenues on the gross basis and net basis. The relative proportions of gross billing recognized as net revenues on a gross basis and a net basis, are affected by a variety of factors, in particular, the terms of the arrangements with our clients, including whether to conduct their marketing campaigns on a specified-action (i.e., gross) or cost-plus (i.e., net) basis in a particular period, which depends on clients' needs and goals.

Failure to retain existing clients or attract new ones could adversely impact our business and results of operations.

We do not have long-term contracts with clients, and a majority of our contracts are for a term of one year or shorter. Our clients, are not obligated to use our platform on an exclusive basis and they generally use multiple providers to manage their marketing spend. Accordingly, we must convince our clients to use our platform, increase their usage and spend a larger share of their online marketing budgets with us, and do so on an on-going basis.

Our ability to achieve renewals or contracts and new sales depends on many factors, some of which are out of our control, including:

- customer satisfaction with our solutions, including any new solutions that we may develop,
- the competitiveness of our pricing and payment terms for our clients, which may, in turn, be constrained by our capital and financial resources,
- customer satisfaction with our account managing services,
- our ability to customize and tailor our solution offerings and delivery and pricing models in accordance with the evolving needs of our clients and end marketers,
- our ability to expand our data base and solutions to serve clients in a wider range of industries and geographic regions,
- our ability to integrate with a wider range of new technologies, systems, networks and standards,
- mergers, acquisitions or other consolidation among clients, and
- global economic conditions and spending levels of customers generally.

Therefore, we cannot assure you that clients that have generated marketing spend on our platform in the past will continue to spend at similar levels or that they will continue to use our platform at all. We may not be able to replace clients which reduce or cease their usage of our platform with new clients that spend similarly on our platform. In addition, the total number of our marketers decreased by 28% from 3,442 in 2021 to 2,464 in 2022 as we continue to strategically review and optimize our customer base.

If our existing clients do not continue to use or increase their use of our platform, or if we are unable to attract sufficient spend on our platform from new clients, our business and results of operations could be materially and adversely affected.

Loss of any marketing agency client may materially and adversely affect our business and results of operations.

We engage third-party marketing agencies to help source and serve some of our marketers. In 2022, we had 2,464 marketers. Among these marketers, 1,145 were represented by our marketing agency clients, which contributed a significant portion of our gross billing and net revenues. We do not have exclusive business arrangement with these marketing agencies. If we lose any marketing agency, we risk losing business from end marketers represented by that agency. In addition, some marketing agencies have their own business arrangements with content distribution channels and can directly connect marketers with such channels. Our business may suffer to the extent that marketing agencies and content distribution channels purchase and sell content distribution opportunities directly from one another or through intermediaries other than us. Loss of marketing agencies as our clients could materially and adversely affect our business and results of operations.

Furthermore, our contractual arrangements with marketing agency clients do not provide us with control or oversight over their day-to-day business activities. If any of our marketing agency clients engage in activities that violate laws and regulations, our reputation could be harmed and our business and results of operations could be materially and adversely affected.

Loss of any content distribution channel and changes in the contract terms with any content distribution channel may materially and adversely affect our business and results of operations.

Our consistent access to attractive content distribution opportunities is crucial to our business. We primarily rely on third-party content distribution channels to access content distribution opportunities. Our content distribution channels are concentrated and primarily include online and mobile publishers, major search engines and ad exchanges, including those owned or operated by Tencent, Baidu, Google and Alibaba. Media costs for content distribution opportunities on Tencent, Baidu, Google and Alibaba channels in aggregate accounted for 75.9%, 55.5% and 56.0% of our media costs in 2020, 2021 and 2022, respectively. Media costs for content distribution opportunities on our largest and second largest channel partners accounted for 51.8% and 10.7% of our media costs in 2022, respectively. In addition, our contracts with content distribution channels are generally for a period of one year and do not impose long-term obligations requiring them to make their content distribution opportunities available to us on reasonable terms or at all. The loss of access to content distribution opportunities from one of those companies would negatively impact our ability to help marketers reach their audience.

Our ability to source content distribution opportunities from content distribution channels depends in part on our ability to continuously generate sufficient marketing spend from our clients on these channels. If our content distribution channels terminate or choose not to renew their contracts with us, due to a variety of factors, including regulatory reasons or changes, our business and results of operations will be materially and adversely affected.

In addition, we may not be able to negotiate favorable or acceptable terms once the contracts expire. There is no assurance that we will be able to execute these contracts with terms favorable or acceptable to us or at all, which could have a material adverse impact on our financial condition and results of operations.

Furthermore, our contracts with content distribution channels generally provide for certain rebates or incentives, generally calculated as a percentage of marketing spend, that we are entitled to should the market spending during the terms exceed the specified thresholds. Under some of our contracts, content distribution channels offer staggered levels of rebates or incentives to us depending on the amount of marketing spend we achieve during the period.

The independent online marketing technology market is highly fragmented and intensely competitive. Independent online marketing technology platforms also face competitive pressure from well-established internet companies, marketing agencies and traditional media. In addition, as we continue to expand into the enterprise solution market, we also face increasingly intensified competition.

China's independent online marketing technology market is highly competitive, fragmented and rapidly changing. With the introduction of new technologies and the influx of new entrants, we expect competition to continue and intensify, which could harm our ability to increase revenue and attain or sustain profitability. We believe the principal competitive factors in this industry include:

- ability to deliver return on marketing expenditure at scale;
- customer trust and loyalty;
- geographic reach;
- breadth and depth of cooperation with publishers, ad exchanges, ad networks and other participants in the online marketing ecosystem;
- comprehensiveness of solutions and service offerings;
- pricing structure and competitiveness;
- cross-channel capabilities;
- accessibility and user-friendliness of solutions; and
- brand awareness.

In addition, independent online marketing technology platforms face competitive pressure from large and well-established internet companies, such as Alibaba, Baidu, Tencent and Google, which have established stronger and broader presence across the online marketing ecosystem and have significantly more financial, technical, marketing and other resources, more extensive client base, and longer operating histories and greater brand recognition than we do. These companies have access to user information by virtue of their popular consumer-oriented websites and mobile apps, and have the technology designed for use in conjunction with the types of user information collected from their websites and mobile apps. These companies may also leverage their positions to make changes to their systems, platforms, exchanges, networks or other products or services that could be harmful to our business and results of operations. While we believe that we do not directly compete with these large and well-established internet companies as we promote their content distribution opportunities or purchase their content distribution opportunities in the ordinary course of our business in connection with our execution of marketing campaigns, and these companies generally do not provide integrated marketing solutions the way we do, we face indirect competition from these major players in the online marketing technology industry as they provide online marketing technology and offer services and offer solutions that help marketers achieve one or more aspects of their marketing goals in one or more phases of their online marketing cycle. These large and well-established companies control content distribution channels and may also directly compete with us to the extent we expand our solutions and footprints vertically along the online marketing technology value chain. Further, some of these companies are, or may also become, our content distribution channels and may enter into other types of strategic arrangements with us. For example, we generally enter into annual framework agreements with content distribution channel partners, including Baidu and Tencent, to purchase or promote their content distribution opportunities. See "Item 4. Information on the Company—B. Business Overview—Our Content Distribution Channels". Competitive pressure may incentivize them to cease their partnership with us. Online marketing technology platforms also face competition from marketing agencies, who may have their own relationships with content distribution channels and can directly connect marketers with such channels. Furthermore, online marketing technology platforms continue to compete with traditional media including direct marketing, television, radio, cable and print advertising companies.

New technologies and methods of online marketing present an evolving competitive challenge, as market participants upgrade or expand their service offerings to capture more marketing spend from marketers. In addition to existing competitors and their existing service offerings, we expect to face competition from new entrants to the online marketing technology industry and new service offerings from existing competitors. If existing or new companies develop, market or resell competitive high-value marketing technology solutions, acquire one of our competitors or strategic partners, form a strategic alliance or enter into exclusivity arrangement with one of our competitors or strategic partners, our ability to compete effectively could be significantly compromised and our business, results of operations and prospects could be materially and adversely affected.

In May 2018, we launched our SaaS-based enterprise solutions. We anticipate competition in this relatively new and evolving area in China and such competition to increase based on businesses' demands for this type of products or solutions. We may face competitions from local companies that are working on enterprise solutions, new cloud computing, artificial intelligence, business intelligence and digitalization. We may also face potential competition from international SaaS companies, which have longer operating histories, greater financial, technical, marketing, distribution, professional services or other resources and greater name recognition. In addition, many of our prospective competitors may have close relationship with our existing and new clients and bear an extensive knowledge of this industry. As a result, we may be able to respond more quickly to new or emerging technologies and changes in clients' requirements, or devote greater resources to the development, promotion and sale of their products. If we fail to upgrade our technologies and differentiate our enterprise solutions to effectively identify and address clients' needs, our business, results of operations and prospects could be materially and adversely affected.

If online marketing technology solutions and enterprise solutions do not achieve widespread market acceptance, our business, growth prospects and results of operations would be materially and adversely affected.

The market for online marketing technology solutions and enterprise solutions such as ours is evolving in China and these solutions may not achieve or sustain high levels of demand and market acceptance as we expect. While marketing via search engines or display channels has been established for several years, marketing via new digital channels such as mobile and social media is less established. The future growth of our business could be constrained by both the level of acceptance and expansion of emerging online marketing channels, as well as the continued use and growth of existing channels. Even if these channels become widely adopted, marketers and agencies may not be familiar with and make significant investments in, solutions such as ours that help them manage their online marketing across channels and devices. In addition, some of our solutions are delivered as SaaS offerings, which are less mature or common in China, and the pace of transition to SaaS business may be slower among customers with heightened data security concerns or general demand for highly customizable application software. The acceptance of our solutions delivered as SaaS offerings will depend, to a substantial extent, on the education of our clients on the SaaS offerings and the widespread adoption of SaaS solutions in general, and we cannot be certain that the trend of adoption of such solutions will continue in the future. Therefore, it is difficult to predict the demand for our platform or the future growth rate and size of the market for online marketing technology solutions.

Expansion of the market for online marketing technology solutions depends on a number of factors, including the growth of new digital channels such as mobile and social media and the cost, as well as the performance and perceived value associated with online marketing technology solutions. If online marketing technology solutions do not achieve widespread acceptance, or there is a reduction in demand for online marketing caused by weakening economic conditions, decreases in corporate spending, technological challenges, data security or privacy concerns, governmental regulation, competing technologies and solutions or otherwise, our business, growth prospects and results of operations will be materially and adversely affected.

In late 2021, we started to strategically reduce lower margin and higher risk businesses in our marketing solution segment in order to focus on the higher growth potential of enterprise solutions. We cannot assure you that this strategy shift would continue to bring more favorable operation results.

The enterprise solution is a relatively new data technology market in China. The expansion of our enterprise solutions depends on the clients' interest and market acceptance. If we fail to obtain a widespread acceptance, the number of our clients may decrease. We may also incur additional spending to further enhance our data analytics capabilities and our brand recognition and promotion, which could adversely impact our profitability. If our enterprise solutions fail to gain a widespread acceptance, our business, growth prospects and results of operations will also be materially and adversely affected.

If our algorithms and data engines for assessing and predicting potential audience behaviors are flawed or ineffective, or if our platform fails to otherwise function properly, our reputation and market share would be materially and adversely affected.

Our ability to attract marketers to, and build trust in, our platform is significantly dependent on our ability to effectively assess and predict audience interest in, and therefore interaction with, relevant marketing content. In addition, our ability to attract businesses to use our enterprise solutions is significantly dependent on our ability to effectively identify and address their needs on customer relationship management, or CRM, and data analytics (e.g. sales data, customer data, product data, etc.). We utilize our proprietary algorithms and data engines to track, process and analyze internet user data, forecast probability and nature of internet users' potential engagement with a given marketing message, create and tailor the marketing message to specific user interest, and execute marketing campaigns based on parameters specified by our clients. Our proprietary algorithms and data engines take into account multiple kinds and sources of data, including data on users' interest, intent, E-commerce and social data, demographic data and campaign performance data, which we track using our proprietary tracking tools, from our marketers, publishers and ad exchanges in connection with marketing campaigns, and from collaboration with selected third-party data partners. The data we collect may not be relevant to all industries, and for certain industries, we may not have sufficient user data to ensure that our algorithms and data engines would work effectively. Furthermore, we generally do not verify the data we gather, which may be subject to fraud or are otherwise inaccurate. Even if such data are accurate, they may become irrelevant or outdated and thus may not reflect a user's genuine interest or accurately predict his or her interaction with a given marketing message. For example, following the date we obtain the relevant data, a user's interest and behavior pattern may change or he or she may have already completed a transaction and is no longer interested in the marketing message.

In addition, we expect to experience significant growth in the amount of data we process as we continue to develop new solutions and features to meet evolving and growing marketer demands. As the amount of data and variables we process increases, the calculations that our algorithms and data engines must process become increasingly complex and the likelihood of any defect or error increases. To the extent our proprietary algorithms and data engines fail to accurately assess or predict a user's interest in and interaction with, the relevant marketing content, or experience significant errors or defects, marketers may not achieve their marketing goals in a cost-effective manner or at all, which could make our platform less attractive to them, result in damages to our reputation and a decline of our market share and adversely affect our business and results of operations.

Our ability to collect and use data from various sources could be restricted.

The optimal performance of our algorithms and data engines depends on the data that we collect from multiple sources, which we use to build user profiles, develop and refine our algorithms and data engines. Our ability to collect and use these types of data is limited by a number of factors, some of which are described in further details elsewhere in this section, including:

- consumer choices, including the blocking or deletion of cookies or modifications to privacy settings;
- decisions by marketers, content distribution channels, or selected third party that we have data collaboration arrangement
 with, to restrict our ability to collect data from them, to refuse to implement mechanisms that we request to ensure
 compliance with our legal obligations;
- changes in browser or device functionality and settings, and other new technologies, which could make it easier for users to
 prevent the placement of cookies or other tracking technologies;
- new developments in law, regulations and industry standards on privacy and data protection regimes, including increased visibility of consent mechanisms as a result of these legal, regulatory or industry developments;
- the failure of our network or software systems, or the network or software systems of marketers;
- our inability to grow client base in new industries and geographic markets in order to obtain the critical mass of data necessary for our algorithms and data engines to perform optimally in these new industries and geographies;
- our relationship with our data partners or certain key data sources, including major internet companies in China, which may stop providing or be unable to provide us data on terms acceptable to us; and

interruptions, failures or defects in our data collection, mining, analysis and storage systems.

Any of the above described limitations on our ability to successfully collect and use data could materially impair the optimal performance of our algorithms and data engines as well as the efficiency of our solutions, which could make our platform less attractive to marketers and result in damages to our reputation, a decline of our market share and adversely affect our business and results of operations.

Blocking or deletion of cookies or other modifications to privacy settings on PCs and mobile devices could impair our data collection and effectiveness of our solutions.

Cookies that we place are generally regarded as "third party cookies" because we place them through internet browsers on an internet user when an internet user visit our website or a website owned by our marketers or other party that has given us permission to place cookies. Our cookies generally record non-personally identifiable information, including when a user views or clicks on a marketing message, where a user is located, how many marketing messages a user has seen, and browser or device information. We use data from cookies to help build user profiles that assess audience interest and predict audience potential interaction with a given marketing message. Cookies may easily be deleted or blocked by internet users. Commonly used internet browsers (Chrome, Firefox, Internet Explorer, and Safari) allow internet users to modify their browser settings to prevent cookies from being accepted by their browsers. Most browsers also now support temporary privacy modes that allow the user to suspend, with a single click, the placement of new cookies or reading or updates of existing cookies. Internet users can also delete cookies from their computers at any time. Some internet users also download free or paid "ad blocking" software that prevents certain cookies from being stored on a user's computer. Further, certain web browsers, such as Safari, currently block or are planning to block some or all third-party cookies by default, as do Apple's iPad and iPhones devices. Mobile devices based upon the Android operating system use cookies only in their web browser applications, so that cookies do not track Android users while they are using other applications on the device. If web browsers block, or internet users reject or delete, cookies, fewer of our cookies or our marketers' cookies may be set in browsers or accessible in mobile devices, which could adversely affect our data collection and hence the optimal performance of our algorithms and data engines and effectiveness of our solutions.

Aside from blocking or deleting of cookies, other modifications to privacy settings on the PCs and mobile devices could limit or restrict our ability to collect and analyze data. For example, certain search engines, such as Google, provide an encrypted search function. Although we may still be able to see the amount of traffic brought to marketers' website through the search engine, we will not be able to see the keywords that generate the traffic as the keywords are encrypted. This makes it more difficult for us to evaluate the effectiveness of keywords, and hence the effectiveness of our solutions may be compromised, which would result in client departure and reputation damages, and materially and adversely affect our business and results of operations.

If we fail to maintain or renew the value-added telecommunication license, or fail to obtain other requisite license, or approvals or filings in China, the business carried out by certain consolidated entity may be materially and adversely affected.

In November 2018, we, through OptAim Network, or the VIE, acquired Shanghai Myhayo Technology Co., Ltd., or Myhayo, a content distribution channel and a mobile content aggregator of articles and short videos in China. Myhayo presents customized feeds to users via its mobile application and allows users to earn points from their daily access to the app, which could be used to redeem cash rewards. Under the relevant PRC laws, commercial operators of value-added telecommunication services, which refer to providers of telecommunications and information services through public network infrastructures that provide information or services to internet users with a charge, shall obtain a value-added telecommunications business operation license. See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Value-added Telecommunication Services" and "—Regulations on Internet Content Providers." It is unclear whether Myhayo's business model would render it a commercial operator of value-added telecommunication service provider under the relevant PRC laws.

In August 2019, Myhayo obtained the value-added telecommunication license that has a validity term of five years from the relevant local counterpart of the MIIT. We are subject to ongoing obligations and continued regulatory review. If we fail to maintain or renew the value-added telecommunication license, or fail to obtain any additional licenses and permits or make any records or filings required by new laws, regulations or executive orders in a timely manner or at all, we could be subject to liabilities or penalties, and we may have to change our business models, and our operations could be adversely affected. In addition, new laws and regulations may be adopted from time to time to address new issues that come to the authorities' attention, which may require us to obtain new license and permits, or take certain actions that may adversely affect our business operations. We may not timely obtain or maintain all the required licenses or approvals or make all the necessary filings. Nor can we assure you that we will be able to timely address all the change in policy, failure of which may subject us to liabilities or penalties, and our operations could be adversely affected.

Content displayed on our platform and the mobile application may be found objectionable by PRC regulatory authorities and may subject us to penalties and other administrative actions.

We are subject to PRC regulations governing internet access and other forms of information over the internet. Under these regulations, internet content providers are prohibited from posting over the internet any content that, among other things, violates PRC laws and regulations, impairs the national dignity of China or the public interest, or is obscene, superstitious, frightening, gruesome, offensive, fraudulent or defamatory. Failure to comply with these requirements may result in monetary penalties, revocation of licenses to provide internet content or other licenses, suspension of the concerned platforms and reputational harm. In addition, these laws and regulations are subject to interpretation by the relevant authorities, and it may not be possible to determine in all cases the types of content that could cause us to be held liable as a content distribution channel and a mobile content aggregator of articles and short videos in China, which presents customized feeds to users via its mobile application. For a detailed discussion, see "Item 4. Information on the Company—B. Business Overview—Regulation—Regulations on Internet Content Providers."

Internet platform operators may also be held liable for the content displayed on or linked to their platforms that is subject to certain restrictions. Our users may browse professional or user-generated content, such as articles and other content formats. Although we have adopted internal procedures to monitor the content displayed on our mobile application, due to the significant amount of content, we may not be able to identify all the content that may be illegal or otherwise objectionable. In addition, we may not be able to timely update our internal procedures to reflect the latest changes in the PRC government's requirements for content display. Failure to identify and prevent illegal or inappropriate content from being displayed on our platform and the mobile application may subject us to liability, government sanctions or loss of licenses and/or permits.

Regulatory, legislative or self-regulatory developments for online businesses, including privacy and data protection regimes, are expansive, not clearly defined and rapidly evolving. These laws and regulations could create unexpected costs, subject us to threats of lawsuits, enforcement actions for compliance failures, result in declines in user growth or engagement, restrict portions of our business or cause us to change our technology platform or business model.

Governments around the world, including the PRC, Hong Kong, U.S. and European Union governments, have enacted or are considering legislation related to online businesses. There may be an increase in legislation and regulation related to online marketing, the use of geo-location data to inform marketing, the collection and use of internet user data and unique device identifiers, such as IP address or mobile unique device identifiers, and other data protection and privacy regulation. These laws and regulations could adversely affect the demand for or effectiveness and value of our solutions, force us to incur substantial costs or require us to change our business practices in a manner that could adversely affect our business and results of operations or compromise our ability to effectively pursue our growth strategies.

We primarily target Chinese language internet users in China for our marketers from all over the world. Through our enterprise solutions, we also access and gather data of users outside China as clients adopt our enterprise solutions. As a result, we may be directly or indirectly subject to the laws and regulations on online marketing and enterprise solutions, including data and privacy laws, of multiple jurisdictions.

In recent years, the PRC government has enacted legislation on internet use to protect personal information from any unauthorized disclosure. For example, on February 1, 2013, China's first set of personal data protection guidelines, the Guidelines for Personal Information Protection in Information Security Technology Public and Commercial Service Systems, came into effect, which set forth detailed personal information protection requirements on data collection, data processing, data transfer and data creation. Although these guidelines are voluntary and non-binding, we believe that growing regulatory oversight of data privacy in China is inevitable. In addition, Amendment 9 to the PRC Criminal Law prohibits institutions, companies and their employees in the telecommunications and other industries from selling or otherwise illegally disclosing a citizen's personal information or obtaining such information through theft or other illegal ways, and further stipulates that persons who sell or otherwise illegally disclose a citizen's personal information obtained during the course of performing duties or providing services shall be subject to a heavier sentence. On November 7, 2016, the Standing Committee of the PRC National People's Congress issued the Cyber Security Law of the PRC, which became effective on June 1, 2017. Pursuant to the Cyber Security Law of the PRC, providers of network products and services shall provide security maintenance for their products and services and shall comply with provisions regarding the protection of personal information as stipulated under the relevant laws and regulations. Moreover, the Provisions on Protection of Personal Information of Telecommunication and Internet Users is the specific regulation governing the collection, use, disclosure and security of personal information. Complying with these PRC laws and regulations may cause us to incur substantial costs or require us to change our business practices. Furthermore, the Personal Information Security Specification, last revised on March 6, 2020, or the China Specification, came into force on October 1, 2020. Although the China Specification is not a mandatory regulation, it nonetheless has a key implementing role in relation to China's Cyber Security Law in respect of protecting personal information in China. It is likely that the China Specification will be relied on by Chinese government agencies as a standard to determine whether businesses have abided by China's data protection rules. The China Specification has broadened the scope of personal sensitive information, or PSI, including but not limited to phone number, transaction record and purchase history, bank account, browse history, and e-ID info such as system account, email address and corresponding password, and thus, the application of explicit consent under the China Specification is more far reaching. Furthermore, under the China Specification, the data controller must provide the purpose of collecting and using subject personal information, as well as business functions of such purpose, and the China Specification requires the data controller to distinguish its core function from additional functions to ensure the data controller will only collect personal information as needed. Our failure to comply with the China Specification could result in governmental enforcement actions, litigation, fines and penalties, which could have a material adverse effect on our business, results of operations, financial condition and prospects. On November 28, 2019, the CAC, or the MIIT, the Ministry of Public Security, and the State Administration for Market Regulation of the PRC jointly formulated the Method for Identifying the Illegal Collection and Use of Personal Information by Applications, which explicitly sets out the specific methods of identifying six types of illegal behaviors of collecting and using personal information through applications. If we are unable to respond to changing laws, regulations, policies and guidelines related to privacy or cyber security, our business, financial condition, results of operations and prospects may be materially and adversely affected.

In Hong Kong, the Hong Kong Personal Data Ordinance prohibits an internet company collecting information about its users, analyzing the information for a profile of the user's interests or selling or transmitting the profiles to third parties for direct marketing purposes unless it has obtained the user's consent.

In the U.S., all 50 states have now passed laws to regulate the actions that a business must take in the event of a data breach, such as prompt disclosure and notification to affected users and regulatory authorities. In addition to the data breach notification laws, some states have also enacted statutes and rules requiring businesses to reasonably protect certain types of personal information they hold or to otherwise comply with certain specified data security requirements for personal information. Additionally, the U.S. government has announced that it is reviewing the need for greater regulation of the collection of consumer information, including regulation aimed at restricting some targeted advertising practices.

In the European Union, or EU, to the extent it is applicable to the processing operations carried out in the course of our activities, the General Data Protection Regulation, or the GDPR, which became applicable on May 25, 2018, has a broad territorial scope affecting the processing of personal data by companies outside of the EU offering goods and services to, or monitoring the behavior of, individuals in the EU. The GDPR introduces new obligations for subject companies in the area of privacy and data protection. The GDPR implements more stringent legal and operational requirements for both processors and controllers of personal data, including, for example, requiring expanded disclosures about how personal information is to be used, limitations on retention of information, new rights for data subjects with respect to their data (including by enabling them to exercise rights to erasure and data portability), mandatory data breach notification requirements, and higher standards for data controllers to demonstrate that they have obtained either valid consent or have another legal basis in place to justify their data processing activities. The GDPR further provides that EU member states may make their own additional laws and regulations in relation to certain data processing activities, which could further limit our ability to use and share personal data and could require localized changes to our operating model. Under the GDPR, fines of up to €20 million or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, may be imposed in certain cases of non-compliance. To the extent the GDPR is applicable, the implementation of the GDPR may require amendments to our procedures and policies or the agreements we have with our service providers and clients, and these changes could impact our business by increasing its operational and compliance costs. The EU has also released a proposed Regulation on Privacy and Electronic Communications, or the e-Privacy Regulation, to replace the EU's current Privacy and Electronic Communications Directive, or the e-Privacy Directive, to, among other things, achieve a greater harmonization among EU member states and better align the rules governing electronic communications (e.g., in relation to the use of cookies and other tracking technologies and protection against spam) with the requirements of the GDPR. While the ePrivacy Regulation was originally intended to be adopted on May 25, 2018 (alongside the GDPR), it is still going through the European legislative process, and commentators now expect it to be adopted in 2023. The current draft of the ePrivacy Regulation imposes strict opt-in e-marketing rules with limited exceptions to business to business communications and significantly increases fining powers to the same levels as GDPR. Regulations of cookies and web beacons may lead to broader restrictions on our online activities, including efforts to understand followers' internet usage and promote ourselves to them. Since the implementation of the GDPR in 2018, we have made tremendous efforts to comply and constantly adapt to the fast-evolving regulatory framework; for example, we have already revised our Data Processing Addendum (after invalidation of the Privacy Shield by the European Court of Justice, with the adoption of the new Standard contractual clauses by the European Union, and the recent adoption of the new UK standard contractual clauses by the United Kingdom). We are always actively working with our clients and partners towards ensuring up to date compliance.

Outside of the U.S. and the EU, many jurisdictions have adopted or are adopting new data privacy and data protection laws that may impose further onerous compliance requirements, such as data localization, which prohibits companies from storing outside the jurisdiction data relating to resident individuals in data centers outside the jurisdiction. The proliferation of such laws within the jurisdictions and countries in which we operate may result in conflicting and contradictory requirements, particularly in relation to evolving technologies such as cloud computing. Any failure to successfully navigate the changing regulatory landscape could result in legal liability or impairment to our reputation in the marketplace, which could have a material adverse effect on our business and operations.

While we strive to comply with all applicable laws and regulations relating to privacy and data collection, processing, use, and disclosure applicable to us, it is possible that our practices are and will continue to be, inconsistent with certain regulatory requirements. These laws and regulations are continually evolving, are not always clear, and are not always consistent across the jurisdictions in which we do business, and the measures we take to comply with these laws, regulations and industry standards may not always be effective. We may be subject to litigation or enforcement action or reduced demand for our solutions if we or our marketers fail to abide by applicable data protection and privacy laws or to provide adequate notice and/or obtain consent from end users. In addition, some of our content distribution channels require us to indemnify and hold them harmless from the costs or consequences of litigation resulting from using their networks. Any proceeding, claims or lawsuits initiated by governmental bodies, customers or other third parties, whether meritorious or not, or perception of concerns relating to our collection, use, disclosure, and retention of data, including our security measures applicable to the data we collect, whether or not valid, could harm our reputation, force us to spend significant amounts and time on defense of these proceedings, give rise to significant fines, liabilities and damage awards, distract our management, change our business practices, increase our costs of doing business, inhibit the use of our solutions, harm our ability to keep existing customers or attract new customers, or otherwise materially and adversely affect our business, results of operations and prospects.

We are subject to, and may expend significant resources in defending against, government actions and civil claims in connection with false, fraudulent, misleading or otherwise illegal marketing content for which we provide design, production or agency services.

Under PRC Advertising Law, where an advertising operator provides advertising design, production or agency services with respect to an advertisement when it knows or should have known that the advertisement is false, fraudulent, misleading or otherwise illegal, the competent PRC authority may confiscate the advertising operator's advertising revenue from such services, impose penalties, order it to cease dissemination of such false, fraudulent, misleading or otherwise illegal advertisement or correct such advertisement, or suspend or revoke its business licenses under certain serious circumstances.

Under the PRC Advertising Law, "advertising operators" include any natural person, legal person or other organization that provides advertising design, production or agency services to advertisers for their advertising activities. Since our solutions involve provision of agency services to marketers, including helping them identify, engage and convert audience, and create content catering to their potential clients across different content distribution channels, we are deemed as an "advertising operator" under the PRC Advertising Law. Therefore, we are required to examine advertising content for which we provide agency services for compliance with applicable laws, notwithstanding the fact that the advertising content may have been previously published, and that the advertisers also bear liabilities for the content in their advertisements. In addition, for advertising content related to certain types of products and services, such as alcohol, cosmetics, pharmaceuticals and medical procedures, we are expected to confirm that the advertisers have obtained requisite government approvals, including operating qualifications, proof of quality inspection for the advertised products, government pre-approval of the content of the advertisements and filings with the local authorities. Although we have established internal policies to review and vet advertising content before it is placed on a content distribution channel to ensure compliance with applicable laws, we cannot ensure that each advertisement for which we provide agency services complies with all PRC laws and regulations relevant to advertising activities, that supporting documentation provided by our clients is authentic or complete, or that we are able to identify and rectify all non-compliances in a timely manner.

Moreover, civil claims may be filed against us for fraud, defamation, subversion, negligence, copyright or trademark infringement or other violations due to the nature and content of the information for which we provide design, production or agency services. For example, we generally represent and warrant in our contracts with content distribution channels as to the truthfulness of the advertising content that we place on these channels, and agree to indemnify the content distribution channels for any losses resulting from false, fraudulent, misleading or otherwise illegal advertising content that we place on these content distribution channels. On the other hand, not all our marketing campaign contracts contain a back-to-back representation and warranty as to the truthfulness of the advertising content or an indemnity provision where the clients undertake to hold us harmless in case we incur losses arising out of any false, fraudulent, misleading or otherwise illegal advertising content. In the event we are subject to government actions or civil claims in connection with false, fraudulent, misleading or otherwise illegal marketing content for which we provide agency services, our reputation, business and results of operations may be materially and adversely affected.

If we are not able to grow efficiently to meet our clients' increasing needs, our operating results could be harmed.

As usage of our solutions especially on enterprise solutions grows, we will need to devote additional resources to improving our system infrastructure. In addition, we will need to appropriately scale our internal business systems and our services organization, including account servicing staff, to serve marketers' growing demands. We cannot assure you these improvements and expansions to our infrastructure and staff will be fully or effectively implemented on a timely basis, if at all. Even if we are able to upgrade our systems and expand our staff, such expansion may be expensive and complex and require our management's time and attention. We could also face inefficiencies or operational failures as a result of our efforts to scale our infrastructure and expand our staff. Any of these could impair the performance of our platform, reduce customer satisfaction and lead to client departure, which could harm our reputation and adversely affect our business and results of operations.

If we fail to offer high-quality account services, our business and reputation may suffer.

Our success in marketing and sale of our solutions and retention and expansion of client base depends on our ability to maintain a consistently high level of customer services, client education and technical support, which requires that our account servicing personnel have specific marketing domain knowledge and expertise. If we are unable to hire and train a sufficient number of support staff to provide effective and timely support to our clients, our clients' appreciation of, or satisfaction with, our solutions may be adversely affected, resulting in reduced client spending or departure and adversely affect our reputation and materially and adversely affect our business and results of operations.

If we fail to offer high-quality technical support services under enterprise solutions, our relationships with our clients and our financial results may be adversely affected.

Clients of our enterprise solutions will depend on our support to resolve technical issues relating to our applications. We may be unable to respond quickly enough to accommodate short-term increases in their demand for support services. Increased demand for these services, without corresponding revenues, could increase costs and adversely affect our operating results. In addition, our sales growth can be highly dependent on our applications and business reputation and on positive recommendations from clients. Any failure to maintain high-quality technical support, or a market perception that we do not maintain high-quality support, could adversely affect our reputation, our ability to sell our service offerings to existing and prospective customers, and our business, operating results and financial position.

If we fail to innovate, adapt and respond timely and effectively to rapidly changing technologies and new trends, our solutions may become less competitive or obsolete.

Our future success will depend on our ability to continuously innovate, enhance and broaden our solutions to meet evolving needs for online marketing, data and intelligent enterprise solutions, and address technological advancements and new trends in these areas, in particular the growing popularity of online marketing via mobile channel. We may not be able to timely identify and respond to these new trends. The design of mobile devices and operating systems is controlled by third parties with which we do not have any formal relationship. These parties frequently introduce new devices, and from time to time they may introduce new operating systems or modify existing ones. Network carriers may also restrict our ability to access specific content on mobile devices. If we fail to innovate or adapt our technologies and solutions so that they are compatible with these devices or operating systems, which in turn require that we maintain adequate research and development personnel and resources, our solutions may become less competitive or obsolete. In addition, any new solution that we develop may not receive wide acceptance as we anticipated. Any of these events could materially and adversely affect our business, results of operations and prospects.

If we are unable to protect our proprietary information or other intellectual property, our business could be adversely affected.

As of December 31, 2022, we had 2 patents and 138 computer software copyrights in mainland China, and 42 registered trademarks in mainland China, Hong Kong, Singapore, Japan and South Korea. We rely on a combination of trademark and trade secret laws, and contractual restrictions, including through confidentiality, non-disclosure and assignment of invention assignment agreements with our key employees, consultants and third parties with whom we do business, to establish, maintain and protect our proprietary information and other intellectual property. Policing any misappropriation, unauthorized use or reverse engineering our proprietary information and other intellectual property is difficult and costly and the steps we have taken may be inadequate. For example, contractual restrictions may be breached, and we may not succeed in enforcing our rights or have adequate remedies for any breach of laws or contractual restrictions. In addition, we may not be able to enter into agreements or arrangements with everyone who has access to our proprietary information or contributes to the development of our intellectual property. Moreover, our trade secrets may be disclosed to or otherwise become known or be independently developed by competitors, and in these situations, we may have no or limited rights to stop others' use of our information.

Furthermore, to the extent that our employees, consultants or other third parties with whom we do business use intellectual property owned by others in their work for us, disputes may arise as to the rights to such intellectual property. If, for any of the above reasons, our intellectual property is disclosed or misappropriated, it would have an adverse effect on our business, financial condition and results of operations.

Our business may suffer if it is alleged or determined that our technologies or any other aspects of our business infringe on the intellectual property rights of others.

As we continue to expand and as litigation or other similar proceedings become more common in resolving commercial disputes, we face a higher risk of being subject to intellectual property infringement claims. Companies in the internet, technology and media industries are increasingly bringing and becoming subject to suits alleging infringement of proprietary rights. The validity, enforceability and scope of protection of intellectual property rights in internet-related industries are uncertain and evolving. In particular, our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We cannot be certain that our operations or any aspects of our business do not or will not infringe upon or otherwise violate patents, copyrights or other intellectual property rights held by third parties. This is also the case as our sales and marketing activities may use photos or video clips that contain portraits of individuals and shows performed by others, such as product live-streaming promotions held by our cooperating key opinion leaders ("KOLs"). At times, third parties may adopt trade names or trademarks similar to those of ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered or unregistered trademarks that are similar to our registered or unregistered trademarks or trade names. If a third party has been using in commerce any mark that is confusingly similar to our trade names or trademarks, or has registered any such marks, prior to our use or registration of our trade names or trademarks, such third party could potentially bring infringement claims against us depending on the territory of the use or registration. Any such claim would require us to incur significant costs to defend, and if we are unsuccessful, we may be subject to an injunction and/or required to pay significant damages or spend significant time and resources to rebrand any relevant products or services.

We have received in the past, and expect to receive in the future, notices that claim we have infringed, misappropriated or misused other parties' trademark and other intellectual property rights. For example, in January 2015, iClick, Inc., a company incorporated in the state of Washington in the United States and the owner of a U.S. registered trademark for the term "iClick" filed an action in the United States District Court for the District of Colorado against one of our subsidiaries in Hong Kong, iClick Interactive Asia Limited, alleging trademark and trade name infringement and unfair competition, among others. The basis of iClick Inc.'s claims arose from iClick Interactive Asia Limited's use of the name iClick in the United States. We believe these claims lacked merit, primarily because the parties offer different goods and services, and therefore any chance of consumer confusion is remote. However, to avoid the costs and uncertainty of litigation, we settled the lawsuit in January 2016. Furthermore, we have not conducted any trademark clearance searches in the United States nor have we obtained any registrations or filed any applications for the registration of our trade names or trademarks in the United States. Although common law and federal law in the United States provide unregistered mark in use in the United States with protection against infringement, such protection is only limited to the geographic areas where such mark is in use. Therefore, we may not be able to effectively enforce and protect our trade names or trademark throughout the United States. Any litigation or other proceedings on intellectual property rights could be costly, time-consuming, divert management resources, and may impede our ability to use existing or develop new technologies or expand into new markets, any of which could have a material adverse effect upon our business and results of operations.

Past and future acquisitions, strategic investments, partnership or alliance could be difficult to integrate, divert the attention of key management personnel, disrupt our business, dilute shareholder value and adversely affect our results of operations and financial condition.

We have expanded our business and offerings through organic growth as well as acquisitions and strategic investments. For example, in July 2015, we acquired OptAim, a mobile marketing business. Since the acquisition, we have substantially expanded our mobile marketing business, with OptAim's complementary mobile analytics, attribution technologies, and content distribution channel partners that allow marketers to track and optimize marketing campaigns on mobile channels.

In January 2019, we made a controlling investment in Changyi, as we seek to extend our client solutions beyond the core online marketing business, addressing enterprise needs in China, particularly in the emerging area of Smart Retail—an expanding and innovative market involving the combination of online and offline solutions. In October 2020 and December 2020, we further increased our equity stake in Changyi. In March 2022, we entered into an agreement to acquire the remaining equity interest in Changyi. We have since made additional investments and acquisition to expand our enterprise solution offerings.

In May 2020, we made a controlling investment in Optimal Power Limited to acquire certain premium media licensing assets covering a number of jurisdictions in the Asia-Pacific.

In October 2020, we acquired CMRS, a leading marketing automation solution provider in China. The acquisition will allow us to further enhance our full product offerings, leveraging CMRS's marketing automation capabilities, in particular, for cross-border customers' marketing into China.

In January 2021, we issued certain Class B ordinary shares to Baozun, a leading brand e-commerce service partner that helps brands execute their e-commerce strategies in China and entered into a strategic cooperation framework agreement with it. Pursuant to the strategic cooperation framework agreement, we and Baozun will collaborate in developing a full-cycle, closed-loop e-commerce service model, covering areas such as system development, IT services, digital marketing, store operation, customer services and warehousing and fulfillment services to better serve potential brand partners.

In July 2021, we completed the acquisition of Parllay, a leading personalized marketing platform with deep expertise in WeChat-based CRM, e-commerce and marketing SaaS solutions in China. We anticipate that the utilization of Parllay's rich expertise will further enhance our product offerings, enlarge our potential clients base, and accelerate sales of our enterprise solutions.

Past and future acquisitions, strategic investments, partnerships or alliances could be difficult to integrate, divert the attention of key management personnel, disrupt our business, dilute shareholder value and adversely affect our business and results of operations. We have limited experience in acquiring and integrating businesses, products and technologies. If we identify an appropriate acquisition candidate, we may not be successful in negotiating the terms and/or financing of the acquisition, and our due diligence may fail to identify all of the problems, liabilities or other shortcomings or challenges of an acquired business, product or technology, including issues related to intellectual property, product quality or architecture, regulatory compliance practices, revenue recognition or other accounting practices or employee or client issues. Any acquisition or investment may require us to use significant amounts of cash, issue potentially dilutive equity securities or incur debt. In addition, acquisitions, including our acquisitions of OptAim, CMRS, and Changyi, our strategic investment in Optimal Power Limited, involve numerous risks, any of which could harm our business, including:

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

increased fixed costs.

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

If we do not appropriately maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002, we may be unable to accurately report our financial results and the market price of our ADSs may be adversely affected.

As a public company in the United States, we are subject to Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, which requires that we include a report of management on our internal control over financial reporting in our annual report on Form 20-F beginning with our annual report for the fiscal year ended December 31, 2018.

Our management has concluded that our internal control over financial reporting was not effective as of December 31, 2022. We and our independent registered public accounting firm identified two material weaknesses in our internal control over financial reporting. These two material weaknesses identified relate to (1) the lack of sufficient accounting personnel with appropriate understanding of U.S. GAAP and SEC reporting requirements, and (2) the lack of an up-to-date manual of accounting policies and procedures to facilitate preparation of U.S. GAAP financial statements, which could result in adjustments to U.S. GAAP not identified in a timely and complete manner, causing material misstatements in the Company's financial reporting. To remediate these two weaknesses, we have adopted the following measures to improve our internal control over financial reporting:

- In 2020 and 2021, we hired additional personnel with managerial positions in our finance department with an appropriate
 understanding of and work experience involving U.S. GAAP and SEC reporting requirements. We will continue to put
 effort in hiring additional personnel with an appropriate understanding of and work experience involving U.S. GAAP and
 SEC reporting requirements to ensure there are sufficient resources in the financial reporting functions.
- Besides, we established clear roles and responsibilities for financial reporting and accounting personnel to address complex accounting and financial reporting issues.
- Furthermore, we sponsored our existing financial reporting and accounting personnel to complete external courses relating
 to U.S. GAAP and SEC reporting such that the financial reporting and accounting personnel can earn the necessary
 credentials to be qualified as certified public accountants in the U.S.
- We are also establishing an ongoing program to provide sufficient and additional appropriate training to our financial reporting and accounting staff, especially trainings related to U.S. GAAP and SEC financial reporting requirements. For instance, we continue to require our existing financial reporting and accounting personnel to regularly attend U.S. GAAP and SEC reporting requirement training and workshops hosted by external organizations at least on an annual basis.
- In addition, we have formalized the procedures and controls regarding the financial reporting process and developed and implemented a comprehensive set of U.S. GAAP policies and standardized financial reporting procedures, including a manual of accounting policies and financial reporting checklists, to allow early detection, prevention and resolution of potential misstatements. However, we are in the process of hiring additional financial reporting and accounting personnel to timely update the manual of accounting policies, and properly prepare and review financial statements and related footnote /disclosures based on U.S. GAAP and SEC reporting requirements.

See "Item 15. Controls and Procedures." We cannot assure you, however, that these measures may fully address these deficiencies in our internal control over financial reporting or that we may conclude that they have been fully remedied. Our failure to correct these control deficiencies or our failure to discover and address any other control deficiencies could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis. However, if we fail to maintain effective internal control over financial reporting in the future, our management and our independent registered public accounting firm may not be able to conclude that we have effective internal control over financial reporting. This could in turn result in the loss of investor confidence in the reliability of our financial statements. As a result of these, our business, financial condition, results of operations and prospects, as well as the trading price of our ADSs, may be materially and adversely affected. Moreover, ineffective internal control over financial reporting significantly hinders our ability to prevent fraud. Furthermore, we have incurred and may need to incur additional costs and use additional management and other resources in an effort to comply with Section 404 of the Sarbanes-Oxley Act and other requirements going forward.

In addition, our internal controls over financial reporting will not prevent or detect all errors or 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.

Failures or disruption in any systems, software or hardware infrastructure supporting our platform and solutions could significantly disrupt our operation and cause us to lose clients or partners.

The optimal performance of our solutions relies on the continued and uninterrupted performance of our systems, software and hardware infrastructure, and security and integrity of our data. They are vulnerable to damages from a variety of sources, some of which are out of our control, including telecommunication failures, power outages, cyber-attacks, or other malicious human acts and natural disasters. Any steps we take to increase the reliability and redundancy of our systems, software and hardware infrastructure supporting our platform and solutions and to improve the security of our data assets may be expensive and may not be successful in preventing system failures or disruption. For example, techniques used to obtain unauthorized access to or sabotage our data or otherwise hack our systems change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate these techniques or to implement adequate preventative measures. Sustained or repeated failures or disruption in our systems, including from security breaches, whether actual or perceived, could significantly reduce the attractiveness of our solutions, harm our reputation, result in our liabilities and have a material adverse effect on our business and results of operations.

In addition, our business may be negatively affected by interruptions or delays in services provided by third-party system or infrastructure providers that we rely upon. We currently lease data centers and utilize related equipment and services from third-party data center providers. All of our data gathering and analytics are conducted on, and the marketing content we deliver are processed through, our servers located in these data centers and their cloud. We also rely on bandwidth providers and internet information service providers to deliver marketing content. While we have disaster recovery arrangements in place, our testing in actual disasters or similar events is limited and any damage to, or failure of, the systems or facilities of our third-party providers, including as a result of any occurrence of a natural disaster, an act of terrorism, vandalism or sabotage, a decision to close any data center or the facilities of any other third-party provider without adequate notice, or other unanticipated problems at these facilities, could adversely impact our ability to deliver our solution to marketers and have a material adverse effect on our business and results of operations.

Our inability to use software licensed from third parties, including open source software could negatively affect our ability to sell our solutions and subject us to possible litigation.

Our technology platform incorporates software licensed from third parties, including open source software, which we use without charge. Although we monitor our use of open source software, the terms of many open source licenses to which we are subject have not been interpreted by courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to provide our solution to our clients. In addition, the terms of open source software licenses may require us to provide software that we develop using such software to others on unfavorable license terms. For example, certain open source licenses may require us to offer the components of our platform that incorporate the open source software for free, to make available source code for modifications or derivative works we create based upon, incorporating or using the open source software, and to license such modifications or derivative works under the terms of the particular open source license.

In the future, we could be required to seek licenses from third parties in order to continue offering our solution, in which case licenses may not be available on terms that are acceptable to us, or at all. Alternatively, we may need to re-engineer our solutions or discontinue use of portions of the functionality provided by our solutions. Our inability to use third-party software could result in disruptions to our business, or delays in the development of future offerings or enhancements of our existing platform, which could materially and adversely affect our business and results of operations.

If we fail to detect fraud or serve marketers' marketing content on undesirable websites, our reputation will suffer, which would harm our brand and negatively impact our business and results of operations.

Our business depends in part on providing marketers with solutions that they can trust, and we have contractual commitments to take reasonable measures to prevent marketer's marketing content from appearing on undesirable websites. We use proprietary technologies and third party services to detect click fraud and block inventory on websites with inappropriate content. However, technologies utilized by bad actors are constantly evolving. Preventing and combating fraud and inappropriate content requires constant vigilance and investment of time and resources. We may not always be successful in our efforts to do so. If we serve marketing content on websites that are objectionable to marketers, or inadvertently purchase content distribution opportunities for marketers that proves to be unacceptable for their marketing campaigns, such as fraudulent bot generated impressions, we may lose business and incur damages to our brand and reputation. In addition, we may be exposed to liabilities or the need to provide credits or refunds to our clients, and our business and results of operations may be harmed.

Any negative publicity with respect to us, the online marketing industry in general or our partners may materially and adversely affect our reputation, business and results of operations.

Complaints, litigation, regulatory actions or other negative publicity that arise about the online marketing industry in general or our company in particular, including on the quality, effectiveness and reliability of marketing solutions, privacy and security practices, and online marketing content, even if inaccurate, could adversely affect our reputation and client confidence in, and the use of, our solutions. Harm to our reputation and client confidence can also arise for many other reasons, including employee misconduct, misconduct of our data and content distribution channel partners, data center providers or other counterparties, failure by these persons or entities to meet minimum quality standards or otherwise fulfill their contractual obligations or to comply with applicable laws and regulations. Additionally, negative publicity with respect to our data or content distribution channel partners could also affect our business and results of operation to the extent that we rely on these partners or if marketers or marketing agencies associate our company with such partners. For example, we collaborate with third-party data service providers who supplement our dataset. We maintain a strict vetting process before engaging with these third-party data service providers to ensure the integrity and quality of data they provided, but we cannot assure you that these providers have accessed and processed data in a proper and legal manners. Any non-compliance on their part may cause potential liabilities to us and disrupt our operations.

If we fail to promote or maintain our brand in a cost-efficient manner, our business and results of operations may be harmed.

We believe that developing and maintaining awareness of our brand in a cost-effective manner is critical to achieving widespread acceptance of our solutions, and is an important element in attracting new clients and partners. Furthermore, we believe that the importance of brand recognition will increase as competition in our market increases. Successful promotion of our brand will depend largely on our ability to deliver value propositions to marketers and on the effectiveness of our marketing efforts. In the past, our efforts to build our brand have involved significant expenses and promotion of our brand may be subject to restrictions and challenges. For example, as part of the settlement of the trademark infringement lawsuit brought by iClick, Inc. in January 2015, although we are free to use the term "iClick" in connection with our business in the United States, we are subject to ongoing obligations and restrictions to certain types of marketing and promotion that contain that term. In addition, our brand promotion activities may not yield increased revenue, and even if they do, any increased revenue may not offset the expenses we incurred in building our brand. If we fail to successfully promote and maintain our brand, or incur substantial expenses in an unsuccessful attempt to promote and maintain our brand, we may fail to attract enough new clients or retain our existing clients and our business and results of operations can be materially and adversely affected.

Misconduct, errors and failure to function by our employees could harm our business and reputation.

We are exposed to many types of operational risks, including the risk of misconduct and errors by our employees. Our business depends on our employees to process a large number of marketing campaigns orders, which involve the use of audience data and marketers' business information. We could be materially adversely affected if such data or information was disclosed to unintended recipients or if we experience an operational breakdown or failure in the processing of a marketing campaign whether as a result of human error, a purposeful sabotage or a fraudulent manipulation of our operations or systems. We could also be materially adversely affected if our employees absconded with our proprietary data or used our know-how to compete with us. Although employees have left our company in the past and may have violated the non-compete and non-solicitation clauses in their employment agreements with little impact on our business, future violations of these clauses could have a material adverse effect on our business. Any of these occurrences could result in our diminished ability to operate our business, potential liability to our clients, inability to attract future clients, reputational damage, regulatory intervention and financial harm, which could negatively impact our business and results of operations.

We may not be able to obtain additional capital when desired, on favorable terms or at all.

We operate in a capital intensive industry and require a significant amount of cash to fund our operations. In previous years, we have financed our operations primarily with cash generated from financing activities such as issuance of ordinary shares upon IPO and follow-on share offerings, issuance of convertible notes, and bank borrowings. We may not be able to obtain additional capital when desired, on favorable terms or at all. As of February 28, 2023, our total facilities available for draw-down (net of bank deposits that would need to be pledged as restricted cash upon utilization of the facilities) dropped significantly to US\$17.4 million.

If we raise additional funds through future issuances of equity or convertible debt securities, existing shareholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our ordinary shares. In addition, some of our credit agreements include a financial covenant that requires us to meet certain minimum monthly adjusted quick ratio and minimum quarterly EBITDA, and any debt financing that we secure in the future could involve additional restrictive covenants relating to our capital raising activities and other financial and operational matters, including the ability to pay dividends. These restrictions may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

Our ability to obtain additional financing is subject to a number of uncertainties, including those relating to:

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

Some of the factors of the above uncertainties are beyond our control. If we fail to obtain additional capital when desired or properly manage our working capital as planned, we may not be able to execute our growth strategies including but not limited to broaden our business scope, penetrate new markets, invest on innovation and technology etc., and could materially and adversely affected our business, results of operations, liquidity, financial condition, competitiveness and prospects.

If we do not retain our senior management team and key employees, or attract additional technology and sales talents, we may not be able to sustain our growth or achieve our business objectives.

Our future success is substantially dependent on the continued service of our senior management team and key employees. Our management team is currently spread across multiple physical locations and geographies, which can strain the organization and make coordinated management more challenging. Our future success also depends on our ability to continue to attract, retain and motivate highly skilled employees, particularly employees with technical skills that enable us to deliver effective marketing solutions, and sales and marketing, and publisher development and support personnel with experience in online marketing. Competition for these employees in our industry is intense. As a result, we may be unable to attract or retain these management, technical, sales and marketing and publisher development and support personnel who are critical to our success, resulting in harm to our key marketer and publisher relationships, loss of key information, expertise or proprietary knowledge and unanticipated recruitment and training costs. The loss of the services of our senior management or other key employees could make it more difficult to successfully operate our business and pursue our business goals.

Increases in labor costs in the PRC may adversely affect our business and results of operations. Most of our employees are based in China. Chinese economy has experienced increases in inflation and labor costs in recent years. As a result, average wages in the PRC are expected to continue to increase. In addition, we are required by PRC laws and regulations to pay various statutory employee benefits, including pension, housing fund, medical insurance, work-related injury insurance, unemployment insurance and maternity insurance to designated government agencies for the benefit of our employees. We expect that our labor costs, including wages and employee benefits, will continue to increase. Unless we are able to control our labor costs or pass on these increased labor costs to our users by increasing the fees of our services, our financial condition and results of operations may be adversely affected.

Negative publicity about our KOLs may adversely affect our reputation, our business and our results of operations.

Our brand and reputation is perceived to be connected with the reputation of the KOLs we collaborate with. Therefore, our brand image and reputation could be harmed by negative publicity about the KOLs we collaborate with. Negative publicity about them could occur in many circumstances that are beyond our control. For example, the KOLs we collaborate with may post unlawful, false, offensive or controversial content on their social media pages, notwithstanding any terms of use of the social media platforms and our guidelines, which may result in negative comments and complaints or even cause their accounts to be closed by social media platforms. Although we have requested the KOLs we collaborate with to observe certain behavioral covenants and to refrain from conduct that is detrimental to our reputation and brand image, we cannot assure you that they will strictly follow those requirements. In addition, they may also receive negative publicity if they are involved in any illegal activities, scandals or rumors. Any of these negative publicity, regardless of veracity, could hurt our reputation and may result in costs incurred to offset such reputation damage and have a negative impact on our business, results of operations and financial condition.

We do not have any business insurance coverage in China.

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

The failure of any bank in which we deposit our funds could have an adverse effect on our business, financial condition and results of operations.

Events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions, transactional counterparties or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market-wide liquidity problems. Most recently, on March 10, 2023, Silicon Valley Bank ("SVB") was closed by the California Department of Financial Protection and Innovation, which appointed the U.S. Federal Deposit Insurance Corporation ("FDIC") as receiver. Similarly, on March 12, 2023, Signature Bank was also placed into receivership. A statement by the U.S. Department of the Treasury, the Federal Reserve and the FDIC indicated that all depositors of SVB would have access to all of their money after only one business day of closure, including funds held in uninsured deposit accounts, however, borrowers under credit agreements, letters of credit and certain other financial instruments with SVB, Signature Bank or any other financial institution that is placed into receivership by the FDIC may be unable to access undrawn amounts thereunder.

Although we generally seek to diversify our cash and cash equivalents across several financial institutions in an attempt to minimize exposure to any one of these entities, our cash balance with a financial institution may exceed the amount under the deposit guarantee program in the relevant jurisdiction. To the extent any of the financial institutions in which we have deposited funds ultimately fails, we may lose our deposits to the extent they exceed the amount under the deposit guarantee program in the relevant jurisdiction, and/or we may be required to move our accounts to another financial institution, which could cause operational difficulties, such as delays in making payments to third parties, which could have an adverse effect on our business, financial condition and results of operations.

Risks Related to Our Corporate Structure

We are a Cayman Islands holding company with no equity ownership in the VIE and we conduct our operations in China through (i) our PRC subsidiaries and (ii) the VIE entities with which we have maintained contractual arrangements.

We are a Cayman Islands holding company with no equity ownership in the VIE and we conduct our operations in China through (i) our PRC subsidiaries and (ii) the VIE entities with which we have maintained contractual arrangements. Investors in our ADSs thus are not purchasing equity interest in the VIE entities in China but instead are purchasing equity interest in a Cayman Islands holding company. If the PRC government deems that our contractual arrangements with the VIE do not comply with PRC regulatory restrictions on foreign investment in the relevant industries, or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations. Our holding company in the Cayman Islands, the VIE, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the validity and enforceability of the contractual arrangements with the VIE and, consequently, significantly affect the financial performance of the VIE and our company as a group.

We rely on the contractual arrangements that establish the structure for certain of our operations in China.

Foreign ownership in advertising business used to be subject to certain restrictions under the PRC laws and regulations. For example, according to the Administrative Provisions on Foreign-Invested Advertising Enterprises, which were abolished in June 2015, foreign investors were required to meet several conditions in order to invest in PRC advertising business, such as a minimum number of years of advertising-related experience and an approval from the relevant PRC regulatory authority. OptAim, which we acquired in July 2015, is a Cayman Islands company and iClick Data Technology (Beijing) Limited, or iClick Beijing, its PRC subsidiary, is considered a foreign invested enterprise, or FIE. To comply with the then-effective PRC laws and regulations, including the Administrative Provisions on Foreign-Invested Advertising Enterprises, OptAim Beijing, later replaced by iClick Beijing entered into a set of contractual arrangements with OptAim Network and its shareholder. For a detailed description of these contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with OptAim Network." As a result of these contractual arrangements, we exert control over OptAim Network and its subsidiaries, and consolidate their operating results in our financial statements under U.S. GAAP.

After the abolishment of the foreign ownership restriction in advertising business, we had been transferring the advertising business previously operated by the VIE, OptAim Network, primarily consisting of our mobile marketing solution business, to our wholly-owned subsidiaries. As of December 31, 2018, our wholly-owned subsidiaries had replaced OptAim Network as contracting party for all our mobile marketing solution business. In November 2018, OptAim Network acquired Myhayo, a content distribution channel and a mobile content aggregator of articles and short videos in the PRC, which presents customized feeds to users via its mobile application. The mobile application operated by Myhayo allows users to earn points from their daily access, which could be used to redeem cash rewards. It is unclear whether Myhayo's business model would render it a commercial operator of value-added telecommunication services under the relevant PRC laws, in which case Myhayo would be required to hold a value-added telecommunication license. In August 2019, Myhayo obtained the value-added telecommunication license that has a validity term of five years. See "—Risk Related to Our Business and Industry—If we fail to maintain or renew the value-added telecommunication license, or fail to obtain other requisite license, or approvals or filings in China, the business carried out by certain consolidated entity may be materially and adversely affected." Current PRC laws and regulations impose certain restriction on foreign investment in valueadded telecommunication services. See "-Regulations-Regulations on Foreign Direct Investment in Value-Added Telecommunications Companies." As a result, we acquired Myhayo through OptAim Network, the VIE. In June 2022, Zhiyunzhong (Shanghai) Technology Co., Ltd., one of the VIE entities, was wholly transferred from OptAim Network to another subsidiary of the Company, Anhui Zhiyunzhong Information Technology Co., Ltd..

In 2021, OptAim Network contributed 3.0% to our gross billing and 7.8% of our net revenues. In 2022, OptAim Network contributed 5.3% to our gross billing and 12.7% of our net revenues. We conduct our operations in China through our PRC subsidiaries and the VIE entities, with which we maintained these contractual arrangements. Investors in our ordinary shares or the ADSs are not purchasing equity interest in the VIE in China but instead are purchasing equity interest in a Cayman Islands holding company with no equity ownership of the VIE.

Under the Measures on the Administration of Foreign-related Surveys, or the Foreign-related Surveys Measures, promulgated by the National Bureau of Statistics of China on October 13, 2004, no individual or organization may conduct any foreign-related survey without a license for foreign-related survey granted by the National Bureau of Statistics in China or its local counterparts.

Under the Catalogue for the Guidance of Foreign Investment Industries, or Foreign Investment Catalog, promulgated by the Ministry of Commerce and National Development and Reform Commission on June 28, 2017, only a domestic enterprise or a sinoforeign enterprise which meets the several requirements stipulated in the Foreign-related Surveys Measures can apply for a license for the foreign-related survey. On September 18, 2021, the Ministry of Commerce ("MOFCOM") and the National Development and Reform Commission, or the NDRC, jointly promulgated the Special Administrative Measures (Negative List 2021) for Foreign Investment Access, or the Special Administrative Measures, which replaced the negative list attached to the Foreign Investment Catalog in 2020. Industries that are not listed in the Special Administrative Measures are permitted areas for foreign investments, and are generally open to foreign investment unless specifically restricted by other PRC regulations. We do not believe our collection and use of multiple kinds of data from multiple sources in China to improve the cost-effectiveness of marketing campaigns for marketers in and outside China fall within the scope of "foreign-related survey" under the Foreign-related Survey Measures listed under the Special Administrative Measures. However, there are uncertainties under the PRC Laws whether such activities may be deemed as "foreignrelated survey," which would require a foreign-related survey license from the National Bureau of Statistics in China or its local counterparts. If the PRC regulatory authorities disagree with our interpretation of what would constitute foreign-related survey and enforcement practices on foreign-related survey licensing requirement or if we expand our business scope to engage in activities falling within the scope of foreign-related survey, we will need to continue to rely on iClick Data Technology (Beijing) Limited's contractual arrangements with OptAim Network and its shareholder to conduct certain of our operations in China, including to transfer such operations to the VIE to the extent they are deemed foreign-related survey.

In the opinion of our PRC counsel, Jingtian & Gongcheng, our current ownership structure, the ownership structure of our PRC subsidiaries, the VIE entities, and the contractual arrangements among iClick Beijing, OptAim Network and the shareholder of OptAim Network are not in violation of existing PRC laws, rules and regulations; and these contractual arrangements are valid, binding and enforceable in accordance with their terms and applicable PRC laws and regulations currently in effect. However, Jingtian & Gongcheng has also advised us that there are substantial uncertainties regarding the interpretation and application of current or future PRC laws and regulations and there can be no assurance that the PRC government will ultimately take a view that is consistent with the opinion of our PRC counsel.

It is uncertain whether any new PRC laws, rules or regulations relating to variable interest entity structures will be adopted or if adopted, what they would provide. Please see "-Substantial uncertainties exist with respect to the newly enacted PRC Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations." for more information. If the ownership structure, contractual arrangements and business of our company, our PRC subsidiaries or our consolidated variable interest entity and its subsidiary are found to be in violation of any existing or future PRC laws or regulations, or we fail to obtain or maintain any of the required permits or approvals, the relevant governmental authorities would have broad discretion in dealing with such violation, including levying fines, confiscating our income or the income of our PRC subsidiaries, consolidated variable interest entity or its subsidiary, revoking the business licenses or operating licenses of our PRC subsidiaries, consolidated variable interest entity or its subsidiary, shutting down our servers or blocking our online platform, discontinuing or placing restrictions or onerous conditions on our operations, requiring us to undergo a costly and disruptive restructuring, restricting or prohibiting our use of proceeds from our offerings and equity issuances to finance our business and operations in China, and taking other regulatory or enforcement actions that could be harmful to our business. Any of these actions could cause significant disruption to our business operations and severely damage our reputation, which would in turn materially and adversely affect our business and results of operations. If any of these occurrences results in our inability to direct the activities of our consolidated variable interest entity and its subsidiary, and/or our failure to receive economic benefits from our consolidated variable interest entity and its subsidiary, we may not be able to consolidate their results into our consolidated financial statements in accordance with U.S. GAAP.

We rely on contractual arrangements with our variable interest entity and its shareholder for certain of our business operations, which may not be as effective as direct ownership in providing operational control.

We have relied and expect to continue to rely on contractual arrangements with the VIE, OptAim Network, and its shareholder for part of our online marketing business on mobile channels in China, as well as certain other complementary businesses, and to the extent our operations are deemed as foreign-related survey. For a description of these contractual arrangements, see "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with OptAim Network." These contractual arrangements may not be as effective as direct ownership in providing us with control over the VIE entities.

If we had direct ownership of OptAim Network and its subsidiaries, we would be able to exercise our rights as a shareholder to effect changes in the board of directors of OptAim Network and its subsidiaries, which in turn could implement changes, subject to any applicable fiduciary obligations, at the management and operational level. However, under the current contractual arrangements, we rely on the performance by OptAim Network and the shareholder of OptAim Network of his obligations under the contracts to exercise control over our consolidated variable interest entity and its subsidiaries. The shareholder of our consolidated variable interest entity may not act in the best interests of our company or may not perform their obligations under these contracts. Such risks exist throughout the period in which we intend to operate our business through the contractual arrangements with OptAim Network and its shareholder. In addition, if any third party claims any interest in such shareholder's equity interests in OptAim Network, our ability to exercise shareholder's rights or foreclose the share pledge according to the contractual arrangements may be impaired. Therefore, our contractual arrangements with our consolidated variable interest entity may not be as effective in ensuring our control over the relevant portion of our business operations as direct ownership would be.

Any failure by our variable interest entity or its shareholder to perform their obligations under our contractual arrangements with them would have a material adverse effect on our business.

If our consolidated variable interest entity or its shareholder fails to perform their respective obligations under the contractual arrangements, we may have to incur substantial costs and expend additional resources to enforce such arrangements. We may also have to rely on legal remedies under PRC 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 shareholder of OptAim Network was to refuse to transfer their equity interest in OptAim Network to us or our designee if 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. In addition, if any third parties claim any interest in such shareholder's equity interests in OptAim Network, our ability to exercise shareholder's rights or foreclose the share pledge according to the contractual arrangements may be impaired.

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 laws and any disputes would be resolved in accordance with PRC legal procedures. Such disputes do not include claims arising under the United States federal securities laws and therefore these arbitration provision do not prevent you from pursuing claims under the United States federal securities law. The legal system in the PRC is different from 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. Meanwhile, there are very few precedents and little formal guidance as to how contractual arrangements in the context of a consolidated variable interest entity 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 our consolidated variable interest entity and its subsidiary, and our ability to conduct our business may be negatively affected.

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

The equity interests of OptAim Network are held by Mr. Jian Tang, who is our chairman of the board, chief executive officer and co-founder. His interest may differ from the interests of our Company as a whole. The shareholder may breach, or cause our consolidated variable interest entity to breach, or refuse to renew the existing contractual arrangements we have with his and our consolidated variable interest entity, which would have a material adverse effect on our ability to effectively control our consolidated variable interest entity and receive economic benefits from him. For example, the shareholder may be able to cause our agreements with OptAim Network to be performed in a manner adverse to us by, among other things, failing to remit payments due under the contractual arrangements to us on a timely basis. We cannot assure you that when conflicts of interest arise, any or all of the shareholder will act in the best interests of our company or such conflicts will be resolved in our favor.

Currently, we do not have any arrangements to address potential conflicts of interest between the shareholder and our company, except that we could exercise our purchase option under the third amended and restated exclusive option agreement with the shareholder to request him to transfer all of his equity interests in OptAim Network to a PRC entity or individual designated by us, to the extent permitted by PRC laws. If we cannot resolve any conflict of interest or dispute between us and the shareholder of OptAim Network, we would have to rely on legal proceedings, which could result in the disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

Contractual arrangements in relation to our variable interest entity may be subject to scrutiny by the PRC tax authorities and they may determine that we or our PRC variable interest entity owe additional taxes, which could negatively affect our results of operations 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 within ten years after the taxable year when the transactions are conducted. 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 between our wholly-owned subsidiary iClick Beijing, the VIE OptAim Network and the shareholder of OptAim Network were not entered into on an arm's length basis in such a way as to result in an impermissible reduction in taxes under applicable PRC laws, rules and regulations, and adjust OptAim Network's 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 OptAim Network for PRC tax purposes, which could in turn increase their tax liabilities without reducing iClick Beijing's tax expenses. In addition, if iClick Beijing requests the shareholder of OptAim Network to transfer his equity interests in OptAim Network at nominal or no value pursuant to these contractual arrangements, such transfer could be viewed as a gift and subject iClick Beijing to PRC income tax. Furthermore, the PRC tax authorities may impose late payment fees and other penalties on OptAim Network for the adjusted but unpaid taxes according to the applicable regulations. Our results of operations could be materially and adversely affected if OptAim Network's tax liabilities increase or if they are required to pay late payment fees and other penalties.

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

On March 15, 2019, the National People's Congress approved the Foreign Investment Law, which came into effect on January 1, 2020 and replaced the trio of existing laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations. The Foreign Investment Law embodies an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. On December 26, 2019, the State Council adopted the Implementing Rules for the Foreign Investment Law of the People's Republic of China, which took effect on January 1, 2020, to interpret and implement the Foreign Investment Law. However, uncertainties still exist in relation to the nature of "variable interest entity" structure. As a result, the Foreign Investment Law may materially impact the viability of our current corporate structure, corporate governance and business operations in many aspects.

Under the Foreign Investment Law, "foreign investment" refers to the investment activities directly or indirectly conducted by foreign individuals, enterprises or other entities in China. Though the Foreign Investment Law does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the Stale Council to provide for contractual arrangements as a form of foreign investment.

Our holding company in the Cayman Islands, VIE, and investors of our company face uncertainty about potential future actions by the PRC government that could affect the enforceability of the contractual arrangements with VIE and, consequently, the business, financial condition, and results of operations of VIE and our company as a group. If our contractual arrangements is considered a form of foreign investment, then we may be required to complete the MOC market entry clearance, and we face uncertainties as to whether such clearance can be timely obtained, or at all. If we are not able to obtain such clearance when required, VIE structure may be regarded as invalid and illegal. As a result, we would not be able to (i) continue our business in China through our contractual arrangements with the VIE and shareholder of the VIE, (ii) exert control over the VIE, (iii) receive the economic benefits of the VIE under such contractual arrangements, or (iv) consolidate the financial results of the VIE. Were this to occur, our results of operations and financial condition would be materially and adversely affected and the market price of our ADSs may decline. Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

If we exercise the option to acquire equity ownership of OptAim Network, the ownership transfer may subject us to certain limitation and substantial costs.

Pursuant to the contractual arrangements, iClick Beijing has the exclusive right to purchase all or any part of the equity interests in OptAim Network from OptAim Network's shareholder for a nominal price, unless the relevant government authorities or then applicable PRC laws request that a minimum price amount be used as the purchase price, in such case the purchase price shall be the lowest amount under such request. The shareholder of OptAim Network will be subject to PRC individual income tax on the difference between the equity transfer price and the then current registered capital of our consolidated variable interest entity. Additionally, if such a transfer takes place, the competent tax authority may require iClick Beijing to pay enterprise income tax for ownership transfer income with reference to the market value, in which case the amount of tax could be substantial.

Risks Related to Doing Business in China

Uncertainties in China's legal system, including the interpretation and enforcement of PRC laws and regulations, could limit the legal protections available to us.

It is especially difficult for us to accurately predict the potential impact to us of new legal requirements in China because the PRC legal system is based on written statutes. Unlike common law legal systems, prior court decisions may be cited for reference but have limited precedential value. The PRC legal system evolves rapidly, and the interpretations of many laws, regulations and rules may contain inconsistencies and enforcement of these laws, regulations and rules involves uncertainties.

From time to time, we may have to resort to administrative and court proceedings to enforce our legal rights. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. Furthermore, the PRC legal system is based in part on government policies and internal rules (some of which are not published in a timely manner or at all) that may have retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. Furthermore, rules and regulations in China can change quickly with little advance notice. Recently, Chinese regulators have announced regulatory actions aimed at providing the Chinese government with greater oversight over certain sectors of China's economy, including the for-profit education sector and technology platforms that have a quantitatively significant number of users located in China. Although the online marketing technology industry does not appear to be the focus of these regulatory actions, we cannot guarantee that the Chinese government will not in the future take regulatory actions that materially adversely affect the business environment and financial markets in China as they relate to us, our ability to operate our business, our liquidity and our access to capital. Such uncertainties, including uncertainty over the scope and effect of our contractual, property (including intellectual property) and procedural rights, could materially and adversely affect our business and impede our ability to continue our operations. Litigation in China may be protracted and result in substantial costs and diversion of resources and management attention. Uncertainties with respect to the PRC legal system could adversely affect us.

We conduct our business primarily through our subsidiaries and the VIE entities in China. Our operations in China are governed by PRC laws and regulations. Our subsidiaries are generally subject to laws and regulations applicable to foreign investments in China. The PRC legal system is based on written statutes. Prior court decisions may be cited for reference but have limited precedential value.

PRC government has significant oversight over and discretion over the conduct of our business and may intervene or influence our operations as the government deems appropriate to further regulatory, political and societal goals. Furthermore, recent statements made by the Chinese government have indicated an intent to increase the government's oversight and control over offerings of companies with significant operations in China that are to be conducted in foreign markets, as well as foreign investment in China-based issuers like us. Any such action could significantly limit or completely hinder our ability to offer or continue to offer securities to investors and cause the value of such securities to significantly decline or be worthless.

PRC laws and regulations have significantly enhanced the protections afforded to various forms of foreign investments in China for the past decades. However, China has not developed a fully integrated legal system, and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. In particular, because these laws and regulations are relatively new, and because of the limited volume of published decisions and their nonbinding nature, the interpretation and enforcement of these laws and regulations involve uncertainties. Furthermore, the PRC legal system is based in part on government policies and internal rules, some of which are not published on a timely basis or at all, which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. In addition, any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention.

Recent regulatory developments in China may subject us to additional regulatory review and disclosure requirements, expose us to government interference, or otherwise restrict or completely hinder our ability to offer securities and raise capital outside mainland China, which could adversely affect our business operations and cause the value of our securities to significantly decline or become worthless.

As our primary business is conducted in China, we are exposed to legal and other risks associated with our operations in China. The PRC government has significant authority to exert influence on the ability of a company with operations in China, including us, to conduct its business, and may exert substantial intervention and influence over the manner our operations. Any actions by the PRC government to exert more oversight and control over offerings that are conducted overseas or foreign investment in companies having operations in China, including us, 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. Recently, the PRC government initiated a series of regulatory actions and statements to regulate business operations in China with little advance notice, including cracking down on illegal activities in the securities market, enhancing supervision over China-based companies listed overseas, adopting new measures to extend the scope of cybersecurity reviews and new laws and regulations related to data security, expanding the efforts in anti-monopoly enforcement, and adopting new rules to request China-based companies to fulfill relevant filing procedure and report relevant information to the CSRC for overseas offerings. While we do not believe that these regulatory changes would have any material impact on us, we cannot guarantee that the authorities will agree with us or will not promulgate new regulations that restrict our business operations or access to capital.

Cybersecurity and data privacy and security issues are legislative and regulatory focus in China. On July 30, 2021, the State Council of the PRC promulgated the Regulations on the Protection of the Security of Critical Information Infrastructure, which took effect on September 1, 2021. This regulation requires, among others, certain competent authorities to identify critical information infrastructures. If any critical information infrastructure is identified, the relevant authorities shall promptly notify the relevant operator and the Ministry of Public Security. In November 2021, the CAC promulgated the Draft Administrative Regulations on Cyber Data Security, or the Draft Cyber Data Security Regulations, for public comment. These draft regulations set forth different scenarios under which data processors would be required to apply for cybersecurity review. However, there is no definite timetable as to when these draft regulations will be enacted. In addition, the CAC and a number of other departments under the State Council promulgated the Measures for Cybersecurity Review on December 28, 2021, which became effective on February 15, 2022. According to this regulation, critical information infrastructure operators purchasing network products and services and network platform operators carrying out data processing activities, which affect or may affect national security, are required to conduct cybersecurity review. As advised by our PRC counsel, Jingtian & Gongcheng, we believe that we do not need to apply for cybersecurity reviews under the current regulatory regime, because we have not received any notice or determination from competent PRC government authorities identifying us as a critical information infrastructure operator as of the date of this annual report. However, we cannot rule out the possibility that the competent PRC government authorities will not initiate cybersecurity reviews on us in the future. As of the date hereof, we have not been involved in any investigations on cybersecurity review made by the CAC, and we have not received any inquiry, notice, warning, or sanctions in such respect. However, as these are new regulations that are evolving, there remains uncertainties as to how they will be interpreted or implemented in the context of an overseas offering.

We may be subject to PRC laws relating to the collection, use, sharing, retention security, and transfer of confidential and private information, such as personal information and other data. These PRC laws apply not only to third-party transactions, but also to transfers of information between us and our wholly foreign-owned enterprises in China, and other parties with which we have commercial relations. For example, on September 1, 2021, the PRC Data Security Law became effective, which imposes data security and privacy obligations on entities and individuals conducting data-related activities, and introduces a data classification and hierarchical protection system based on the importance of data in economic and social development, as well as the degree of harm it will cause to national security, public interests, or legitimate rights and interests of individuals or organizations when such data is tampered with, destroyed, leaked, or illegally acquired or used. In addition, the Standing Committee of PRC National People's Congress promulgated the Personal Information Protection Law (the "PIPL") on August 20, 2021, which took effect on November 1, 2021. The PIPL further emphasizes processors' obligations and responsibilities for personal information protection and sets out the basic rules for processing personal information and the rules for cross-border transfer of personal information. As of the date hereof, we have not been involved in any investigations on data security or privacy compliance issues in connection with the PRC Data Security Law or the PIPL, and we have not received any inquiry, notice, warning, or sanctions in such respect. In addition, we do not expect to have significant data security or privacy issues given that the nature of our business does not involving collecting and use of vast personal data. However, we cannot guarantee that the regulators will agree with us or will not in the future adopt new regulations that restrict our business operations.

On February 7, 2021, the Anti-monopoly Committee of the State Council published the Guideline on Anti-monopoly of Platform Economy Sector, or the Guideline, which became effective on the same day, aiming at enhancing anti-monopoly administration on businesses that operate under the platform model and the overall platform economy. The Guideline intends to regulate abuse of a dominant position and other anticompetitive practices by online platform operators and the related merchants and service providers on online platforms, i.e. unfairly locking in exclusive agreements with merchants and targeting specific customers with unreasonable bigdata driven tailored pricing through their online behavior to eliminate or limit market competition. As of the date of this document, we have not been subject to any regulatory actions or investigations in connection with anti-monopoly. However, as the Guideline is newly enacted, there remains uncertainties as to how the Guideline will be implemented, and we cannot assure you that the governmental authorities will not take an opposite opinion. Any failure or perceived failure by us to comply with the Guideline and other anti-monopoly laws and regulations may result in governmental investigations or enforcement actions, litigation or claims against us and could have an adverse effect on our business, financial condition and results of operations.

On July 7, 2022, the CAC promulgated the Measures on Security Assessment of Outbound Data Transfer, or the Measures on Security Assessment of Outbound Data Transfer, effective September 1, 2022. These measures shall apply to the security assessment of the provision of important data and personal information collected and generated by data processors in the course of their operations within the territory of the PRC by such data processors to overseas recipients, or the outbound data transfer. Where there are other provisions in laws and administrative regulations, such other provisions shall prevail. These Measures specify that an outbound data transfer by a data processor that falls under any of the following circumstances, the data processor shall apply to the CAC for the security assessment via the local provincial-level cyberspace administration authority: (i) outbound transfer of important data by a data processor; (ii) outbound transfer of personal information by a critical information infrastructure operator or a personal information processor who has processed the personal information of more than 1,000,000 people; (iii) outbound transfer of personal information by a personal information processor who has made outbound transfers of the personal information of 100,000 people cumulatively or the sensitive personal information of 10,000 people cumulatively since January 1 of the previous year; or (iv) other circumstances where an application for the security assessment of an outbound data transfer is required as prescribed by the CAC. The data we process does not involve the above circumstances. However, we cannot guarantee that the regulators will agree with us or will not in the future adopt new regulations that restrict our business operations.

Since these statements and regulatory actions are new, and some regulations are still at the stage of consultation for comments, it is highly uncertain how soon legislative or administrative regulation making bodies will respond and what existing or new laws or regulations or detailed implementations and interpretations will be modified or promulgated, if any, or the potential impact such modified or new laws and regulations will have on our daily business operation, our ability to accept foreign investments and listing on a U.S. or other foreign exchanges. PRC laws and their interpretations and enforcement continue to develop and are subject to change, and the PRC government may adopt other rules and restrictions in the future.

The approval of and/or filing with the CSRC or other PRC government authorities may be required in connection with our offshore offerings under PRC law, and, if required, we cannot predict whether or for how long we will be able to obtain such approval or complete such filing.

On July 6, 2021, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council jointly issued Opinions on Strictly Cracking Down Illegal Securities Activities in Accordance with the Law. These opinions emphasized the need to strengthen the administration over illegal securities activities and the supervision on overseas listings by China-based companies. These opinions proposed to take effective measures, such as promoting the construction of relevant regulatory systems, to deal with the risks and incidents facing China-based overseas-listed companies and the demand for cybersecurity and data privacy protection. These opinions and any related implementation rules to be enacted may subject us to additional compliance requirement. On February 17, 2023, the CSRC released a set of regulations consisting of six documents, including the Trial Administrative Measures of Overseas Securities Offering and Listing by Domestic Companies and five supporting guidelines, collectively, the Overseas Listing Filing Rules, which came into effective on March 31, 2023. According to the Overseas Listing Filing Rules, China-based companies that have already offered shares or been listed overseas prior to the implementation of such new regulations qualify as "Stock Enterprises", and Stock Enterprises are not required to apply for the filing immediately until a subsequent overseas offering or listing occurs. However, the Overseas Listing Filing Rules, among others, require the issuer or its main operational entity in the PRC to file with the CSRC for its follow-on securities offerings in the same offshore market within three business days after the completion of such offerings, and file with the CSRC for its offerings or listing in offshore stock market other than the stock market of its initial public offering or listing within three business days after the submission of offering application outside mainland China.

We had been listed on the NASDAQ prior to the implementation of the Overseas Listing Filing Rules. Therefore, we are qualified as a "Stock Enterprise" and are not required to apply for the filing immediately until a subsequent overseas offering or listing occurs according to the Overseas Listing Filing Rules. However, we are required to file with the CSRC for its follow-on securities offerings in the same offshore market within three business days after the completion of such offerings, and file with the CSRC for our offerings or listing in offshore stock market other than the stock market of our initial public offering or listing within three business days after the submission of offering application outside mainland China. Failure to comply with the filing requirements for any offering, listing or any other capital raising activities, may result in administrative penalties, such as order to rectify, warnings, fines and other penalties, on us, our controlling shareholders, the actual controllers, any person directly in charge and other directly liable persons. Given the uncertainties surrounding the CSRC filing requirements at this stage, we cannot assure you that we will be able to complete the filings and fully comply with the relevant new rules on a timely basis, or at all, if we conduct listing in other offshore stock markets or follow-on offerings, issuance of convertible corporate bonds, exchangeable bonds, or other kinds of equity security in the future.

As of the date of this annual report, we have not received any inquiry, notice, warning, or sanctions regarding offshore offering from the CSRC or any other PRC regulatory authorities. However, if it is determined in the future that approval from the CSRC or other regulatory authorities or other procedures are required for our offshore offerings, it is uncertain whether we can or how long it will take us to obtain such approval or complete such procedures and any such approval or completion could be rescinded. Any failure to obtain or delay in obtaining such approval or completing such procedures for our offshore offerings, or a rescission of any such approval obtained by us, would subject us to sanctions by the CSRC or other PRC regulatory authorities for failure to seek approval for our offshore offerings. These regulatory authorities may impose fines and penalties on our operations in China, limit our ability to pay dividends outside of China, limit our operating privileges in China, delay or restrict the repatriation of the proceeds from our offshore offerings into China or take other actions that could materially and adversely affect our business, financial condition, results of operations, and prospects, as well as the trading price of our ordinary shares and ADSs. The CSRC or other PRC regulatory authorities also may take actions requiring us, or making it advisable for us, to halt our offshore offerings before settlement and delivery of the shares offered hereby. Consequently, if you engage in market trading or other activities in anticipation of and prior to settlement and delivery, you do so at the risk that settlement and delivery may not occur. In addition, if the CSRC or other regulatory authorities later promulgate new rules or explanations requiring that we obtain their approvals or accomplish the required filing or other regulatory procedures for our offshore offerings, we may be unable to obtain a waiver of such approval requirements, if and when procedures are established to obtain such a waiver. Any uncertainties or negative publicity regarding such approval requirement could materially and adversely affect our business, prospects, financial condition, reputation, and the trading price of the ordinary shares and ADSs.

We are subject to many of the economic and political risks associated with emerging markets due to our operations in mainland China and Hong Kong. Adverse changes in mainland China or Hong Kong's economic, political and social conditions as well as government policies could adversely affect our business and prospects.

Our primary operations are based in, and a substantial percentage of our revenue is generated from China, one of the world's largest emerging markets. In light of our operations in an emerging market, we may be subject to risks and uncertainties including fluctuations in GDP, unfavorable or unpredictable treatment in relation to tax matters, expropriation of private assets, exchange controls, restrictions affecting our ability to make cross-border transfer of funds, regulatory proceedings, inflation, currency fluctuations or the absence of, or unexpected changes in, regulations and unforeseeable operational risks. In addition, our business, prospects, financial condition and results of operations may be significantly influenced by political, economic and social conditions in China generally and by continued economic growth in China as a whole.

The Chinese economy differs from the economies of most developed countries in many respects, including the amount of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. Although the PRC government has implemented measures that focus on taking into account market forces to effect economic reform aimed at reducing the state ownership of productive assets and the establishing improved corporate governance in business enterprises, a substantial portion of China's productive assets are still owned by the government. In addition, the PRC government continues to play a significant role in regulating development through industrial, economic and business policies. The PRC government also exercises significant control over China's economic growth through its allocation of payment of foreign currency-denominated obligations, setting monetary policy, and providing preferential treatment for particular industries or companies. The PRC government also exercises significant control over China's economic growth through its allocation of resources, control of payment of foreign currency-denominated obligations, monetary policy, and preferential treatment for particular industries or companies. Any such action, once taken by the Chinese government, could significantly limit or completely hinder our ability to offer or continue to offer ADSs and ordinary shares to our investors, and could cause the value of our ADSs and ordinary shares to significantly decline or become worthless.

While the Chinese economy has experienced significant growth over the past decades, growth has been uneven, both geographically and among various sectors of the economy. The PRC government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures, which may benefit the overall Chinese economy, may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations. In addition, the PRC government has from time to time implemented certain measures, including interest rate changes, to control the pace of economic growth. These measures may cause decreased economic activity in China, and since 2012, the Chinese economy has slowed down. Any prolonged slowdown in the Chinese economy may reduce the demand for our services and materially and adversely affect our business and results of operations. There have also been concerns about the relationships among China and other Asian countries, the relationship between China and the United States, as well as the relationship between the United States and certain Asian countries such as North Korea, which may result in or intensify potential conflicts in relation to territorial, regional security and trade disputes. Any adverse changes in economic conditions in China, in the policies of the Chinese government or in the laws and regulations in China could have a material adverse effect on the overall economic growth of China. Such developments could adversely affect our business and operating results, leading to reduction in demand for our services and solutions and adversely affect our competitive position. An economic downturn, whether actual or perceived, a further decrease in economic growth rates or an otherwise uncertain economic outlook in China could have a material adverse effect on business and consumer spending and, as a result, adversely affect our business, financial condition and results of operations.

Developments in U.S.-China relations, including any escalation of political or trade tensions, could negatively affect our business and the market for our ADSs.

Our principal executive offices are in Hong Kong, and we derive a substantial percentage of our revenue from China. We also continuously seek to expand our international footprint. Accordingly, international trade or political tensions, especially those affecting mainland China and Hong Kong's relations with the United States, could affect us.

In recent years, political tensions between the United States and China have escalated due to factors including the COVID-19 outbreak and related issues, China's enactment of national security legislation for Hong Kong, the United States' enactment of the Hong Kong Autonomy Act, U.S. sanctions imposed on certain Chinese and Hong Kong officials, the U.S. executive order of November 2020 prohibiting U.S. persons from buying securities of certain "Chinese Military-Industrial Complex Companies", the United States' imposition of import bans on certain companies and products based on "forced labor" allegations, a January 2021 U.S. executive order authorizing restrictions on dealings with persons who develop or control certain China-connected software applications companies, and United States' imposition of licensing requirement for exports or transfers of items on lists of controlled items maintained by the U.S. government. We could also be affected by U.S. actions targeting specific Chinese companies we do business with, such as the August 2020 U.S. executive orders prohibiting certain transactions with ByteDance Ltd., Tencent Holdings Ltd. and their respective subsidiaries. China has responded to some of the U.S. actions listed above in actions generally perceived as retaliations, including imposing sanctions on certain U.S. officials and lawmakers, the adoption of China's Unreliable Entity List, and China's tightening of export rules for sensitive technology under its Export Control Law, which came into effect in December 2020.

The types of government actions described in the paragraph above are in practice discretionary and highly political. In a relationship as broad and complex as that between the United States and China, it is difficult to predict the full impact of these laws, executive orders and regulations on either us or the overall bilateral relationship. We partner and have business with some of the companies referred to in these executive orders, including Tencent, with which we do substantial business. If a broad prohibition against transactions with Tencent or other companies that we partner or have business with were to be implemented, our business and results of operations could be materially and adversely affected. We cannot assure you that there will not be additional laws, regulations or executive orders or that existing laws regulations or executive orders will be interpreted in ways that impact us. Furthermore, developments in U.S.-China relations could cause investor uncertainty, and the market price of our ADSs could be adversely affected.

In addition, the SEC has issued statements primarily focused on companies with significant China-based operations, such as us. For example, on July 30, 2021, Gary Gensler, Chairman of the SEC, issued a Statement on Investor Protection Related to Recent Developments in China, pursuant to which Chairman Gensler stated that he has asked the SEC staff to engage in targeted additional reviews of filings for companies with significant China-based operations. The statement also addressed risks inherent in companies with VIE structures. It is possible that our periodic reports and other filings with the SEC may be subject to enhanced review by the SEC and this additional scrutiny could affect our ability to effectively raise capital in the United States. Consistent with that directive, on December 20, 2021, the SEC posted an illustrative letter containing sample comments to companies with the majority of their operations in the PRC or Hong Kong. The statement and sample comment letter also addressed risks inherent in companies with a VIE, structure, which are used by some companies in China that operate in sectors that are subject to foreign ownership limitations. In response to the SEC's July 30 statement, the CSRC announced on August 1, 2021, that the CSRC will continue to collaborate "closely with different stakeholders including investors, companies, and relevant authorities to further promote transparency and certainty of policies and implementing measures." There is no assurance that the tension between the two nations will ease soon. If any new legislation, executive orders, tariffs, laws and/or regulations are implemented, if existing trade agreements are renegotiated or if the U.S. or Chinese governments take retaliatory actions due to the U.S.-China tension, such changes could have an adverse effect on our business, financial condition and results of operations, our ability to raise capital and the price of our ADSs.

In addition to political tensions, international trade disputes could result in tariffs and other protectionist measures that could adversely affect our business and investor sentiment. The U.S. initiated certain trade actions, primarily higher tariffs, against China beginning in early 2018 and China took certain actions in retaliation. Although the two countries reached the so-called "Phase One" trade deal in January 2020, the long-term stability of their trade relationship remains uncertain. Higher tariffs could increase the cost of goods and services, which could affect our customers' marketing budget or lead to generally lower levels of economic activity. As we are expanding our business internationally, any unfavorable government policies on international trade, such as capital controls or tariffs, could also affect the demand for our products and services, impact our competitive position, or prevent us from being able to conduct business in certain countries. If any new tariffs, legislation or regulations are implemented or if existing trade agreements are renegotiated, including in relation to political developments in the relationship, such changes could have an adverse effect on our business, financial condition and results of operations. In addition, any escalation in existing trade tensions or the advent of a trade war or related news or rumors, could affect consumer confidence and have a material adverse effect on our business, results of operations and, ultimately, the trading price of the ADSs.

We rely on dividends and other distributions on equity paid by the Company's subsidiaries incorporated in mainland China to fund any cash and financing requirements we may have, and any limitation on the ability of the Company's subsidiaries incorporated in mainland China to make payments to us could have a material adverse effect on our ability to conduct our business.

We are a Cayman Islands exempted limited liability company, used as a holding company, and we rely on dividends and other distributions on equity from our PRC subsidiaries for our cash requirements, including payment of dividends and other cash distributions to holders of our ordinary shares and services of any debt we may incur. If our PRC subsidiaries incur debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Under PRC laws and regulations, our PRC subsidiaries, as wholly foreign-owned enterprises in mainland China, may pay dividends only out of their respective accumulated after-tax profits as determined in accordance with PRC accounting standards and regulations. In addition, a wholly foreign-owned enterprise is required to set aside at least 10% of its accumulated after-tax profits each year, if any, to fund certain statutory reserve funds, until the aggregate amount of such funds reaches 50% of its registered capital. At its discretion, a wholly foreign-owned enterprise may allocate a portion of its after-tax profits based on PRC accounting standards to staff welfare and bonus funds. These reserve funds and staff welfare and bonus funds are not distributable as cash dividends.

In addition, the PRC tax authorities may require our PRC subsidiaries to adjust its taxable income under the contractual arrangements it currently has in place with our consolidated variable interest entity in a manner that would materially and adversely affect their ability to pay dividends and other distributions to us. Furthermore, the failure of our beneficial owners who are PRC residents to register or comply with the registration procedures set forth in SAFE Circular 37 and subsequent implementation rules, may also limit our PRC subsidiaries' ability to distribute dividends to us. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—PRC regulations relating to investments in offshore special purposes 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."

Any limitation on the ability of our PRC subsidiaries to pay dividends or make other distributions to us could materially and adversely limit our ability to grow, make investments or acquisitions that could be beneficial to our business, pay dividends, or otherwise fund and conduct our business.

PRC regulation of loans to and direct investment in entities incorporated in mainland China by holding companies incorporated outside mainland China and governmental control of currency conversion may delay or prevent us from using the proceeds of the fundraisings outside mainland China to make loans to or make additional capital contributions to the Company's subsidiaries incorporated in mainland China, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

Any funds we transfer to our PRC subsidiaries, either as a shareholder loan or as an increase in registered capital, are subject to approval by, registration or record filing with relevant governmental authorities in mainland China. According to the relevant PRC regulations on foreign-invested enterprises in mainland China, capital contributions to our PRC subsidiaries are subject to the requirement of making necessary filings in the Foreign Investment Comprehensive Management Information System, or FICMIS, and registration with other governmental authorities in mainland China. In addition, (i) any foreign loan procured by our PRC subsidiaries is required to be registered with the State Administration of Foreign Exchange, or SAFE, or its local branches, and (ii) except as otherwise regulated by laws or regulations each of our PRC subsidiaries may procure loans which do not exceed the difference between its registered capital and its total investment amount as recorded in FICMIS, or as an alternative, do not exceed the upper limit as specified in the Notice of the People's Bank of China on Matters concerning the Macro-Prudential Management of Full-Covered Cross-Border Financing as promulgated by People's Bank of China, or the PBOC, on January 11, 2017. Any medium or long term loan to be provided by us to our variable interest entity must be recorded and registered by the NDRC and SAFE or its local branches. We may not complete such recording or registrations on a timely basis, if at all, with respect to future capital contributions or foreign loans by us to our PRC subsidiaries. If we fail to complete such recording or registration, our ability to use the proceeds of our offering and to capitalize our PRC operations may be negatively affected, which could adversely affect our liquidity and our ability to fund and expand our business.

In 2008, SAFE promulgated the Circular on the Relevant Operating Issues Concerning the Improvement of the Administration of the Payment and Settlement of Foreign Currency Capital of Foreign-Invested Enterprises, or SAFE Circular 142, which used to regulate the conversion by foreign-invested enterprises of foreign currency into Renminbi by restricting the usage of converted Renminbi. On March 30, 2015, SAFE promulgated the Circular on Reforming the Management Approach Regarding the Foreign Exchange Capital Settlement of Foreign-Invested Enterprises, or SAFE Circular 19. SAFE Circular 19 took effect as of June 1, 2015 and superseded SAFE Circular 142 on the same date. SAFE Circular 19 launched a nationwide reform of the administration of the settlement of the foreign exchange capitals of foreign-invested enterprises and allows foreign-invested enterprises to settle their foreign exchange capital at their discretion, but continues to prohibit foreign-invested enterprises from using the Renminbi fund converted from their foreign exchange capitals for expenditure beyond their business scopes, investment in security market, offering of entrustment loans or purchase of any investment properties. On June 9, 2016, the Notice of the State Administration of Foreign Exchange on Reforming and Standardizing the Administrative Provisions on Capital Account Foreign Exchange Settlement, or SAFE Circular 16, was promulgated. In addition to restating the general principles of SAFE Circular 19, SAFE Circular 16 explicitly stipulates that foreign debts and repatriated funds raised through overseas listings as foreign exchange receipts can be settled discretionally. SAFE Circular 16 continues to prohibit foreign-invested enterprises from using the Renminbi funds converted from their foreign exchange capitals for expenditures beyond their business scopes, investments in security market, offerings of entrustment loans or purchases of any investment properties. Although SAFE Circular 16 further relaxes the control over foreign exchange settlement of capital accounts, in practice, there are still several specific requirements that limit the abilities of PRC enterprises to access the offshore financing capitals, which may adversely affect our business, financial condition and operating results.

Fluctuations in exchange rates could have a material adverse effect on our results of operations and the price of our ADSs.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the PBOC. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The value of the Renminbi against the U.S. dollar and other currencies is affected by changes in mainland China's political and economic conditions and by mainland China's foreign exchange policies, among other things. We cannot assure you that the Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between the Renminbi and the U.S. dollar in the future.

A substantial portion of our revenues and costs are denominated in Renminbi, whereas our reporting currency is the U.S. dollar. Any significant appreciation or depreciation of the Renminbi may materially and adversely affect our revenues, earnings and financial position as reported in U.S. dollars. To the extent that we need to convert U.S. dollars we receive from our offshore fundraisings into Renminbi for our operations, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert our Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs or for other business purposes, appreciation of the U.S. dollar against the Renminbi would have an adverse effect on the U.S. dollar amount available to us.

Very limited hedging options are available in mainland China to reduce our exposure to exchange rate fluctuations. To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert Renminbi into foreign currency.

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

The PRC government imposes controls on the convertibility of the Renminbi into foreign currencies and, in certain cases, the remittance of currency out of mainland China. We receive a substantial portion of our revenues in Renminbi. Under our current corporate structure, our company in the Cayman Islands relies on dividend payments from our PRC subsidiaries and HK subsidiaries to fund any cash and financing requirements we may have. Under existing PRC foreign exchange regulations, payments of current account items, such as profit distributions and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval from SAFE by complying with certain procedural requirements. Therefore, our PRC subsidiaries are able to pay dividends in foreign currencies to us without prior approval from SAFE, subject to the condition that the remittance of such dividends outside of the PRC complies with certain procedures under PRC foreign exchange regulation, such as the overseas investment registrations by the beneficial owners of our company who are PRC residents. However, approval from or registration with appropriate government authorities is required where the Renminbi is to be converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies, as enterprises shall duly file the cross-border financing contracts according to the Circular of the PBOC on Matters relating to the Macro-prudential Management of Full-covered Cross-border Financing for the Issuance of Foreign Debts by Enterprise, or Circular on Management of Cross-border Financing, effective on January 11, 2017, and any medium or long term loan to be provided by foreign entities to domestic enterprises must be recorded and registered by the National Development and Reform Committee, or the NDRC, according to the Circular on Promoting the Administrative Reform of the Record- filing and Registration System for the Issuance of Foreign Debts by Enterprises, or Circular on Promoting the Administrative Reform, by the NDRC on September 14, 2015.

In light of the flood of capital outflows of mainland China in 2016 due to the weakening Renminbi, the PRC government has imposed more restrictive foreign exchange policies and stepped up scrutiny of major outbound capital movement. More restrictions and substantial vetting process are put in place by SAFE to regulate cross-border transactions falling under the capital account. The PRC government may at its discretion further restrict access in the future to foreign currencies for current account transactions. If the foreign exchange control system prevents us from obtaining sufficient foreign currencies to satisfy our foreign currency demands, we may not be able to pay dividends in foreign currencies to our shareholders, including holders of our ADSs.

PRC regulations relating to investments in offshore special purposes 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.

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. SAFE Circular 37 requires PRC residents to register with the local SAFE branches in connection with their direct establishment or indirect control of any offshore entity, referred to in SAFE Circular 37 as a "special purpose vehicle," 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. SAFE Circular 37 requires further registrations in the event of any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material events. In the event that a PRC shareholder holding interests in a special purpose vehicle fails to fulfill this 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 it may be restricted from contributing additional capital into its PRC subsidiaries. Moreover, failure to comply with the various SAFE registration requirements described above could result in liabilities 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 SAFE, local banks shall examine and handle foreign exchange registration for overseas direct investment, including the initial foreign exchange registration and amendment registration under SAFE Circular 37 since June 1, 2015. Beneficial owners of the special purpose vehicle who are PRC citizens are also required to make annual filing with the local banks regarding their overseas direct investment status.

Moreover, we do not have control over our beneficial owners and may not be aware of the identities of all of our beneficial owners. We cannot assure you that all of our PRC-resident beneficial owners comply with SAFE Circular 37 and subsequent implementation rules. 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 capital to our PRC subsidiaries and limit our PRC subsidiaries' ability to distribute dividends to us. These risks may have a material adverse effect on our business, financial condition and results of operations.

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

Among other things, the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A rules, established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time-consuming and complex. Such regulation requires, among other things, that MOFCOM be notified in advance of any change-of-control transaction in which a foreign investor acquires control of a PRC domestic enterprise or a foreign company with substantial PRC operations, if certain thresholds under the Provisions on Thresholds for Prior Notification of Concentrations of Undertakings, issued by the State Council in 2008, were triggered.

Moreover, the Anti-Monopoly Law promulgated by the Standing Committee of the National People's Congress of the PRC, which became effective in 2008 requires that transactions which are deemed concentrations and involve parties with specified turnover thresholds must be cleared by MOFCOM before they can be completed. In addition, the Notice of the General Office of the State Council on Establishing the Security Review System for Mergers and Acquisitions of Domestic Enterprises by Foreign Investors which became effective in March 2011 requires acquisitions by foreign investors of PRC companies engaged in military related or certain other industries that are crucial to national security be subject to security review before consummation of any such acquisition. We may pursue potential strategic acquisitions that are complementary to our business and operations. Complying with the requirements of these regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval or clearance from MOFCOM, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share.

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

Pursuant to SAFE Circular 37, PRC residents who participate in share incentive plans in overseas non-publicly-listed companies may submit applications to SAFE or its local branches for the foreign exchange registration with respect to offshore special purpose companies. In the meantime, our directors, executive officers and other employees who are PRC citizens or who are non-PRC residents residing in the PRC for a continuous period of not less than one year, subject to limited exceptions, and who have been granted incentive share awards by us, may follow the Notices on Issues Concerning the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Publicly-Listed Company, promulgated by SAFE in 2012, or the 2012 SAFE Notices. Pursuant to the 2012 SAFE Notices, PRC citizens and non-PRC citizens who reside in mainland China for a continuous period of not less than one year who participate in any stock incentive plan of an overseas publicly listed company, subject to a few exceptions, are required to register with SAFE through a domestic qualified agent, which could be the PRC subsidiaries of such overseas listed company, and complete certain other procedures. In addition, an overseas entrusted institution must be retained to handle matters in connection with the exercise or sale of stock options and the purchase or sale of shares and interests. We and our executive officers and other employees who are PRC citizens or who reside in the PRC for a continuous period of not less than one year and who have been granted options are subject to these regulations. Failure to complete SAFE registrations may subject them to fines, and legal sanctions and may also limit our ability to contribute additional capital into our PRC subsidiaries and limit our PRC subsidiaries' ability to distribute dividends to us. We also face regulatory uncertainties that could restrict our ability to adopt additional incentive plans for our directors, executive officers and employees under PRC law. See "Item 4. Information On the Company—B. Business Overview—Regulation-Regulations on Foreign Exchange—Equity Incentive Plans."

The State Administration of Taxation, or the SAT, has issued certain circulars concerning employee share options and restricted shares. Under these circulars, our employees working in mainland China who exercise share options or are granted restricted shares will be subject to PRC individual income tax. Our PRC subsidiaries have obligations to file documents related to employee share options or restricted shares with relevant tax authorities and to withhold individual income taxes of those employees who exercise their share options. If our employees fail to pay or we fail to withhold their income taxes according to relevant laws and regulations, we may face sanctions imposed by the tax authorities or other PRC governmental authorities. See "Item 4. Information On the Company—B. Business Overview—Regulation—Regulations on Foreign Exchange—Equity Incentive Plans."

Failure to make adequate contributions to various employee benefit plans as required by PRC regulations may subject us to penalties.

Companies operating in mainland China are required to participate in various government sponsored employee benefit plans, including certain social insurance, housing funds and other welfare-oriented payment obligations, and contribute to the plans in amounts equal to certain percentages of salaries, including bonuses and allowances, of our employees up to a maximum amount specified by the local government from time to time at locations where we operate our businesses. The requirement of employee benefit plans has not been implemented consistently by the local governments in mainland China given the different levels of economic development in different locations. We have not made adequate employee benefit payments. We may be required to make up the contributions for these plans as well as to pay late fees and fines. If we are subject to late fees or fines in relation to the underpaid employee benefits, our financial condition and results of operations may be adversely affected.

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

Under the PRC Enterprise Income Tax Law, or the EIT law, and its implementation rules, an enterprise established outside of the PRC with a "de facto management body" within the PRC is considered a resident enterprise and will be subject to the enterprise income tax on its global income at the rate of 25%. The implementation rules define the term "de facto management body" as the body that exercises full and substantial control over and overall management of the business, productions, personnel, accounts and properties of an enterprise. In April 2009, 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, as amended on December 29, 2017, known as Circular 82, which provides certain specific criteria for determining whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is located in mainland China. Although this circular applies only to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners like us, the criteria set forth in the circular may reflect the SAT's general position on how the "de facto management body" test should be applied in determining the tax resident status of all offshore enterprises. According to Circular 82, an offshore incorporated enterprise controlled by a PRC enterprise or a PRC enterprise group will be regarded as a PRC tax resident by virtue of having its "de facto management body" in mainland China and will be subject to PRC enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management is in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval by organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals, and board and shareholder resolutions, are located or maintained in the PRC; and (iv) at least 50% of voting board members or senior executives habitually reside in the PRC.

We believe none of our entities outside of mainland China is a PRC resident enterprise for PRC tax purposes. See "Item 10. Additional Information—E. Taxation—People's Republic of China Taxation." 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". As a majority of our management members are based in mainland China, it remains unclear how the tax residency rule will apply to our case. If the PRC tax authorities determine that iClick Interactive Asia Group Limited or any of our subsidiaries outside of mainland China is a PRC resident enterprise for PRC enterprise income tax purposes, then iClick Interactive Asia Group Limited or such subsidiary could be subject to PRC tax at a rate of 25% on its world-wide income, which could materially reduce our net income. In addition, we will also be subject to PRC enterprise income tax reporting obligations. Furthermore, income and any gains realized in respect to our ordinary shares or ADSs may be deemed by the PRC tax authorities as income or gain, as the case may be, arising from sources within the PRC, as described immediately below.

You may be subject to PRC income tax on dividends from us or on any gain realized on the transfer of our ordinary shares.

Under the EIT Law and its implementation rules, subject to any applicable tax treaty or similar arrangement between the PRC and our shareholders' jurisdictions of residence that provide for a different income tax arrangement, PRC withholding tax at the rate of 10% is generally applicable to dividends from PRC sources paid to shareholders that are non-PRC 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 relevant income is not effectively connected with the establishment or place of business. Any gain realized on the transfer of shares by such shareholders is subject to 10% PRC income tax if such gain is regarded as income derived from sources within the PRC unless a treaty or similar arrangement otherwise provides. Under the PRC Individual Income Tax Law and its implementation rules, dividends from sources within the PRC paid to foreign individual investors who are not PRC residents are generally subject to a PRC withholding tax at a rate of 20% and gains from PRC sources realized by such investors on the transfer of shares are generally subject to 20% PRC income tax, in each case, subject to any reduction or exemption set forth in applicable tax treaties and PRC laws.

As described in the preceding risk factor, there is a risk that we will be treated by the PRC tax authorities as a PRC tax resident enterprise. In that case, dividend income and gains from sales of our shares or ADSs may be treated as PRC source income or gains subject to the PRC taxes described above.

If PRC income tax is imposed on gains realized on the transfer of our ordinary shares or ADSs or on dividends paid to our non-resident shareholders or ADS holders, the value of your investment in our ordinary shares or ADSs may be materially and adversely affected. Furthermore, our shareholders or ADS holders whose jurisdictions of residence have tax treaties or arrangements with mainland China may not qualify for benefits under such tax treaties or arrangements.

We may not be able to obtain certain benefits under relevant tax treaty on dividends paid by our PRC subsidiaries to us through our Hong Kong subsidiaries.

We are an exempted limited liability company, used as holding company, incorporated under the laws of the Cayman Islands and as such rely on dividends and other distributions on equity from our PRC subsidiaries, as paid to us through our Hong Kong subsidiaries, to satisfy part of our liquidity requirements. Pursuant to the PRC EIT Law, a withholding tax rate of 10% currently applies to dividends paid by a PRC "resident enterprise" to a foreign enterprise investor, unless any such foreign investor's jurisdiction of incorporation has a tax treaty with mainland China that provides for preferential tax treatment. Pursuant to the Arrangement between the Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and Tax Evasion on Income, or the Double Tax Avoidance Arrangement, and Circular 81 issued by the SAT, such withholding tax rate may be lowered to 5% if the PRC enterprise is at least 25% held by a Hong Kong enterprise throughout the 12 months prior to distribution of the dividends and is determined by the relevant PRC tax authority to have satisfied other requirements. Furthermore, under the Administrative Measures for Non-Resident Taxpayers to Enjoy Treatments under Tax Treaties, which became effective on January 1, 2020, the non-resident enterprises shall determine whether they are qualified for preferential tax treatment under the tax treaties and file relevant reports and materials with the tax authorities. There are also other conditions for benefiting from the reduced withholding tax rate according to other relevant tax rules and regulations. See "Item 10. Additional Information—E. Taxation—People's Republic of China Taxation." We cannot assure you that our determination regarding our Hong Kong subsidiaries' qualification to benefit from the preferential tax treatment will not be challenged by the relevant PRC tax authority or that we will be able to complete the necessary filings with the relevant PRC tax authority and benefit from the preferential withholding tax rate of 5% under the Double Taxation Avoidance Arrangement with respect to dividends to be paid by our PRC subsidiaries to our Hong Kong subsidiaries.

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

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

On February 3, 2015, the SAT issued a Public Notice Regarding Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Resident Enterprises, or SAT Public Notice 7. SAT Public Notice 7 supersedes the rules with respect to the Indirect Transfer under SAT Circular 698, but does not touch upon the other provisions of SAT Circular 698, which remain in force. SAT Public Notice 7 has introduced a new tax regime that is significantly different from the previous one under SAT Circular 698 (Article V and Article VI). SAT Public Notice 7 extends its tax jurisdiction to not only Indirect Transfers set forth under SAT Circular 698 but also transactions involving transfer of other taxable assets through offshore transfer of a foreign intermediate holding company. In addition, SAT Public Notice 7 provides clearer criteria than SAT Circular 698 for assessment of reasonable commercial purposes and has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market. SAT Public Notice 7 also brings challenges to both foreign transferor and transferee (or other person who is obligated to pay for the transfer) of taxable assets. Where a non-resident enterprise transfers taxable assets indirectly by disposing of the equity interests of an overseas holding company (other than by way of sale of equity securities traded on a public market), which is an Indirect Transfer, the nonresident enterprise as either transferor or transferoe, or the PRC entity that directly owns the taxable assets, may report such Indirect Transfer to the relevant tax authority. Using a "substance over form" principle, the PRC tax authority may disregard the existence of the overseas holding company if it lacks a reasonable commercial purpose and was established for the purpose of reducing, avoiding or deferring PRC tax. As a result, gains derived from such Indirect Transfer may be subject to PRC enterprise income tax, and the applicable taxes will be withheld from payments to the transferor, currently at a rate of 10%. Both the transferor and the PRC entity that directly owns the taxable assets, or the withhold agent, may be subject to penalties under PRC tax laws if the withhold agent fails to withhold the taxes and the transferor fails to pay the taxes.

On October 17, 2017, SAT issued the Announcement on Issues Relating to Withholding at Source of Income Tax of Non-resident Enterprises, or SAT Circular 37, effective in December 2017, which supersedes SAT Circular 698 as a whole and partially amended some provisions in SAT Circular 7. SAT Circular 37 further reduces the burden of withholding obligator, such as revocation of contract filing requirements and tax liquidation procedures, strengthens the cooperation of tax authorities in different places, and clarifies the calculation of tax payable and conversion of foreign exchange.

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 or subject to withholding obligations in such transactions, under SAT Public Notice 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 SAT Public Notice 7 and SAT Circular 37. As a result, we may be required to expend valuable resources to comply with SAT Public Notice 7 and SAT Circular 37 or to request the relevant transferors from whom we purchase taxable assets to comply with these circulars, or to establish that our company should not be taxed under these circulars, which may have a material adverse effect on our financial condition and results of operations.

Recent litigation and negative publicity surrounding China-based companies listed in the U.S. may result in increased regulatory scrutiny of us and negatively impact the trading price of the ADSs and could have an adverse effect upon our business, including our results of operations, financial condition, cash flows and prospects.

We believe that litigation and negative publicity surrounding companies with operations in China that are listed in the U.S. have negatively impacted stock prices for these companies. Various equity-based research organizations have published reports on China-based companies after examining their corporate governance practices, related party transactions, sales practices and financial statements, and these reports have led to special investigations and listing suspensions on U.S. national exchanges. Any similar scrutiny of us, regardless of its lack of merit, could result in a diversion of management resources and energy, potential costs to defend ourselves against rumors, decreases and volatility in the ADS trading price, and increased directors and officers insurance premiums and could have an adverse effect upon our business, including our results of operations, financial condition, cash flows and prospects.

The PCAOB had historically been unable to inspect our auditor in relation to their audit work performed for our financial statements and the inability of the PCAOB to conduct inspections of our auditor in the past had deprived our investors with the benefits of such inspections.

Our auditor, the independent registered public accounting firm that issues the audit report included elsewhere in this annual report, as an auditor of companies that are traded publicly in the United States and a firm registered with the PCAOB, is subject to laws in the United States pursuant to which the PCAOB conducts regular inspections to assess its compliance with the applicable professional standards. Our auditor is located in Hong Kong, a jurisdiction where the PCAOB was historically unable to conduct inspections and investigations completely before 2022. As a result, we and investors in the ADSs were deprived of the benefits of such PCAOB inspections. The inability of the PCAOB to conduct inspections of auditors in Hong Kong in the past had made it more difficult to evaluate the effectiveness of our independent registered public accounting firm's audit procedures or quality control procedures as compared to auditors outside of Hong Kong that are subject to the PCAOB inspections. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determination and removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. However, if the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong, and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we and investors in the ADSs would be deprived of the benefits of such PCAOB inspections again, which could cause investors and potential investors in the ADSs to lose confidence in our audit procedures and reported financial information and the quality of our financial statements.

Our ADSs may be prohibited from trading in the United States under the HFCA Act, if the PCAOB is unable to inspect or fully investigate auditors located in mainland China or Hong Kong. The delisting of our ADSs, or the threat of their being delisted, may materially and adversely affect the value of your investment.

Pursuant to the HFCA Act, if the SEC determines that we have filed audit reports issued by a registered public accounting firm that has not been subject to inspections by the PCAOB for two consecutive years, the SEC will prohibit our shares or ADSs from being traded on a national securities exchange or in the over-the-counter trading market in the United States.

On December 16, 2021, the PCAOB issued a report to notify the SEC of its determination that the PCAOB was unable to inspect or investigate completely registered public accounting firms headquartered in mainland China and Hong Kong and our auditor was subject to that determination. On June 1, 2022, the SEC conclusively listed us as a Commission-Identified Issuer under the HFCA Act following the filing of our annual report on Form 20-F for the fiscal year ended December 31, 2021. On December 15, 2022, the PCAOB removed mainland China and Hong Kong from the list of jurisdictions where it is unable to inspect or investigate completely registered public accounting firms. For this reason, we do not expect to be identified as a Commission-Identified Issuer under the HFCA Act after we file this annual report on Form 20-F for the fiscal year ended December 31, 2022.

Each year, the PCAOB will determine whether it can inspect and investigate completely audit firms in mainland China and Hong Kong, among other jurisdictions. If the PCAOB determines in the future that it no longer has full access to inspect and investigate completely accounting firms in mainland China and Hong Kong and we use an accounting firm headquartered in one of these jurisdictions to issue an audit report on our financial statements filed with the SEC, we would be identified as a Commission-Identified Issuer following the filing of the annual report on Form 20-F for the relevant fiscal year. In accordance with the HFCA Act, our ADSs would be prohibited from being traded on a national securities exchange or in the over-the-counter trading market in the United States if we are identified as a Commission-Identified Issuer for two consecutive years in the future. If our 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. A prohibition of being able to trade in the United States would substantially impair your ability to sell or purchase other ADSs when you wish to do so, and the risk and uncertainty associated with delisting would have a negative impact on the price of the 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.

Risks Related to Our American Depositary Shares

The market price for our ADSs may be volatile.

Since our ADSs became listed on NASDAQ Global Market on December 21, 2017, the trading price of our ADSs has ranged from US\$0.21 to US\$19.10 per ADS (trading price presented here reflected actual trading price, without retrospectively applied ratio change). The trading prices of our ADSs are 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 internet or other companies based in China that have listed their securities in the United States in recent years. The securities of some of these companies have experienced significant volatility since their initial public offerings, including, in some cases, substantial price declines in their trading prices. The trading performances of other Chinese companies' securities after their offerings may affect the attitudes of investors toward Chinese companies listed in the United States, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. Furthermore, as a result of the narrow band of our ADSs publicly available for trading, small trades can cause significant percentage changes in valuation in a short time period. Such volatility may affect the attitude of investors towards our securities, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or other matters of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have conducted any inappropriate activities. Furthermore, securities markets may from time to time experience significant price and volume fluctuations that are not related to our operating performance, such as the large decline in share prices in the United States, China and other jurisdictions in late 2008, early 2009 and the second half of 2011, which may have a material adverse effect on the market price of our ADSs.

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

- regulatory developments affecting us, our clients and end marketers, or our industry;
- conditions in the online marketing industry and SaaS industry;
- fluctuation of our results of operations from quarter to quarter due to seasonality in online marketing business, which may
 be affected by the online spending cycles of consumers and marketers' practices in marketing budget allocation;
- announcements of studies and reports relating to the quality of our solutions and service offerings or those of our competitors;
- changes in the economic performance or market valuations of other providers of marketing solutions;
- actual or anticipated fluctuations in our quarterly results of operations and changes in or revisions to our expected results;
- changes in financial estimates by securities research analysts;
- announcements by us or our competitors of new product and service offerings, acquisitions, strategic relationships, joint ventures or capital commitments;
- additions to or departures of our senior management;
- detrimental negative publicity about us, our management or our industry;
- fluctuations of exchange rates between Renminbi and the U.S. dollar;
- release or expiry of lock-up or other transfer restrictions on our outstanding ordinary shares or ADSs;

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- sales or perceived potential sales of additional ordinary shares or ADSs;
- any share repurchase program; and
- potential litigation or regulatory investing actions.

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

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

In addition, the stock market in general, and the market prices for internet-related companies and companies with operations in China in particular, have experienced volatility that often has been unrelated to the operating performance of such companies. The securities of some China-based companies that have listed their securities in the United States have experienced significant volatility since their initial public offerings in recent years, including substantial declines in the trading prices of their securities. The trading performances of these companies' securities after their offerings may affect the attitudes of investors towards Chinese companies listed in the United States in general, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. In addition, any negative publicity of other Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have engaged in any inappropriate activities. In particular, the global financial crisis, the ensuing economic recessions and deterioration in the credit market in many countries have contributed and may continue to contribute to extreme volatility in the global stock markets. These broad market and industry fluctuations may adversely affect the market price of our ADSs. Volatility or a lack of positive performance in our ADS price may also adversely affect our ability to retain key employees, most of whom have been granted options or other equity incentives.

Our ADSs may not comply with the minimum listing requirements of the NASDAQ.

Our ADSs are currently listed on the NASDAQ Global Market. In order to maintain listing on the NASDAQ, we must satisfy minimum financial and other continued listing requirements and standards, including maintaining a minimum average closing price of \$1.00 per ADS over a period of 30 consecutive business days. The Company received a notification letter from the NASDAQ dated June 14, 2022 indicating that the closing bid price of the ADSs was below the minimum bid price of \$1.00 required for continued listing under the NASDAQ Listing Rule 5450(a)(1) for 30 consecutive business days. The Company regained compliance with the minimum bid price requirement by changing the ratio of its ADSs representing its Class A ordinary shares from one (1) ADS representing one-half (1/2) of one Class A ordinary share to one (1) ADS representing five (5) Class A ordinary shares. The change became effective on November 14, 2022. Since November 29, 2022, and the Company has regained compliance with the minimum bid price requirement. However, if we were not able to maintain compliance with this requirement or any other applicable listing standard of the NASDAQ, our ADSs would be subject to delisting. In the event that our ADSs are delisted from the NASDAQ and are not eligible for quotation or listing on another market or exchange, trading of our ADSs could be conducted only in the over-the-counter market established for unlisted securities such as OTC markets. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for our ADSs, which could cause the price of our ADSs to decline further. As a result, our ability to obtain adequate financing for the continuation of our operations would be substantially impaired, which could have a material adverse effect on our financial condition and results of operations.

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

We announced share repurchase programs in November 2018 (the "2018 Share Repurchase Program"), January 2020 (the "January 2020 Share Repurchase Program"), December 2020 (the "December 2020 Share Repurchase Program"), December 2021 (the "December 2021 Share Repurchase Program") and December 2022 (the "December 2022 Share Repurchase Program") to purchase up to US\$10 million, US\$10 million, US\$15 million, US\$20 million and US\$5 million of the ADSs respectively. In August 2021, we upsized the "December 2020 Share Purchase Program" by US\$10 million to US\$25 million. Although our board of directors has authorized these programs, we are not obligated to purchase any specific dollar amount or to acquire any specific number of shares. We expect to effect the proposed share repurchase on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as we deem appropriate. As of December 31, 2022, we repurchased approximately US\$28 million of the ADSs under the share repurchase programs. Our share repurchase program could affect the price of the ADSs and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of the ADSs. For example, the existence of a share repurchase program could cause the price of the ADSs to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for the ADSs. Additionally, our share repurchase program could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities. There can be no assurance that any share repurchases will enhance shareholder value because the market price of the ADSs or our ordinary shares may decline below the levels at which we determine to repurchase the ADSs or our ordinary shares. Although our share repurchase program is intended to enhance long-term shareholder value, there is no assurance that it will do so and short-term share price fluctuations could reduce the program's effectiveness.

Our dual-class share structure with different voting rights will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

We have a dual-class share structure such that our ordinary shares consist of Class A ordinary shares and Class B ordinary shares. In respect of matters requiring the votes of shareholders, holders of Class A ordinary shares are entitled to one vote per share, while holders of Class B ordinary shares are entitled to 20 votes per share based on our dual-class share structure. One ADSs represent five Class A ordinary shares was effective from November 14, 2022. 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 thereof to any person or entity which is not an affiliate of such holder, such Class B ordinary shares shall be automatically and immediately converted into the equal number of Class A ordinary shares.

As of the date of this annual report, Mr. Sammy Hsieh, our director and co-founder, Mr. Jian Tang, our chairman of the board, chief executive officer and co-founder, beneficially own an aggregate of 4,385,078 Class B ordinary shares. Due to the disparate voting powers associated with our dual-class share structure, Mr. Hsieh and Mr. Tang, collectively beneficially owned approximately 61.2% of the aggregate voting power of our company as of March 31, 2023. See "Item 6. Directors, Senior Management and Employees—E. Share Ownership." In January 2021, we issued 649,349 Class B ordinary shares to Baozun Inc., or Baozun. In addition, Baozun entered into a share purchase agreement with an existing shareholder of us, pursuant to which Baozun purchased from such existing iClick shareholder 2,471,468 ADSs. After the closing of the above transactions, Baozun beneficially owned approximately 4% of our total outstanding shares, representing approximately 10% of our total voting equity. As a result of the dual-class share structure and the concentration of ownership, Mr. Hsieh, Mr. Tang and Baozun will have considerable influence over matters such as decisions regarding change of directors, mergers, change of control transactions and other significant corporate actions. They may take actions that are not in the best interest of us or our other shareholders. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could have the effect of depriving our other shareholders of the opportunity to receive a premium for their shares as part of a sale of our company and may reduce the price of our ADSs. This concentrated control will limit your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover or other change of control transactions that holders of Class A ordinary shares and ADSs may view as beneficial.

Our directors, officers and principal shareholders have substantial influence over our company and their interests may not be aligned with the interests of our other shareholders.

Our directors and officers collectively owned an aggregate of 61.2% of the total voting power of our outstanding ordinary shares as of March 31, 2023. See "Item 6. Directors, Senior Management and Employees—E. Share Ownership." As a result, they have substantial influence over our business, including significant corporate actions such as change of directors, mergers, change of control transactions and other significant corporate actions.

They may take actions that are not in the best interest of us or our other shareholders. This concentration of ownership may discourage, delay or prevent a change in control of our company, which could deprive our shareholders of an opportunity to receive a premium for their shares as part of a sale of our company and may reduce the price of the ADSs. These actions may be taken even if they are opposed by our other shareholders, including ADS holders. In addition, the significant concentration of share ownership may adversely affect the trading price of the ADSs due to investors' perception that conflicts of interest may exist or arise.

We have granted, and may continue to grant, share incentives, which may result in increased share based compensation expenses.

We have granted, and may continue to grant, share incentives to employees, directors and advisors to incentivize their performance and align their interests with ours.

As of March 31, 2023, options to purchase 274,830 Class A ordinary shares were outstanding under our 2018 Plan, and they were vested and unexercised options.

As of March 31, 2023, 427,880 Class A ordinary shares were outstanding under our Post-IPO Plan, representing the shares underlying the unvested 427,880 restricted Class A ordinary shares units.

We account for shared-based compensation for these share incentive awards using a fair value based method and recognize expenses in our consolidated statements of comprehensive loss in accordance with U.S. GAAP. We will incur additional share based compensation expenses in the future as we continue to grant share incentives using the ordinary shares reserved for this platform. We believe the granting of share-based compensation is of significant importance to our ability to attract and retain key personnel and employees, and we will continue to grant share-based compensation to them in the future. As a result, our expenses associated with share-based compensation may increase, which may have an adverse effect on our results of operations.

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

The trading market for our ADSs will depend in part on the research and reports that securities or industry analysts publish about us or our business. If research analysts do not establish and maintain adequate research coverage or if one or more of the analysts who cover us downgrade our ADSs or publish inaccurate or unfavorable research about our business, the market price for our 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 our ADSs to decline.

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

Sales of substantial amounts of our ADSs in the public market, or the perception that these sales could occur, could adversely affect the market price of our ADSs and could materially impair our ability to raise capital through equity offerings in the future. Certain holders of our ordinary shares have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other shareholders. We have also registered all ordinary shares that we may issue under our equity compensation plans. These shares can be freely sold in the public market subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our ADSs could decline.

We cannot predict what effect, if any, market sales of securities held by our significant shareholders, including potential sales of our securities upon the conversion of our convertible notes, or any other shareholder or the availability of these securities for future sale will have on the market price of our ADSs.

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

We currently intend to retain most, if not all, of our available funds and any future earnings to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. Therefore, you should not rely on an investment in our ADSs as a source for any future dividend income.

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

Our memorandum and articles of association that contain anti-takeover provisions that could discourage a third party from acquiring us and adversely affect the rights of holders of our Class A ordinary shares and ADSs.

Our memorandum and articles of association contain certain provisions that could limit the ability of others to acquire control of our company, including a dual-class share structure that gives greater voting power to the Class B ordinary shares beneficially owned by Mr. Sammy Hsieh, Mr. Jian Tang and Baozun, and a provision that grants authority to our board of directors to establish and issue from time to time one or more series of preferred shares without action by our shareholders and to determine, with respect to any series of preferred shares, the terms and rights of that series. These provisions could have the effect of depriving our shareholders and ADSs holders of the opportunity to sell their shares or ADSs at a premium over the prevailing market price by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transactions.

As a company incorporated in the Cayman Islands, we have adopted certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ corporate governance requirements; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the NASDAQ corporate governance requirements.

As a Cayman Islands company listed on the NASDAQ Global Market, we are subject to the NASDAQ corporate governance requirements. However, NASDAQ Global 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 corporate governance requirements. We follow our home country practices and rely on certain exemptions provided by the Nasdaq Stock Market Rules to a foreign private issuer, including exemptions from the requirements to have:

- shareholder approval for certain events, including the establishment or amendment of certain equity based compensation plans and arrangements and certain transactions involving issuances of 20% or more interest in our company;
- majority of independent directors on our board of directors;
- only independent directors being involved in the selection of director nominees and determination of executive officer compensation; and
- regularly scheduled executive sessions of independent directors.

As a result of our reliance on the corporate governance exemptions available to foreign private issuers, you will not have the same protection afforded to shareholders of companies that are subject to all of Nasdaq's corporate governance requirements.

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 limited liability company incorporated under the laws of the Cayman Islands. Our corporate affairs are governed by our memorandum and articles of association, the Companies Act (Revised) of the Cayman Islands and the common law of the Cayman Islands. The rights of shareholders to take action against the directors, actions by minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from the common law of England, the decisions of whose courts are of persuasive authority, but are not binding, on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedent in some jurisdictions in the United States. In particular, the Cayman Islands has a less developed body of securities laws than the United States. Some U.S. states, such as Delaware, have more fully developed and judicially interpreted bodies of corporate law than the Cayman Islands. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action in a federal court of the United States.

The Cayman Islands courts are also unlikely:

- to recognize or enforce against us judgments of courts of the United States based on certain civil liability provisions of U.S. securities laws; and
- to impose liabilities against us, in original actions brought in the Cayman Islands, based on certain civil liability provisions of U.S. securities laws that are penal in nature.

There is no statutory recognition in the Cayman Islands of judgments obtained in the United States, although the courts of the Cayman Islands will in certain circumstances recognize and enforce a non-penal judgment of a foreign court of competent jurisdiction without retrial on the merits.

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

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 will have discretion under our current 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 United States.

You may experience difficulties in effecting service of legal process and enforcing judgments obtained against us, our directors or our officers, and the ability of U.S. authorities to bring actions against us, our directors or our officers in China may also be limited.

We are an exempted limited liability company incorporated under the laws of the Cayman Islands. We conduct substantially all of our operations in China and substantially all of our assets are located in China. In addition, a majority of our directors and executive officers reside within China, and most of the assets of these persons are located within China. As a result, it may be difficult or impossible for you to effect service of process within the United States upon these individuals, or to bring an action against us or against these individuals in the United States in the event that you believe your rights have been infringed under the U.S. federal securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of the PRC may render you unable to enforce a judgment against our assets or the assets of our directors and officers. In addition, due to jurisdictional limitations, matters of comity and various other factors, the SEC, Department of Justice ("DOJ") and other U.S. authorities may be limited in their ability to take enforcement actions, including in instances of fraud, against us or our directors and officers in China. In addition, shareholder claims that are common in the United States, including class action securities law and fraud claims, are generally uncommon in China.

The voting rights of holders of ADSs are limited by the terms of the deposit agreement, and you may not be able to exercise your right to vote your Class A ordinary shares.

As a holder of our ADSs, you will only be able to exercise the voting rights with respect to the underlying Class A ordinary shares in accordance with the provisions of the deposit agreement. Under the deposit agreement, you must vote by giving voting instructions to the depositary. If we ask for your instructions, then upon receipt of your voting instructions, the depositary will try to vote the underlying Class A ordinary shares in accordance with these instructions. If we do not instruct the depositary to ask for your instructions, the depositary may still vote in accordance with instructions you give, but it is not required to do so. You will not be able to directly exercise your right to vote with respect to the underlying shares unless you withdraw the shares. When a general meeting is convened, you may not receive sufficient advance notice to withdraw the shares underlying your ADSs to allow you to vote with respect to any specific matter. If we ask for your instructions, the depositary will notify you of the upcoming vote and will arrange to deliver our voting materials to you. We have agreed to give the depositary at least 30 days' prior notice of shareholder meetings.

Nevertheless, we cannot assure you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your shares. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for their manner of carrying out your voting instructions. This means that you may not be able to exercise your right to vote and you may have no legal remedy if the shares underlying your ADSs are not voted as you requested.

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

Under the deposit agreement for our ADSs, to the extent we have provided the depositary with at least 40 days' notice of a proposed meeting, if voting instructions are not timely received by the depositary from you, you shall be deemed to have instructed the depositary to give a discretionary proxy to a person designated by us to vote the shares represented by you ADSs as desired.

However, no such instruction shall be deemed given and no discretionary proxy shall be given (a) if we inform the depositary in writing that (i) we do not wish such proxy to be given, (ii) substantial opposition exists with respect to any agenda item for which the proxy would be given or (iii) the agenda item in question, if approved, would materially or adversely affect the rights of holders of shares and (b) unless we have provided the depositary with an opinion of our counsel to the effect that (i) the granting of such discretionary proxy does not subject the depositary to any reporting obligations in the Cayman Islands, (ii) the granting of such proxy will not result in a violation of any applicable law, public rule or regulation in force in the Cayman Islands and (iii) the courts of the Cayman Islands will give effect to the voting arrangement and deemed instruction as contemplated in the proxy under Cayman Islands law.

The effect of this discretionary proxy is that, if you fail to give voting instructions to the depositary as to how to vote the Class A ordinary shares underlying your ADSs at any particular shareholders' meeting, you cannot prevent our Class A ordinary shares underlying your ADSs from being voted at that meeting, absent the situations described above, and it may make it more difficult for shareholders to influence our management. Holders of our Class A ordinary shares are not subject to this discretionary proxy.

Your rights to pursue claims against the depositary as a holder of ADSs are limited by the terms of the deposit agreement and the deposit agreement may be amended or terminated without your consent.

Under the deposit agreement, any action or proceeding against or involving the depositary, arising out of or based upon the deposit agreement or the transactions contemplated thereby or by virtue of owning the ADSs may only be instituted in a state or federal court in New York, New York, and you, as a holder of our ADSs, will have irrevocably waived any objection which you may have to the laying of venue of any such proceeding, and irrevocably submitted to the exclusive jurisdiction of such courts in any such action or proceeding. However, the depositary may, in its sole discretion, require that any dispute or difference arising from the relationship created by the deposit agreement be referred to and finally settled by an arbitration conducted under the terms described in the deposit agreement. Also, we may amend or terminate the deposit agreement without your consent. If you continue to hold your ADSs after an amendment to the deposit agreement, you agree to be bound by the deposit agreement as amended.

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

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

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

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

Your ADSs are transferable on the books of the depositary. However, the depositary may close its 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.

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

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

- the rules under the Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q or current reports on Form 8-K;
- the sections of the Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the Exchange Act;
- the sections of the Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year and reports on Form 6-K relating to certain material events promptly after we publicly announce these events. 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 U.S. 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 may lose our foreign private issuer status in the future, which could result in significant additional cost and expense.

The determination of our status as a foreign private issuer is made annually on the last business day of our most recently completed second fiscal quarter. If we were to lose our foreign private issuer status, the regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly higher. We may also be required to modify certain of our policies to comply with corporate governance practices associated with U.S. domestic issuers, which would involve additional costs.

We have incurred increased costs as a result of being a public company, and our compliance costs may continue to increase in the future.

We have incurred additional legal, accounting and other expenses as a public reporting company. For example, we are required to comply with additional requirements of the rules and regulations of the SEC and requirements of the NASDAQ Global Market, including applicable corporate governance practices. We expect that compliance with these requirements will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. We also expect that our management and other personnel will need to divert attention from operational and other business matters to devote substantial time to these public company requirements. We cannot predict or estimate the amount of additional costs we may incur as a result of becoming a public company or the timing of such costs.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may also initiate legal proceedings against us and our business may be adversely affected.

There can be no assurance that we will not be a passive foreign investment company, or PFIC, for United States federal income tax purposes for any taxable year, which could subject United States investors in our ADSs or ordinary shares to significant adverse United States income tax consequences.

A non-U.S. corporation will be a "passive foreign investment company," or "PFIC," if, in any particular taxable year, either (a) 75% or more of its gross income for such year consists of certain types of "passive" income or (b) 50% or more of the average quarterly value of its assets (as determined on the basis of fair market value) during such year produce or are held for the production of passive income (the "asset test"). For this purpose, cash generally is treated as a passive asset. Goodwill is treated as an active asset under the PFIC rules to the extent attributable to activities that produce active income for these purposes. We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock. Although the law in this regard is not entirely clear, we treat our consolidated variable interest entities as being owned by us for U.S. federal income tax purposes because we control their management decisions and are entitled to substantially all of the economic benefits associated with these entities.

The determination of whether we are a PFIC is made annually after the close of each taxable year. This determination is based on the facts and circumstances at that time, some of which may be beyond our control, such as the amount and composition of our income and the valuation and composition of our assets, including goodwill and other intangible assets, as implied by the market price of our ADSs and ordinary shares. In particular, because the value of our assets for purposes of the asset test may be determined by reference to the market price of our ADSs, the recent decline in the market price of our ADSs has resulted in a significant risk that we were a PFIC for our prior taxable year (or, alternatively, that we may become a PFIC for the current or subsequent taxable years). The market price of our ADSs and/or ordinary shares may continue to fluctuate considerably and, consequently, we cannot assure you of our PFIC status for any taxable year. In addition, the composition of our income and assets will also be affected by how, and how quickly, we use our liquid assets. If we determine not to deploy significant amounts of cash for active purposes, or if it were determined that we do not own the stock of the consolidated variable interest entities for U.S. federal income tax purposes, our risk of being a PFIC may substantially increase.

If we are a PFIC in any taxable year, U.S. Holders (as defined in "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations") may incur significantly increased U.S. income tax on gain recognized on the sale or other disposition of the ADSs or ordinary shares and on the receipt of distributions on the ADSs or ordinary shares to the extent such gain or distribution is treated as an "excess distribution" under the U.S. federal income tax rules, and may be subject to burdensome reporting requirements. Further, if we are a PFIC for any year during which a U.S. Holder holds our ADSs or ordinary shares, the U.S. Holder generally will be required to continue to treat us as a PFIC for all succeeding years during which the U.S. Holder holds our ADSs or ordinary shares. For more information, see "Item 10. Additional Information—E. Taxation—United States Federal Income Tax Considerations—Passive Foreign Investment Company Rules."

ITEM 4. INFORMATION ON THE COMPANY

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

We commenced our online marketing business in 2009. In February 2010, we restructured our holding structuring by incorporating Optimix Media Asia Limited in the Cayman Islands as the holding company of Optimix HK to facilitate financing and offshore listing. In March 2017, we changed our name from Optimix Media Asia Limited to iClick Interactive Asia Group Limited.

In November 2014, we enhanced our data analytics capabilities by acquiring Buzzinate Company Limited, or Buzzinate, a company incorporated in Hong Kong. Buzzinate is an online marketing platform with strong data analytics capabilities and deep understanding of behavior of internet users in China.

In July 2015, we acquired all shares in OptAim Ltd., or OptAim, and substantially expanded our online marketing business into mobile channels to identify, engage and convert mobile marketing.

On December 21, 2017, our ADSs commenced trading on Nasdaq Global Market under the symbol "ICLK." We raised from our initial public offering approximately \$23,325,000 in net proceeds after deducting underwriting commissions and the offering expenses payable by us.

In May 2018, we launched a strategic growth initiative beyond our core online marketing operation to provide SaaS-based enterprise solutions. Our enterprise solutions help enterprise optimize their capabilities to leverage various types of data, and help them reduce costs and allow for easy integration with other platforms and applications. Our enterprise solutions help us foster closer relationship with our clients beyond digital marketing. Enterprises can make better and more informed choices during their decision-making process through our enterprise solutions.

In November 2018, we acquired Myhayo, a content distribution channel and a mobile content aggregator of articles and short videos in the PRC, which presents customized feeds to users via its mobile application. The acquisition may further increase our market shares in the PRC online marketing segment, particularly in relation to mobile platform.

In January 2019, we made a controlling investment in Changyi, a leading independent software vendor based in Shanghai which provides intelligent retail and CRM solutions, through which we expect to further enhance our data-driven enterprise solutions business. In October 2020 and December 2020, we further increased our equity stake in Changyi. In August 2022, we fully acquired the remaining equity interest in Changyi.

In October 2020, we acquired CMRS Group Holding Limited, or CMRS, a leading marketing automation solution provider in China. The acquisition will allow us to further enhance our full product offerings, leveraging CMRS's marketing automation capabilities, in particular, for cross-border customers marketing into China.

In January 2021, we issued certain Class B ordinary shares to Baozun, a leading brand e-commerce service partner that helps brands execute their e-commerce strategies in China and entered into a strategic cooperation framework agreement with it. Pursuant to the strategic cooperation framework agreement, we and Baozun will collaborate in developing a full-cycle, closed-loop e-commerce service model, covering areas such as system development, IT services, digital marketing, store operation, customer services and warehousing and fulfillment services to better serve potential brand partners.

In January 2021, we released iSCRM, a powerful off-the-shelf SaaS enterprise management platform for daily operations and social customer relationship management. iSCRM leverages the updated features of WeCom, Tencent's communication platform for enterprises, to effectively attract new users and intelligently manage brands' private domain traffic through integration of the various functions on WeChat Mini Program, WeCom and WeChat.

In July 2021, we completed the acquisition of Parllay, a leading personalized marketing platform with deep expertise in WeChat-based CRM, e-commerce and marketing SaaS solutions in China. We anticipate that the utilization of Parllay's rich expertise will further enhance our product offerings, enlarge our potential clients base, and accelerate sales of our enterprise solutions.

On November 14, 2022, we changed the ratio of our ADSs representing the Class A ordinary shares from one (1) ADS representing one-half (1/2) of one Class A ordinary share to one (1) ADS representing five (5) Class A ordinary shares.

Our principal executive offices are located at 15/F, Prosperity Millennia Plaza, 663 King's Road, Quarry Bay, Hong Kong S.A.R. Our telephone number at this address is (852) 3700 9000. Our registered office in the Cayman Islands is located at Maples Corporate Services Limited at PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. Our internet address is www.iclick.com. The SEC also maintains an internet site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC.

B. <u>Business Overview</u>

We are a leading enterprise and marketing cloud Platform in China. We offer a consumer full lifecycle solution that addresses our clients' needs from traffic acquisition, customer relations management and business decisions optimization driven by data analytics in today's smart retail era. With our industry-leading marketing solutions as our entry point, we support enterprises on digital operations to drive customer retention and loyalty and growing customer lifetime value with our intelligent data enterprise solutions.

Our marketing solutions serve as an integrated cross-channel gateway that provides marketers with innovative and cost-effective ways to optimize their online advertising efforts throughout their marketing cycle and achieve their branding and performance-based advertising goals. Our integrated data-driven marketing solutions help marketers engage and activate potential customers, monitor and measure the results of marketing campaigns, and create content catering to potential customers across different content distribution channels through both PC and mobile devices. Our marketing solutions appeal to marketers by offering omni-channel reach to the Chinese audience. We provide our clients with one-stop access to a wide variety of cross-channel content distribution opportunities, including those from leading online publishers in China. We work closely with our content distribution partners to facilitate innovative and effective audience engagement.

Leveraging our data analytics and experience and expertise in online marketing, we launched our SaaS-based enterprise solutions in May 2018. We keep enriching our data-driven enterprise solutions with technological innovation, and currently it is developed in the form of "SaaS+X" model. This model is supported by (i) self-developed software or Tencent cloud and leverage Tencent's proprietary API connection and mini programs in Tencent's WeChat ecosystem, (ii) our operational services for enterprises' digitalization. Through the enterprise solutions, we are able to foster deeper relationship with clients beyond online marketing. As an increasing number of clients adopt our enterprise solutions, we expect to be able to continue to enhance the quantity, quality, and diversity of our data assets and refine our product and service offerings to improve customer experience. Our ability to develop tailored enterprise solutions to our key account clients foster strong relationships with them.

Our solutions are enabled and supported by our extensive data set, sophisticated data analytics capabilities and cutting-edge technologies. We collect data from a wide variety of channels, including through our proprietary tracking tools, from our marketers, publishers and ad exchanges when managing marketing campaigns, and to a lesser extent, from third-party strategic partners. From our large volume of unstructured data, we construct context-rich user profiles, utilizing our proprietary audience profiling and segmentation technologies. These user profiles, which are updated and refined on a continuous basis, typically include information on a user's attributes, such as his or her demographics, geographic location, device preference, spending history, personal interests and other online or offline behavioral patterns. As of March 31, 2023, we had analyzed approximately 2,939.6 million active profiled users or devices in terms of number of cookies that we place through internet browsers. Leveraging our sophisticated automation and deep learning technologies, we continually refine our big data analytics and update our user profiles to address the evolving needs of our clients, optimize the effectiveness of our solutions, and increase our operational efficiency while ensuring the stability of our data and platform as we scale up operations.

We take a flexible approach to delivering our solutions in order to cater to the preferences and levels of internal resources and expertise of our clients. Our clients may choose to access our solutions through (i) self-service, under which they have the flexibility to utilize our solutions "a la carte" to complement their existing marketing resources, including through our software, under which they can use personalized, extensive and secured systems with various functions for advertising, data operation and social retail, and (ii) managed service, under which our account management team provides in-depth services utilizing our solutions that suit the clients' specified objectives and budgets on marketing and digital operation.

The success of our solutions is evidenced by our strong, diverse and recurring client base from a broad range of industry verticals, including but not limited to fashion, entertainment and media, personal care and beauty, banking and finance, and automobile and petroleum. Our clients primarily include large enterprises, from different geographic regions in and outside China.

For our marketing solutions, we generate revenues primarily from clients' marketing spend through our platform as they utilize our solutions in cost-plus and specified action marketing campaigns, and to a less extent from incentives granted by the publisher under our sales agency arrangement. In 2020, 2021 and 2022, our revenue from marketing solutions amounted to US\$225.9 million, US\$242.6 million and US\$106.0 million, respectively. The significant decrease from 2021 to 2022 was primarily as a result of (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition from COVID-19 impact and tightening regulatory environment that affected our clients in certain industry sectors, and (ii) our strategic scale-down of lower margin, higher risk marketing solutions business.

For our enterprise solutions, we generate revenue primarily from the upfront, on-going subscription and service fees our clients pay. Our revenue from enterprise solutions remained relatively stable at US\$63.1 million in 2022, compared to US\$65.1 million in 2021.

The growth opportunities and driving force of our business also depend on the prosperity of the macro-economic environment, the marketing budget of medium and large customers, and our funds from external financing activities. China's GDP growth rate for 2022 is 3% and recovered to 4.5% in the first quarter of 2023 after the COVID-19 pandemic. However, due to the uncertainties still existing in the macro-economic environment, many customers remain cautious in their advertising expenditure, and new investment in business digitalization. As a Chinese concept stock with small market capitalization, we are facing significant challenges in raising funds. We will closely monitor the needs and payment capabilities of our customers, to balance our own financial situation and cash position with business growth.

Our Solutions

Through our suite of end-to-end solutions, enabled and supported by our extensive data set, sophisticated data analytics capabilities and cutting-edge technologies, we deliver highly integrated customer experience and address clients' needs to:

- identify their potential customers;
- engage and activate potential customers;
- monitor and measure the results of online marketing campaigns;
- create content catering to their potential customers;
- build and operate personalized storefronts on social media platforms;
- develop SaaS-based tools;
- provide operational services and support;
- utilize data analytics to advise business decisions; and
- marketing automation

Enterprise Solutions

Leveraging our data analytics expertise and experience in online marketing, we have launched our enterprise solutions from May 2018 to help clients collect information from different consumer touchpoints, and integrate them into a single data management platform to drive sales and marketing decisions. Our enterprise solutions were initially established on WeChat, a widely used social platform in China that is owned and operated by Tencent Holdings Limited. We also further enrich and diversify our offering through self-developed software and provide operational services for digitalization on other third-party platforms, resulted in our "SaaS+X" model.

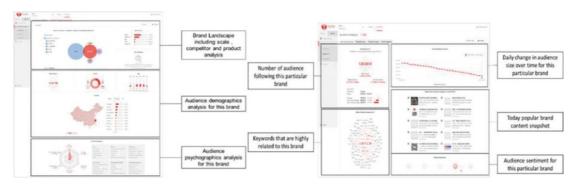
The "SaaS+X" component in our enterprise solutions include (i) data analytics SaaS tools and services; (ii) intelligent enterprise CRM SaaS tools and services; (iii) establishment and operation of client private domains; iv) smart retail tools and services. We continue to broaden our data sources, develop and upgrade SaaS modules and enhance the data functionality of these products so as to help clients better in business digitalization.

iAudience

iAudience is our market intelligence platform empowered by our proprietary data and cutting-edge marketing technology, to provide real-time insights of the target audiences and competitive landscapes in China, that allows enterprises to explore potential market opportunities and drive long-term business growth. Our clients can uncover target audiences by simply typing in a list of keywords, such as brand names, products of interest or competitors brand names and products, and iAudience will automatically suggest other keywords usually associated with, or used in, the relevant contexts, and then search our database of user profiles to identify the most relevant user profiles to target. In addition, iAudience's market module provides 53 pre-defined market segments' audience plans including travel, education, finance, automobile, real estate and more, with key analysis metrics to streamline the audience identification process for marketers in these industries, who can identify their desired user profiles and compare two market segments in just one click.

iAudience's brand module helps clients map out the brand positioning and competitive landscapes by showing the overlaps of their consumers and their competitors. This enables marketers to filter out brand loyalists from brand switchers for more effective, bespoke communication and implement the most appropriate content and marketing strategies to further grow their customer base.

Below is a sample interface for our iAudience solution.



iNsights 2.0

In February 2022, we released iNsights 2.0, our upgraded all-in-one marketing analytics platform, that extends our intelligent data analytics coverage from sole Web to both Web and WeChat Mini program ecosystem, enabling global brands gain unparalleled insights and achieve more effective data-driven marketing and smarter business decisions. Utilizing full-data analytics to produce key metrics, dimensions, reliable and accurate insights, iNsights 2.0 helps clients analyze their campaign performance to refine campaign strategies and guide future campaign planning. Through a user-friendly tracking functions, it not only helps brands create and track events and provide custom analysis for specific metrics to generate insights on campaign performance, such as most-clicked banners or most-engaged with gaming campaign, but also provides customized traffic source tracking paths, as well as custom QR codes for both online and offline campaigns and tailored segmentation capabilities for re-marketing campaigns. Furthermore, combining with iSuite products including iAccess, iNsights 2.0 forms a one-stop MarTech solution that optimizes cross-channel marketing campaigns and transforms data into actionable insights that allow brands to adopt precise remarketing strategies and retarget high-value customers. To summarize, iNsights 2.0 provides marketers with in-depth analyses, including:

- Conversion path analysis—Holistic analysis of when, where and how a user interacts with various devices by the multiple touch points he or she has come in contact with, including the "last mile" through which the user is converted, i.e., making a purchase or otherwise taking an action that the marketer desires; and
- Cross-channel effectiveness analysis—Analysis of the effectiveness of the various marketing channels in achieving
 different marketing objectives and their respective cost effectiveness. Combining these with conversion path analyses,
 marketers can identify the portfolio of channels that work in tandem with each other to generate the greatest marketing
 impact and effectiveness.

• *E-commerce analysis*—Analysis of e-commerce performance in metrics such as total sales, order amount, conversion rate to measure business growth and product performance including product views, individual product sales growth to facilitate product development and promotion strategies.

Below is a sample interface for our iNsights 2.0 solution.

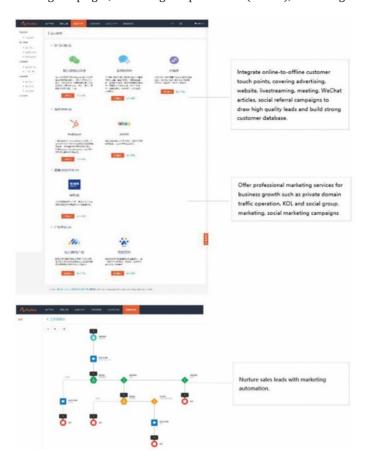


We also launched new data enterprise solutions including iParllay and iSCRM which utilize our SaaS capabilities to enrich our service offerings.

iParllay

iParllay is our social commerce platform leveraging our customer management and marketing automation capabilities. It provides various solutions, including:

- Integrate online-to-offline customer touch points, covering advertising, website, livestreaming, meeting, WeChat articles, social referral campaigns to draw high quality leads and build strong customer database;
- Unify sales leads from multiple channels, track customers' lifestyle and nurture sales leads with marketing automation through well-organized enterprise customer database;
- Offer professional marketing services for business growth such as private domain traffic operation, KOL and social group marketing, social marketing campaigns, search engine optimization ("SEO"), search engine marketing ("SEM") and more.



iSCRM

iSCRM is our WeChat social customer relationship management ("SCRM") that provides enterprises with WeChat private traffic management and operation. Our one-stop data management SaaS platform provides full-funnel services along the consumer journey by integrating online and offline sales, leveraging the power of Tencent ecosystem, providing mini-program development and operation, advertising, social customer relationship management and social communities. We offer three major integrated systems including WeCom SCRM, WeChat Mini-program and business intelligence with capabilities of precise private traffic data-driven marketing strategies, social community management, cross-channel online store operation and O2O marketing.



In addition to data enterprise solutions, we also offer a suite of intelligent enterprise solutions. For example, we have built up tailored mini programs or mini program stores based on WeChat to fulfill specific requirements of our clients. The mini programs or mini program stores offer our clients not only a WeChat-based e-commerce marketplace but also an interface for them to directly engage with their consumers. We have also established a consumer data platform, or CDP, to address some legacy data silo issues our clients face in China. Our CDP facilitates AI-driven personalized marketing campaigns and drives precise and real-time retail and sales decisions such as store expansions, product selection and offerings to targeted customer segments, as well as personalized customer services. For example, it provides location-based services to target potential customers within 5km of a client's physical store, attracting more traffic and enabling other marketing triggers.

Marketing Solutions

Audience Engagement and Activation Solutions: iAccess

iAccess is our cross-channel audience engagement and activation solution tailored for brand awareness-driven campaigns and performance-driven campaigns. iAccess provide marketers with a comprehensive suite of targeting or re-targeting options to reach out to, or re-connect with, potential audience identified by iAudience. Marketers can choose to target these audience based on their gender, age, income levels, geographic locations, interest, device, and device operating system. Marketers are also afforded the flexibility to select their preferred content format, budgeting requirement, display frequency and time to reach these audience.

Below is a sample interface for our iAccess solution.



Our Data and Data Analytics Capabilities and Technologies

Our Data Assets

Our data assets are the backbone of our solutions and data analytics capabilities. We had analyzed approximately 2,939.6 million active profiled users or devices in terms of number of cookies that we place through internet browsers in China as of March 31, 2023. According to the China Internet Network Information Center, there were 1,067 million internet users in China as of December 31, 2022 and the number of mobile internet users in China had reached 1,065 million up to December 31, 2022.

We collect data from a variety of channels, including through our proprietary tracking tools, from our marketers, publishers and ad exchanges when managing marketing campaigns, and to a lesser extent, from third-party strategic partners. We track data with our proprietary toolbars and software development kits installed on apps and websites. The data that we have tracked are complemented by, and blended with, marketing campaign performance data from marketers, publishers and ad exchanges. To a lesser extent, we collect data from selected third-party data partners, including major internet companies in China and financial institutions, through our data collaboration arrangement with them. Our data assets primarily include users' intent, interest, online transactional, social data and demographic data, as well as campaign performance data.

- Intent data Intent data refers to data that indicates the various intent of a user. Intent data directly identifies the interests and immediate needs of a specific user. An example of intent data would be search terms entered into search engines by a particular user looking for business class air tickets from Hong Kong to Shanghai. We obtain intent data primarily from the websites and apps on which we have installed our proprietary sharing toolbars and software development kits as well as through API connection with major search engines where marketers' search marketing is executed.
- Interest data Interest data refers to the category and semantic meaning of the content of websites and apps that a user visits, including visit frequency and sequence, from which we are able to infer the various interests of a user. Interest data shows the awareness of the relevant information by a specific user. An example of interest data would be data concerning how frequently a particular user interested in fine dining browses webpages of luxury Japanese cuisine restaurants. We collect interest data from websites and apps on which we have installed our proprietary sharing toolbars and software development kits as well as through API connection with certain ad exchanges.
- Online transactional data Online transactional data refers to a user's behavior on online commerce platforms, including
 the items he or she is browsing or has added to his or her shopping cart. Online transactional data directly identifies the
 purchasing intent and immediate needs of a specific user. An example of online transactional data would be a particular
 user browsing for high-end skin care products and adding a specific brand of eye serum into the shopping cart in
 preparation of a purchase. We obtain online transactional data from partnerships with branded E-commerce platforms and
 the re-marketing campaigns for our E-commerce clients.

- Social data Social data refers a user's behavior on social networks, such as Sina Weibo and Tencent QZone, including the content the user shares from websites or apps via social sharing toolbars, and the content the user posts, shares on the social networks, his or her "social graph," such as his or her "friends" and "followers" and other behavior data the user publicly shares on social networks. Social data demonstrates that a specific user is engaged in certain particular topics or content online on social media. An example of social data would be the name of a restaurant being recommended by a particular user via his or her social network account. We obtain social data by installing our proprietary sharing toolbars and software development kits on websites and apps, as well as through API connections with major social networks.
- *Demographic data* Demographic data refers to a user's age, gender, income level and geographic location. In addition to inferred demographic information through our data tracking and profiling analytic capabilities and technologies, we obtain actual demographic data from social media accounts through our strategic relationship with selected third-party data partners, including major internet companies in China.
- Campaign performance data Campaign performance data refers to a user's interaction with, and response to, a given
 marketing message, starting with such user's click on the content and including the user's interaction with the destination
 site to which the link leads, and all other actions taken by the user, including E-commerce transaction, clicks, registration or
 sign-ups, video viewing, and "follow" or "likes" on social media platforms. We obtain campaign performance data from
 websites and apps on which we have installed our proprietary sharing toolbars and software development kits, in managing
 client campaigns, and through our data collaboration arrangements with selected third-party data partners.

We distill structured variables from large volume of unstructured data to construct context-rich user profiles. As of March 31, 2023, we analyzed approximately 2,939.6 million active profiled users or devices in terms of number of cookies that we place through internet browsers. We "pre-package" our user profiles into audience groups that can be utilized by specific industry verticals for precise targeting. Data involving our user profiles and audience groups are continuously fed into our content distribution opportunity matching process, enabling marketers to make cost-efficient decisions on real-time audience engagement opportunities and continuously optimize these decisions to access and activate their target audience through different channels.

Our Data Analytics Capabilities and Technologies

We apply data science technologies extensively throughout the online marketing cycle to support audience tracking, profiling and segmentation and to execute cost-efficient decisions on real-time audience engagement. We also launched a strategic growth initiative on enterprise solutions, leveraging our data analytics expertise and experience in online marketing. Our proprietary data analytics capabilities and technologies include:

Deep Learning and Artificial Intelligence

- Audience tracking engine Our audience tracking engine monitors our audience across various devices and channels to
 identify which user has been interacting with what content, through which devices and the environment the user is in. It
 also uses cookies and other digital fingerprinting technologies, which take into account social network IDs, browsing
 behavior, network usage, IP addresses, surfing patterns, and device features, to recognize, identify, and re-identify a user
 across multiple channels, devices, and geographic locations, including de-duplication of multiple devices to a user.
- Contextual analysis engine Our contextual analysis engine parses all data properties to understand the context and
 content which audiences are interacting in and with, including news articles, social networks, search engines, mobile apps,
 etc. These help understand what a user is interested in, including product categories, brand names, product names,
 keywords, and the depth of their interest.
- Natural language processing (NLP) algorithms Our NLP algorithms are important elements of our contextual analysis engine. We use these algorithms to extract structure from unstructured data, so that it can be processed and analyzed effectively. Our NLP algorithms are designed to understand and analyze Chinese and English languages and their usage in various contexts. They enable the extraction of information about entities, correlations, sentiments and emotions from vast amounts of text converted from audio and video streams and other digital content. In addition, we combine deep learning techniques with our natural language processing capabilities to further enhance the accuracy of attributes of our user profiles.

Predictive Analytics

- User profiling engine Combining the data collected through, and processed by, our contextual analysis engine and
 audience tracking engine, our user profiling engine infers the user's interest, demographic, intent and other features through
 multi-dimensional data drill down and dynamic correlation analysis. In addition, we employ various models and algorithms
 on user profiles to expand and provide more breadth and depth on each user profile.
- Profile Segmentation Algorithms We use various algorithms to organize user profiles, which are generated and updated
 dynamically in real time, responding to real time changes in user interests and needs. This allows for accurate and detailed
 segmentation of user interests through multiple dimensions, e.g. by user interest keywords and user interest categories.

Real-Time Matching Technologies

- Real-time user engagement algorithms Our real time user engagement algorithms execute marketing decisions based on
 a wide range of parameters, including predictions on click-through rate and conversion rate, inventory price, inventory
 safety and inventory segment, and consider audience compatibility, demographics, and frequency capping or other
 budgeting restrictions among other parameters, to compute the most cost-efficient decisions on real-time audience
 engagement opportunities.
- Online continuous real-time bid optimization algorithms Our online continuous real-time bid optimization algorithms
 consider a wide range of parameters, including purchasing efficiency, predicted conversion rate, return on media value,
 budget allocation efficiency, inventory safety, and what marketers are willing to pay to dynamically optimize our bidding
 and pricing strategies. Our real-time bid optimization algorithms continuously sieve through a large volume of user
 engagement opportunities per day to decide which are the best possible opportunities to engage with.

Data Privacy and Security

We collect data solely to analyze audience and campaign performance. In order to identify each user profile and to protect data privacy, we develop an approach to assign each profile to a corresponding unique profile number based on our proprietary indexing methodology. We then use that number as the anonymous identification for the profile and associate it with all related data. In general, we do not collect personally identifiable information. If such information is inadvertently obtained by us, our policy is to immediately delete such information.

We treat all information we collect as confidential. We have set up proper control such as encryption and access right on these information. We do not disclose any information we gather from a marketer or any third party data partner unless such disclosure is approved by it, which in turn has obtained end user consent.

We have put in place appropriate physical, electronic and managerial procedures to safeguard and secure our data assets, including to prevent and detect any unauthorized access and data breach, to preserve their integrity and to ensure their appropriate use.

- On the software level, we maintain login information across all our computer systems to control access, and individuals
 with different levels or job duties are assigned different levels of access permissions. For example, only high-level
 technology personnel, including head of system operations and certain other technical developments leaders have root
 access to our operation system; and only database managers have access to the relevant database. We have central controls
 to govern user roles and permissions.
- On the hardware levels, our servers are located at our offices and IDCs, and only system operation personnel have access to
 our servers. In addition, we have established hardware firewall where all traffic is inspected and filtered according to a
 comprehensive set of rules. We conduct comprehensive security reviews of our data assets on a regular basis and ad hoc
 security reviews from time to time as special needs arise.
- We also perform the monitoring and maintenance of our data privacy and security mechanism on a regular basis.

- We perform regular vulnerability scanning on website or web application to identify any weak configuration or vulnerabilities. We apply patch regularly and fix any configuration issues.
- We monitor any suspicious network traffic regularly including unexpected outgoing traffic such as huge data exfiltration
 volume and suspicious DNS query. We gather any events or alerts from servers and endpoints with security information
 and event management facility to set up alerts for any abnormal events or potential security breach.
- We secure and monitor privileged access, particularly on Internet accessible accounts such as web or cloud hosting, and implement multi-factor authentication on these accounts.

We give sufficient priority to develop and upgrade our mechanism to protect data and prevent data leakage. We also endeavor to build up cyber threat intelligence capability to complement the detection mechanisms. As a testament to our dedication to data security and protection, we are not only in compliance with General Data Protection Regulation ("GDPR"), agreed upon by the European Parliament and Council in April 2016 but also qualified for the third level of information system security in mainland China.

Our Technology Infrastructure

Our platform is built on a highly scalable and reliable cloud-based technology architecture. This allows us to harness large quantities of real-time data and ensures high speed performance at a large scale to accommodate more clients and increased complexity of their online marketing campaigns.

- Real-time analytics Our cloud-based technology architecture is built to be fully distributed while having a single unified
 access layer. Large amounts of data are ingested through multiple highly-optimized points and analyzed using both offline
 batch processing and online real-time processing through streaming technologies. This architecture allows us to combine
 multiple data dimensions and apply various machine learning algorithms in real-time to our data, providing the most up-todate and accurate representations of a user's traits and online behavior.
- Scalability With modular architecture that is built to be horizontally scalable, our platform can be easily expanded as
 data storage requirements and client base increase. Our data repositories are clustered and our data processing architecture
 is distributed in several cities in mainland China and Hong Kong, which supports efficient expansion. When need arises,
 we can easily add servers and integrate them into our existing server clusters as either data nodes or processing nodes. In
 addition, load balancing technology helps us improve distribution of workloads across multiple computing components,
 optimizing resource utilization and minimizing response time.
- Reliability Our technology layers have built hardware redundancy and will switch if errors are detected. We built our
 platform on a distributed computing architecture. Furthermore, our data processing architecture is located within the same
 cities where servers of major ad exchanges in China are located, facilitating low latency access and reliability as we bid for
 content distribution opportunities in real time.

Our Content Distribution Channels and Social Medial Platform Partners

For our marketing solutions, we provide marketers with one-stop access to a wide variety of cross-channel content distribution opportunities in China through our deep relationship with content distribution channel partners, which primarily include mobile and online publishers, major search engines and ad exchanges. For example, we purchase or promote content distribution opportunities on content distribution channels, including premium channels such as Tencent, Baidu, Google and Alibaba. Media cost for content distribution opportunities on Tencent, Baidu, Google and Alibaba channels in aggregate accounted for 75.9%, 55.5% and 56.0% of our media costs in 2020, 2021 and 2022, respectively. Media cost for content distribution opportunities on our largest and second largest channel partners accounted for 51.8% and 10.7% of our media cost in 2022, respectively.

We generally enter into annual framework agreements with content distribution channel partners, which set out each party's rights and responsibilities with respect to the relevant content distribution opportunities. For example, we are generally required to examine advertising content to ensure its compliance with applicable laws and content distribution channel partners' policies. We are also generally required to prepay media cost, which is based on pricing models determined by content distribution partners and calculated based on content distribution partners' tracking. In addition, these agreements generally provide for certain rebates or incentives, generally calculated as a percentage of marketing spend, that we are entitled to should the marketing spend during the terms exceed specified thresholds.

For our enterprise solutions, we currently collaborate with Tencent and other social media platforms for the operating environment of our enterprise solutions. We primarily deliver our enterprise products on WeChat in the form of WeChat Mini Programs and WeChat Official Accounts.

Our Clients

We sell our solutions primarily by entering into sales contracts with marketers, marketing agencies or other merchants. We enter into marketing campaign contracts with marketers and marketing agencies for our marketing solutions and service contracts with merchants, many of who are also our marketers for our enterprise solutions. We treat entities which enter into sales contracts with us and incur spending during the relevant period as our clients. Therefore, we count specific sub-brands or divisions within the same brand or holding company as distinct clients so long as we have signed campaign contracts with different entities. On the other hand, even though multiple sales contracts may be involved, we only record one single client if those contracts with us are signed by the same entity. For our marketing solutions, our clients include both marketers who have direct contractual relationships with us, or direct marketer clients, and marketing agency clients. Our "end marketers," or "marketers" comprise marketers we serve, either directly or through marketing agencies, regardless if they have direct contractual relationship with us. In 2022, we had 2,464 marketers, including 1,145 marketers represented by our marketing agency clients.

Our marketers span a diverse array of industry segments, with gaming, entertainment and media, personal care and beauty, ecommerce, education & training, and automobile and petroleum being among the top five in terms of gross billing contribution in 2022. They also feature companies of different sizes. Our marketers come from a variety of regions, with headquarters in Europe, North America, or Asia. In determining the geographic classification of revenue, we look at the geographic location of our subsidiaries or the VIE entities which executed the marketing campaign contract. Our subsidiaries or the VIE entities in mainland China generally are our signing entities for marketing campaign contracts with clients which are based in mainland China. Our Singapore subsidiary generally is our signing entity for marketing campaign contracts with clients based in Southeast Asia. Our Hong Kong subsidiaries generally are our signing entities for marketing campaign contracts with other clients.

Our gross billing per client increased by US\$28,420, or 9%, from US\$300,450 in 2020 to US\$328,870 in 2021, while decreased by US\$177,052, or 54%, from US\$328,870 in 2021 to US\$151,818 in 2022. Relatedly, the total number of clients that we served increased by 7% from 2,256 in 2020 to 2,423 in 2021, and decreased by 23% from 2,423 in 2021 to 1,859 in 2022. The decreases in gross billing per client and the total number of clients from 2021 to 2022 were primarily due to (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition from COVID-19 impact and tightening regulatory environment that affected our clients in certain industry sectors, (ii) our strategic scale-down of lower margin, higher risk marketing solutions business, (iii) lockdowns and other control measures, which adversely affected the progress of our client on-boarding and solution implementation.

In 2020, 2021 and 2022, we did not derive over 10% of our net revenues from a marketer.

Sales, Business Development and Account Management

Our sales and business development workforce is mainly focused on attracting more clients for our marketing solutions and enterprise solutions, and optimizing the client base to focus on profitability and liquidity. Leveraging our existing positions and reputations in industry sectors where we already have a strong presence, we are able to attract more clients in those sectors. With marketing solutions as our entry point, we drive customer retention and loyalty with our data-driven enterprise solutions and growing customer lifetime value with our smart retail enterprise solutions. Our full-stack marketing and enterprise solutions allow cost-effective conversion of clients of our marketing solutions into clients of our enterprise solutions and vice versa, enabling us to lower our client acquisition costs compared to acquiring new clients separately.

In addition, we are focused on diversifying our client base. We have partnered with local marketing agencies at selected first and second-tier cities in mainland China to expand our client base in industry segments where we have relatively less presence, as well as to attract and retain high quality enterprises to use our solutions on a self-serve basis. Furthermore, our sales and business development team works closely with overseas marketing agencies and channel partners in the home countries of overseas marketers, who help promote our solutions to overseas marketers.

Our sales and business development team is organized by geographic region, and is further divided into groups that focus on sales to marketing agencies in each geographic region.

Supporting our sales and business development team are our account managers under our operational support team, who help maintain and grow the accounts of our clients. While our intuitive user interfaces are designed to enable clients to easily deploy and utilize our solutions themselves with minimal customer support, we make online and telephonic helpdesk facilities available and provide onsite engineering support to clients and also assign account managers for our direct marketer clients and some of our marketing agency clients. Our account managers provide consultative services on the use of our solutions, and in addition, for our managed service clients, more in-depth servicing on campaign planning, execution and result measurement and analysis. As of December 31, 2022, we had 578 employees for sales, business development and account management.

We use a variety of traditional and web-based channels to drive our brand awareness and generate demand, including through direct marketing, print advertising in trade journals, offline sales efforts and client referrals. We regularly attend trade shows and industry conferences, and speak to the press about the latest trends in China's digital market industry and developments in our solution offerings. In addition, we periodically post case studies and observations and analysis on industry trends on our website and social media, including our WeChat public account.

Research and Development

We are committed to continually enhancing and innovating our solutions, technologies and technical infrastructure. Our current R&D initiatives include leveraging our technology from our marketing solutions to provide the consumer in-depth analysis, forming 360-degree consumer profiles and marketing automation to enhance our integrated solutions.

In addition to continuous R&D resources devoted to the customization requirements from key account clients, we have launched a number of standard off-the-shelf products to cater to the strong needs of mid-end enterprises for our enterprises solutions. Our R&D process is demand and innovation driven and involves collaborative efforts, including from our other functional teams, including sales and marketing, and product and operation support. Our R&D process advocates adaptive planning, iterative and incremental development cycles, and encourages rapid and flexible response to change. We typically release new solution features or improvements every week.

Intellectual Property

We have developed all of the key technologies supporting our platform and solutions in-house. Our intellectual property rights are a key component of our success. We rely on a combination of trademark and trade secret laws, and contractual restrictions, including through confidentiality, non-disclosure invention assignment agreements with our key employees, consultants and third parties with whom we do business, to establish, maintain and protect our proprietary information and other intellectual property.

Notwithstanding these efforts, we cannot be sure that any intellectual property we own will not be challenged, invalidated, or circumvented or that such intellectual property will be commercially useful in protecting our brand, products, services and technology.

As of December 31, 2022, we had 2 patents and 138 computer software copyrights in China, and 42 registered trademarks in mainland China, Hong Kong, Japan and Singapore.

Competition

China's independent online marketing technology market is highly competitive, fragmented and rapidly changing. We mainly compete with independent online marketing technology companies in China that offer marketing solutions through demand side platform and use advanced technologies to optimize marketing campaigns for marketers.

We compete for online marketing revenue based on many factors, including our ability to deliver return on marketing expenditure at scale, client trust, geographic reach, breadth and depth of relationships with publishers, ad exchanges, ad networks and other participants in the online marketing ecosystem, comprehensiveness of solutions and service offerings, pricing structure and competitiveness, cross-channel capabilities, accessibility and user-friendliness of solutions and brand awareness. We compete for content distribution opportunities based on our ability to maximize the value of content distribution opportunities for content distribution channels partners, provide them with a wide array of solutions covering various types of content distribution opportunities and our ability to increase fill rates. While our industry is evolving rapidly and is becoming increasingly competitive, we believe that our highly scalable and flexible business model, large Chinese consumer data set, and omni-channel, targeted audience reach, proprietary, cutting-edge technologies, strong, diverse and loyal client base, deep knowledge and familiarity with China's online marketing industry, and visionary leadership enable us to remain competitive.

In addition, independent online marketing technology platforms face competitive pressure from large and well-established internet companies, such as Alibaba, Baidu, Tencent and Google, which have established stronger and broader presence across the online marketing ecosystem and have significantly more financial, marketing and other resources, more extensive client base and broader supplier relationship, and longer operating histories and greater brand recognition than we do. While we believe that we do not directly compete with these large and well-established internet companies for marketing spend as we promote their content distribution opportunities or purchase their content distribution opportunities in the ordinary course of our business in connection with our execution of marketing campaigns, and these companies generally do not provide integrated marketing solutions the way we do, they are major players in the online marketing technology industry as they provide online marketing technology and offer services and solutions that help marketers achieve one or more aspects of their marketing goals in one or more phases of their online marketing cycle. In addition, these large and well-established companies control content distribution channels and would directly compete with us should we vertically expand our business to own or operate content distribution channels in the future.

Online marketing technology platforms also face competition from marketing agencies, who may have their own relationships with content distribution channels and can directly connect marketers with such channels. Furthermore, online marketing technology platforms continue to face competition from traditional media including direct marketing, television, radio, cable and print advertising companies.

With respect to our SaaS-based enterprise solutions, our competitors include local cloud-based commerce and marketing service providers, as well as WeChat-based third-party service providers in China. We may also face competition from international SaaS companies, which have longer operating histories, greater financial, technical, marketing, distribution, professional services or other resources and greater name recognition. In addition, many of our prospective competitors may have close relationship with our existing and new clients and bear an extensive knowledge of this industry. As a result, they may be able to respond more quickly to new or emerging technologies and changes in clients' requirements, or devote greater resources to the development, promotion and sale of their products. We believe the principal competitive factors in our industries include the functionality of the products and services, user experience, technology capabilities, sale capabilities, pricing, brand recognition and reputation. In addition, new and enhanced technologies may further increase competition in our industries.

Regulation

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

We operate in an increasingly complex legal and regulatory environment. We are subject to a variety of PRC and foreign laws, rules and regulations across numerous aspects of our business. This section sets forth a summary of the principal PRC laws, rules and regulations relevant to our business and operations in the PRC.

Regulations on Advertising Business

The Advertising Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress on April 24, 2015 and became effective on September 1, 2015 and was amended on October 27, 2018, is the principal law regulating our business. This law regulates contents of advertisements, codes of conduct for advertising, and the supervision and administration of advertising industry. It also stipulates that advertisers, advertising operators, and advertisement publishers shall abide by the Advertising Law and other laws and regulations, be honest and trustworthy, and compete in a fair manner in advertising business. According to the Advertising Law, advertising operators and advertisement publishers shall examine the relevant certification documents and verify the contents of advertisements in accordance with laws and regulations. According the Advertising Law, if advertising operators know or should have known the content of the advertisements is false or deceptive but still provide advertising design, production and agency services in connection with the advertisements, they might be subject to penalties, including confiscation of revenue and fines, and the competent PRC authority may suspend or revoke their business licenses. In addition, the Regulations on the Administration of Advertisement, promulgated by the State Council on October 26, 1987 requires the advertising operators to submit applications to the industry and commerce authorities for approval and registration. During the course of business, advertising operators are required to check papers or certificates and examine the contents of advertisements. According to this regulation, advertising operators may not publish, broadcast, install or post any advertisements which violate the provisions of the relevant regulations.

On July 4, 2016, the State Administration for Industry and Commerce, or the SAIC, promulgated the Interim Measures for the Administration of Internet Advertising, or Interim Measures on Internet Advertising to regulate advertising activities conducted via the internet. According to the Interim Measures on Internet Advertising, advertisements published or distributed via the internet shall not interfere with users' normal use of the internet. For example, advertisements published on web page pop-up windows or in others forms shall be clearly marked with a "close" sign to give the users an opportunity to close them out. No entity or individual may induce users to click on the contents of an advertisement through deception. An internet advertisement publisher or advertising operator, shall establish and maintain an acceptable registration, examination and file management system for its advertisers; examine, verify and record the identity information of each advertiser. The Interim Measures on Internet Advertising also require internet advertisement publishers and advertising operators to verify related supporting documents, check the contents of the advertisement and prohibits them from designing, producing, providing services or publishing any advertisement if the content and the supporting documents do not match each other or the documentary evidence thereof are insufficient.

The Advertising Law defines an "advertising operator" as any natural person, legal person or other organization that agrees to provide advertising design, production and agency services for advertisers. Therefore, we are an "advertising operator" as provided in the Advertising Law and thus subject to the content review and conduct requirements of the Advertising Law and the Interim Measures on Internet Advertising, or the Interim Measures. To facilitate compliance with Advertising Law, we have developed certain advertising business management rules containing these mandatory content review and conduct requirements, and are establishing internal mechanisms to implement these rules.

Prior to June 29, 2015, we were regulated by the Regulations for the Administration of Foreign-Invested Advertising Enterprises, promulgated by the SAIC and MOFCOM, which prescribed certain conditions on foreign investors that invest in companies in advertising business in China. Among other things, such foreign investors shall have at least three years' track record primarily engaging in advertising business and shall have obtained an Opinion on the Approval of Foreign-invested Advertising Enterprise Project, which is issued by the SAIC or its local counterparts. The Regulations for the Administration of Foreign-Invested Advertising Enterprises were abolished on June 29, 2015 by the SAIC after consultation with MOFCOM.

Regulations on Internet Information Service

There are several principal regulations on internet information service business, including (i) the Telecommunications Regulations of the People's Republic of China, promulgated by the State Council on September 25, 2000 and most recently amended on February 6, 2016, (ii) the Administrative Measures on Internet Information Services, promulgated by the State Council on September 25, 2000 and most recently amended on January 8, 2011, or the Internet Measures, and (iii) the Catalogue of Telecommunication Services, issued by the State Council on September 25, 2000, and most recently amended by the MIIT on June 6, 2019. According to the Internet Measures, "internet information services" include provision of information services through the internet to internet users. Since we have websites that provides information, including description of our business and solutions, to online users, we are deemed to be providing "internet information service," and are therefore subject to these regulations on internet information services. Pursuant to the Internet Measures, there are two categories of internet information services, namely, services of an operative nature and services of a non-operative nature. The Internet Measures require providers of operative internet information services to obtain an operating permit and imposes certain restrictions on the percentage of foreign ownership in such providers. Our business does not involve the provision of operative internet information services, and therefore, we are not required to obtain any operating permits or subject to foreign ownership restrictions under these regulations. In accordance with the Internet Measures, we shall complete a filing process for our website, which has been done.

Regulations on Value-added Telecommunication Services

On September 25, 2000, the State Council promulgated the Telecommunications Regulations of the People's Republic of China, or the Telecom Regulations, which was amended on July 29, 2014 and February 6, 2016. The Telecom Regulations is the primary PRC law governing telecommunication services and sets out the general regulatory framework for telecommunication services provided by PRC companies. The Telecom Regulations distinguishes between "basic telecommunication services" and "value-added telecommunication services as telecommunications and information services provided through public network infrastructures. Pursuant to the Telecom Regulations, commercial operators of value-added telecommunications services must first obtain an operating license from the MIIT, or its provincial level counterparts.

The Catalog of Telecommunications Business, or the Catalog, which was issued as an attachment to the Telecom Regulations and updated on June 11, 2001, February 21, 2003, December 28, 2015 and June 6, 2019, further categorizes value-added telecommunication services into two classes: Class 1 value-added telecommunication services and Class 2 value-added telecommunication services. Information services provided via cable networks, mobile networks or internet fall within Class 2 value-added telecommunications services.

On July 3, 2017, the MIIT issued the Administrative Measures for the Licensing of Telecommunications Business, or the Telecom Licensing Measures, which became effective on September 1, 2017, to supplement the Telecom Regulations. The Telecom Licensing Measures sets forth the types of licenses required to operate value-added telecommunications services and the qualifications and procedures for obtaining such licenses. The Telecom Licensing Measures also provides that an operator providing value-added services in multiple provinces is required to obtain an inter-regional license, whereas an operator providing value-added services in one province is required to obtain an intra-provincial license. Any telecommunication services operator must conduct its business in accordance with the specifications in its license.

Regulations on Foreign Direct Investment in Value-Added Telecommunications Companies

Foreign direct investment in telecommunications companies in mainland China is governed by the Provisions on the Administration of Foreign-Invested Telecommunications Enterprises, which was promulgated by the State Council on December 11, 2001 and amended on September 10, 2008 and February 6, 2016. These regulations require that foreign-invested value-added telecommunications enterprises in mainland China must be established as Sino-foreign equity joint ventures and that the foreign investors may acquire up to 50% equity interests in such joint ventures. In addition, a major foreign investor in a value-added telecommunications business in mainland China must demonstrate a good track record and experience in operating value-added telecommunications businesses. Moreover, foreign investors that meet these requirements must obtain approvals from the MIIT and MOFCOM, to provide value-added telecommunication services in mainland China and the MIIT and MOFCOM retain considerable discretion in granting such approvals.

On July 13, 2006, the Ministry of Information Industry, or the MII, released the Notice on Strengthening the Administration of Foreign Investment in the Operation of Value-added Telecommunications Business, or the MII Notice, pursuant to which, for any foreign investor to invest in telecommunications businesses in mainland China, a foreign-invested telecommunications enterprise must be established and such enterprise must apply for the relevant telecommunications business operation licenses. Furthermore, under the MII Notice, domestic telecommunications enterprises may not rent, transfer or sell a telecommunications business operation license to foreign investors in any form, and they may not provide any resources, premises, facilities and other assistance in any form to foreign investors for their illegal operation of any telecommunications business in mainland China. In addition, under the MII Notice, the internet domain names and registered trademarks used by a value-added telecommunication service operator shall be legally owned by such operator or its shareholders.

Furthermore, the Guidance Catalog of Industries for Foreign Investment, or the Foreign Investment Catalog, the latest version of which was promulgated jointly by MOFCOM and the National Development and Reform Commission, or the NDRC, on June 28, 2017 and became effective on July 28, 2017, classifies businesses into three categories with regard to foreign investment: (i) "encouraged," (ii) "restricted," and (iii) "prohibited." The latter two categories are included in the negative list (Negative List, which was most recently amended on December 27, 2021), which was first introduced into the Foreign Investment Catalog in 2017, and listed, in a unified manner, the restrictive measures for the entry of foreign investment. Industries that are not listed in the Foreign Investment Catalog or the Special Administrative Measures are permitted areas for foreign investments, and are generally open to foreign investment unless specifically restricted by other PRC regulations. Our business falls under value-added telecommunications services, which are listed under the Special Administrative Measures.

In view of these restrictions on foreign direct investment in value-added telecommunications services and certain other types of businesses under which our business may fall, we have established domestic consolidated affiliated entities to engage in value- added telecommunications services. For a detailed discussion of our consolidated affiliated entities, see "Item 4. Information on the Company—C. Organizational Structure." Due to the lack of interpretative guidance from the relevant PRC governmental authorities, there are uncertainties regarding whether PRC governmental authorities would consider our corporate structure and contractual arrangements to constitute foreign ownership of a value-added telecommunications business. In order to comply with PRC regulatory requirements, we operate a substantial portion of our business through our consolidated affiliated entities, which we have contractual relationships with but we do not have actual ownership interests in. If our 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 value-added telecommunications services and other types of businesses on which foreign investment is restricted or prohibited, we could be subject to severe penalties.

Regulations on Internet Content Providers

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 specifies that internet information services regarding news, publications, education, medical and health care, pharmacy and medical appliances, among other things, are required to be examined, approved and regulated by the relevant authorities. 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 such prohibition may face criminal charges or administrative sanctions. If any prohibited content is found, they must remove the content immediately, keep a record of such content and report to the relevant authorities. In accordance with Provisions on the Governance of Network Information Content Ecology promulgated by the CAC on December 15, 2019, which became effective on March 15, 2020, the utilization of personalized algorithm recommendation technology taken in internet content provision service shall be in compliance with all the requirements as stated above as well.

The Internet Content Measures classifies internet information services into commercial internet information services and non-commercial internet information services. 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 the value-added telecommunications business operation license.

Regulations on Privacy Protection

According to the Internet Measures, "internet information services" means the activity of providing information services through the internet to internet users. Since we have websites that provide information to internet users, we are considered an internet information service provider under the Internet Measures and are therefore, subject to regulations relating to the protection of privacy, including prohibitions on producing, copying, publishing or distributing information that is humiliating or defamatory to others or that infringes on the lawful rights and interests of others. Internet information service providers that violate the prohibition could face criminal charges or administrative sanctions by the PRC security authorities. In addition, relevant authorities may suspend their services, revoke their licenses or temporarily suspend or close down their websites.

Under the Several Provisions on Regulating the Market Order of Internet Information Services, issued by MIIT, in December 2011, internet information service providers are prohibited from collecting any user-related information that can reveal the identity of the user whether by itself or when used in combination with other information, or providing any such information to third parties without the consent of that user. Internet information service providers must expressly inform the users of the method, content and purpose to collect and process such user personal information, and may only collect such information necessary for their services. Internet information service providers are also required to properly maintain the user personal information and, in case of any leakage or likely leakage of such information, must take remedial measures immediately and report any material leakage to the telecommunications regulatory authority.

In December 2012, the Decision on Strengthening Network Information Protection promulgated by the Standing Committee of the National People's Congress emphasizes the need to protect electronic information that contains personal identification information and other private data. The decision requires internet information service providers to establish and publish policies regarding the collection and use of personal electronic information, to take necessary measures to ensure the security of the information and to prevent leakage, damage or loss.

Furthermore, the MIIT's Rules on Protection of Personal Information of Telecommunications and Internet Users issued in July 2013 contain detailed requirements upon the activities collecting or using personal information of users in the provision of telecommunication service and internet information service, which mainly include: (i) the telecommunication business operators or internet information service providers shall expressly advise users about the purpose, method and scope of the collection or use of information, and the ways to inquire or correct information, and the consequences of refusal to provide information, etc.; (ii) the telecommunication business operators or internet information service providers shall not go beyond the necessary and the purpose for their service, nor by means of deceiving, misleading or force or in violation of the laws, regulations or the agreements between the parties; (iii) any collected information shall be kept in strict confidence with adequate measures; (iv) shall establish user complaint handling mechanism to accept complaints from the users, and etc. Internet information service providers, including us, may subject to penalties, including fines, warnings, orders to correct and even criminal charges if failed to fulfill the aforesaid requirements.

The Personal Information Protection Law of the PRC (the "Personal Information Protection Law"), issued on August 20, 2021 by the SCNPC, provided a comprehensive personal information protection system, under which in case of any personal information processing, individual prior consent must be obtained except in other circumstances stipulated therein to the contrary. Further, any data processing activities in relation to sensitive personal information including biometrics, religious beliefs, specific identities, medical health, financial accounts, whereabouts, personal information of teenagers under fourteen years old and other personal information once leaked or illegally used might easily lead to the infringement of personal dignity or harm of personal and property safety, are only allowed provided such activities are purpose-specified, highly necessary and strictly protected. Personal information processors who use personal information on automated decision-making must ensure the transparency of decision-making and the fairness and impartiality of the results and may not impose unreasonable differential treatment in terms of transaction prices and other transaction conditions. In addition, cross-border personal information transmission is restricted unless certain requirements in the Personal Information Protection Law have been satisfied, including security review organized by the national cyberspace department and other conditions specified by the laws, regulations and the national cyberspace department.

On December 13, 2022, the MIIT released the Administrative Measures for Data Security in Industry and Information Technology Sectors (Trial), or the Data Security Measures, which came into effect on January 1, 2023. The measures apply to data management in certain industries, including telecommunication sectors, where certain data we process is generated from. The Data Security Measures set out three categories of data: ordinary data, important data and core data. The processing of important data and core data is subject to certain filing and reporting obligations. Since the specific catalogues of important data and core data have not been released, it is uncertain how the measures will be interpreted and implemented. We have sorted and cataloged data we process and will take further measures as required.

Regulations on Information Security, Censorship and Privacy

The Standing Committee of the National People's Congress, China's national legislative body, enacted the Decisions on the Maintenance of Internet Security on December 28, 2000 and amended them on August 27, 2009 that may subject persons to criminal liabilities in China for any attempt to use the internet to: (i) gain improper entry to a computer or system of strategic importance; (ii) disseminate politically disruptive information; (iii) leak state secrets; (iv) spread false commercial information or (v) infringe upon intellectual property rights. In 1997, the Ministry of Public Security issued the Administration Measures on the Security Protection of Computer Information Network with International Connections which was amended in 2011 and 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 Standing Committee of the National People's Congress on August 29, 2015, effective on November 1, 2015, any ICP provider that fails to fulfill the obligations related to internet information security as required by applicable laws and refuses to take corrective measures, will be subject to criminal liability for (i) any large-scale dissemination of illegal information; (ii) any severe effect due to the leakage of users' personal information; (iii) any serious loss of evidence of criminal activities; or (iv) other severe situations, and any individual or entity that (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.

The Cybersecurity Law of the PRC, or the Cybersecurity Law, which was promulgated on November 7, 2016 by the Standing Committee of the National People's Congress and came into effect on June 1, 2017, provides that network operators 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: (i) network operators shall comply with certain obligations regarding maintenance of the security of internet systems; (ii) network operators shall verify users' identities before signing agreements or providing certain services such as information publishing or real-time communication services; (iii) when collecting or using personal information, network operators shall clearly indicate 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; (iv) network operators shall strictly preserve the privacy of user information they collect, and establish and maintain systems to protect user privacy; (v) network operators shall strengthen management of information published by users, and when they 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 December 28, 2021, the CAC, jointly with the relevant authorities, published the Measures for Cybersecurity Review which stipulates that a critical information infrastructure operator purchases network products and services or an online platform operator conducts data processing, either of which affects or may affect national security shall conduct a cybersecurity review.

The SCNPC promulgated the Data Security Law of the PRC (the "Data Security Law"), on June 10, 2021, which came into effect on 1 September 2021. The Data Security Law applies to data processing activities, including the collection, storage, use, processing, transmission, availability and disclosure of data, and security supervision of such activities within the territory of the PRC. Where data processing activities outside the territory of the PRC damage national security, public interests or the legitimate rights and interests of PRC citizens and organizations, such activities shall be subject to legal liabilities. The PRC would also establish a data security review system, under which data processing activities that affect or may affect national security shall be reviewed. According to the Data Security Law, whoever carries out data processing activities shall establish a sound data security management system throughout the whole process, organize data security education and training, and take corresponding technical measures and other necessary measures to ensure data security. Important data shall also be categorized and protected more strictly. The Data Security Law also requires formulating the important data catalogues to enhance the protection of important data.

Regulations on Foreign-related Surveys Measures

According to the Foreign-related Surveys Measures, foreign-related surveys include: (i) market and social surveys conducted under the entrustment or financial aid of any overseas organization, individual, or the agency of any overseas organization in China; (ii) market and social surveys conducted in cooperation with any overseas organization, individual, or the agency of any overseas organization in China; (iii) market surveys lawfully conducted by the agency of any overseas organization in China; and (iv) market and social surveys of which the materials and results are to be provided to any overseas organization, individual, or the agency of any overseas organization in China. Any foreign-related market survey must be conducted by a foreign-related survey institution and no individual or organization may conduct any foreign-related survey without a license for foreign-related surveys. According to the Foreign-related Surveys Measure and the Negative List, only a domestic enterprise or a sino-foreign enterprise which meet the several requirements stipulated in the Foreign-related Surveys Measures can apply for license for the foreign-related survey. Industries that are not listed in the Negative List are permitted areas for foreign investments, and are generally open to foreign investment unless specifically restricted by other PRC regulations.

We collect data of multiple kinds and from multiple sources through our consolidated subsidiaries in the mainland China and Hong Kong. These data include users' search, browse, E-commerce and social data, demographic data, campaign performance data, and certain technical data, from our proprietary tracking tools, our marketers, publishers and ad exchanges in connection with marketing campaigns, and from collaboration with selected third-party data partners. Except for the general definitions of market surveys and social surveys defined in the Foreign-related Surveys Measures, there is no further clarification or specific guidance on the characteristics and scope of "foreign-related surveys". In the opinion of our PRC counsel, Jingtian & Gongcheng, the collection and use of data of our business do not fall within the scope of "foreign-related survey" and therefore we are not required to obtain a foreign-related survey license under the Foreign-related Survey Measures as currently interpreted and enforced by the relevant PRC regulatory authorities. However, in light of these uncertainties and out of prudence, we through OptAim Network, VIE, applied for and were granted the foreign-related survey license on June 6, 2017 by the Chinese National Bureau of Statistics.

Regulations on Intellectual Property Rights

Mainland China has adopted legislation governing intellectual property rights, including copyrights, trademarks and patents. China is a signatory to major international conventions on intellectual property rights and is subject to the Agreement on Trade Related Aspects of Intellectual Property Rights as a result of its accession to the World Trade Organization in December 2001.

Computer Software Copyright

On March 1, 2013, the Regulations for the Protection of Computer Software promulgated by the State Council came into effect. These regulations are formulated for protecting the rights and interests of computer software copyright owners, encouraging the development and application of computer software and promoting the development of software business.

Patent

Patents in the PRC are principally protected under the Patent Law of the People's Republic of China, which was amended by the Standing Committee of the National People's Congress in 2008 and further amended on 17 October 2020 and effective on 1 June 2021. This law is formulated for protecting the rights and interests of patentees, encouraging invention, promoting the application of inventions, enhancing innovation capacity, and facilitating the advancement of science and technology, and the economic and social development. Under this law, the duration of a patent right is either 10 years or 20 years from the date of application, depending on the type of patent right.

Trademark

The PRC Trademark Law, promulgated in 1983 and most recently amended in 2019, which such amendments became effective on November 1, 2019, protects the proprietary rights with respect to registered trademarks. The Trademark Office under the SAIC handles trademark registrations and may grant a term of 10 years for registered trademarks, which may be extended for another 10 years upon request. Trademark license agreements shall be filed with the Trademark Office for record. In addition, if a registered trademark is recognized as a well-known trademark, the protection of the proprietary right of the trademark holder may reach beyond the specific class of the relevant products or services.

Domain Name

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 identities to domain name registration service institutions. The applicants will become the holder of such domain names upon the completion of the registration procedure. These measures are formulated with reference to the norms on administration of internet domain names worldwide, for the purposes of promoting the healthy development of China's internet sector and guaranteeing the safe and reliable operation of the internet domain name system in the PRC.

Regulations on Employment

There are several principal rules and regulations in the PRC with respect to rights and obligations of employers and labors, including (i) the Labor Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress effective on January 1, 1995, amended and became effective on December 29, 2018, or the Labor Law, (ii) the Labor Contract Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress effective on July 1, 2013, or the Labor Contract Law, (iii) the Social Insurance Law of the People's Republic of China, promulgated by the Standing Committee of the National People's Congress effective on July 1, 2011, amended and became effective on December 29, 2018, or the Social Insurance Law, which was, and (iv) the Regulations on the Management of Housing Provident Fund, promulgated by the State Council on March 24, 2002 and amended and became effective on March 4, 2019.

According to the Labor Law and the Labor Contract Law, employers must execute written labor contracts with full-time employees. All employers must compensate their employees with wages equal to at least the local minimum wage standard. All employers are required, among other things, to establish a system for labor safety and workplace sanitation, and to provide employees with workplace safety training. Violations of the Labor Law and the Labor Contract Law may result in the imposition of fines and other administrative penalties. For serious violations, criminal liability may arise. In addition, pursuant to the Social Insurance Law, employers in the PRC are required to provide employees with welfare schemes covering pension insurance, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing funds.

Regulations on Taxation

PRC Enterprise Income Tax

PRC enterprise income tax is calculated based on taxable income, which is determined under (i) the PRC Enterprise Income Tax Law, promulgated by the National People's Congress of China and implemented on January 1, 2008, amended and became effective on December 29, 2018, or the EIT Law, and (ii) the implementation rules to the EIT Law promulgated by the State Council and implemented on January 1, 2008 and amended on April 23, 2019. The EIT Law imposes an uniform enterprise income tax rate of 25% on all resident enterprises in the PRC, including foreign-invested enterprises and domestic enterprises, unless they qualify for certain exceptions. According to the EIT Law and its implementation rules, the income tax rate of an enterprise that has been determined to be a high and new technology enterprise may be reduced to 15% with the approval of relevant tax authorities.

In addition, according to the EIT Law, enterprises that are incorporated outside the PRC but have their "de facto management body" located in China may be considered as PRC resident enterprises and may therefore be subject to PRC enterprise income tax at the rate of 25% on their worldwide income. The implementation rules of the EIT Law define "de facto management body" as "establishment that carries out substantial and overall management and control over the manufacturing and business operations, personnel, accounting, properties, etc. of an enterprise." And the Notice Regarding the Determination of Chinese-Controlled Overseas Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or Circular 82, further provides certain specific criteria to determine whether the "de facto management body" of a PRC-controlled enterprise that is incorporated offshore is located in China. Although this circular applies only to offshore enterprises controlled by PRC enterprises or PRC enterprise groups, not those controlled by PRC individuals or foreigners, the criteria set forth in the circular may reflect the SAT's general position on how the "de facto management body" text should be applied in determining the tax resident status of all offshore enterprises.

According to Circular 82, a Chinese-controlled offshore-incorporated enterprise will be regarded as a PRC tax resident by virtue of having its "de facto management body" in China and will be subject to PRC enterprise income tax on its global income only if all of the following conditions are met: (i) the primary location of the day-to-day operational management and the place where the enterprise performs its duties are in the PRC; (ii) decisions relating to the enterprise's financial and human resource matters are made or are subject to approval of organizations or personnel in the PRC; (iii) the enterprise's primary assets, accounting books and records, company seals and board and shareholder resolutions are located or maintained in the PRC; and (iv) 50% or more of voting board members or senior executives habitually reside in the PRC. In the event that we are considered a PRC resident enterprise, we would be subject to the PRC enterprise income tax at the rate of 25% on our worldwide income.

We are organized under the laws of the Cayman Islands and not controlled by a PRC enterprise or PRC enterprise group, we therefore do not believe that we meet all of the conditions above. But if we are considered a PRC resident enterprise by the competent tax authority, we would be subject to the PRC enterprise income tax at the rate of 25% on our worldwide income.

Income Tax for Share Transfers

According to the Notice on Strengthening Administration of Enterprise Income Tax for Share Transfers by Non-Resident Enterprises, or Circular 698, promulgated by the SAT on December 10, 2009, which is replaced by the Circular on Issues of Tax Withholding regarding Non-PRC Resident Enterprise Income Tax, or Circular 37, promulgated by the SAT on October 17, 2017, and the SAT's Announcement on Several Issues Concerning the Enterprise Income Tax on Indirect Property Transfer by Non-Resident Enterprises, or Circular 7, promulgated by the SAT on February 3, 2015, if a non-resident enterprise transfers the equity interests of a PRC resident enterprise indirectly by transfer of the equity interests of an offshore holding company (issued by a PRC resident enterprise) without a reasonable commercial purpose, the PRC tax authorities have the power to reassess the nature of the transaction and the indirect equity transfer may be treated as a direct transfer. As a result, the gain derived from such transfer, which means the equity transfer price less the cost of equity, may be subject to PRC withholding tax at a rate of up to 10%. Under the terms of Circular 7, a transfer that meets all of the following circumstances will be deemed to have no reasonable commercial purposes: (i) over 75% of the value of the equity interests of the offshore holding company are directly or indirectly derived from PRC taxable properties; (ii) at any time during the year before the indirect transfer, over 90% of the total properties of the offshore holding company are investments within PRC territory, or in the year before the indirect transfer, over 90% of the offshore holding company's revenue is directly or indirectly derived from PRC territory; (iii) the function performed and risks assumed by the offshore holding company are insufficient to substantiate its corporate existence; or (iv) the foreign income tax imposed on the indirect transfer is lower than the PRC tax imposed on the direct transfer of the PRC taxable properties.

There is uncertainty as to the application of Circular 37 and Circular 7. Circular 37 and Circular 7 may be determined by the PRC tax authorities to be applicable to our prior private equity financing transactions that involved non-resident investors, if any of such transactions were determined by the tax authorities to lack reasonable commercial purpose. As a result, we and our non-resident investors in such transactions may be taxed under Circular 37 and Circular 7, and we may be required to expend valuable resources to comply with Circular 37 and Circular 7 or to establish that we should not be taxed under the general anti-avoidance rule of the EIT Law, which may have a material adverse effect on our financial condition and results of operations.

Value Added Tax

On January 1, 2012, the State Council launched a pilot value-added tax, or VAT, reform program, or the Pilot Program, applicable to businesses in selected industries, such as industries involving the leasing of tangible movable property, transportation services, research and development and technical services, information technology services, cultural and creativity services, logistics ancillary services and attestation and consulting services. Businesses subject to the Pilot Program are subject to VAT instead of business tax. On May 24, 2013, the Ministry of Finance and the SAT issued the Circular on Tax Policies in the Nationwide Pilot Collection of Value Added Tax in Lieu of Business Tax in the Transportation Industry and Certain Modern Services Industries. On August 1, 2013, the Pilot Program was implemented throughout China. On March 23, 2016, SAT and Ministry of Finance promulgated Circular on Comprehensively Promoting the Pilot Program of the Collection of Value-added Tax in Lieu of Business Tax, which became effective on May 1, 2016. According to the 2016 Circular, general taxpayers who are engaged in technical services, information technology services, cultural creativity services, logistics supporting services, leasing services, attestation consulting services and/or other modern service industries are subject to a VAT at the rate of 6%. On November 19, 2017, the State Council promulgated The Decisions on Abolishing the Provisional Regulations of the PRC on Business Tax and Amending the Provisional Regulations of the PRC on Value-added Tax, or Order 691. According to the VAT Law and Order 691, all enterprises and individuals engaged in the sale of goods, the provision of processing, repair and replacement services, sales of services, intangible assets, real property and the importation of goods within the territory of the PRC are the taxpayers of VAT. The VAT tax rates generally applicable are simplified as 17%, 11%, 6% and 0%, and the VAT tax rate applicable to the small-scale taxpayers is 3%. The Notice of the Ministry of Finance and the SAT on Adjusting Value-added Tax Rates, or the Notice, was promulgated on April 4, 2018 and came into effect on May 1, 2018. According to the Notice, the VAT tax rate of 17% and 11% are changed into 16% and 10%, respectively. On March 20, 2019, the Ministry of Finance, State Taxation Administration and General Administration of Customs jointly promulgated the Relevant Policies Notice on Deepening Reform of VAT Tax, or the Notice 39, effective on April 1, 2019, which lowers the VAT tax rate of 16% and 10% to 13% and 9%, respectively.

Dividends Withholding Tax

We are a Cayman Islands exempted limited liability company, used as a holding company and a substantial part of our income may come from dividends we receive from our PRC subsidiary by distributions to our Hong Kong subsidiaries. Pursuant to the EIT Law and its implementation rules, and Special Double Taxation Avoidance Agreement, dividends generated after January 1, 2008 and distributed to our Hong Kong subsidiaries by our PRC subsidiary are subject to withholding tax at a rate of 5%.

The PRC and the Hong Kong Special Administrative Region entered into the Arrangement for the Avoidance of Double Taxation and Prevention of Fiscal Evasion with respect to Taxes on Income, or Special Double Taxation Avoidance Agreement, on August 21, 2006. This arrangement reduces the withholding tax rate in respect of the payment of dividends by a PRC enterprise to a Hong Kong enterprise, such as from our PRC subsidiaries to our Hong Kong subsidiaries, from the statutory rate of 10% to 5% if the Hong Kong enterprise directly holds at least 25% of the PRC enterprise. Pursuant to the SAT's Notice on the Issues concerning the Application of the Dividend Clauses of Tax Agreements, or Circular 81, a Hong Kong resident enterprise must meet the following conditions, among others, in order to benefit from the reduced withholding tax rate: (i) it must be is a company; (ii) it must directly own the required percentage of equity interests and voting rights in the PRC resident enterprise; and (iii) it must have directly owned such required percentage in the PRC resident enterprise throughout the 12 months prior to receiving the dividends. Furthermore, the Announcement of the State Taxation Administration on Issuing the Administrative Measures for Entitlement to Treaty Benefits for Non-resident Taxpayers, or Non-Resident Tax Treatments Measures, which became effective on October 14, 2019, require that non-resident taxpayers collect, gather and retain relevant materials for future reference in accordance with the provisions of this measure and be administrated and supervised subsequently by the relevant tax authority in order for the reduced withholding tax rate to apply. There are also other conditions for the reduced withholding tax rate including that Hong Kong recipient must be the beneficial owner of the income.

As uncertainties remain regarding the interpretation and implementation of the EIT Law and its implementation rules, we cannot assure you that, if we are deemed a PRC resident enterprise, any dividends to be distributed by us to our non-PRC shareholders and ADS holders would not be subject to any PRC withholding tax.

Regulations on Foreign Exchange

The Regulations of the People's Republic of China on Foreign Exchange Control, promulgated by the State Council on August 5, 2008, are principal regulations on foreign currency exchange in the PRC. Under these regulations, the Renminbi is freely convertible for current account items after due process, including distribution of dividends, trade-related foreign exchange transactions and service-related foreign exchange transactions, whereas foreign exchange for capital account items, such as direct investments or loans, require prior approval of and registration with SAFE.

Capital Settlement and Overseas Remittance of Foreign-Invested Enterprises

On May 13, 2013, SAFE promulgated the Provisions on Foreign Exchange Administration Over Direct Investment Made by Foreign Investors in the PRC in order to promote and facilitate foreign investors to make direct investment in the PRC. Under these provisions, a foreign-invested enterprise may remit funds abroad for purchase and remit foreign exchange with relevant banks from capital reduction, liquidation, advance recovery of investment, profit distribution, etc. after due registration. On June 1, 2015, SAFE Circular 19 came into effect, which introduced a reform of the administration to the settlement of the foreign exchange capital for foreign-invested enterprises national wide based on the pilot experience in certain regions in the early days. On June 9, 2016, SAFE Circular 16 was promulgated, which included more detailed provisions on capital account settlement and overseas remittance for foreign-invested enterprises. This notice allows foreign-invested enterprises to settle their foreign exchange receipt on a discretionary basis and explicitly includes foreign debts and repatriated funds raised through overseas listing as foreign exchange receipts that can be settled discretionally in addition to foreign exchange capital, but continues to prohibit foreign-invested enterprises from using the Renminbi fund converted from their foreign exchange capitals for expenditure beyond their business scopes, investment in security market, offering of entrustment loans or purchase of any investment properties. Although this makes a further relaxation of policies on the control over foreign exchange settlement of capital accounts, in practice, there are still several specific requirements that affect the abilities of the PRC enterprises to access the offshore financing capitals.

According to Interim Administrative Measures for the Record-filing of the Incorporation and Change of Foreign-invested Enterprises promulgated by the Ministry of Commerce, or the MOC, effective on October 8, 2016, foreign investors making capital contributions to their PRC subsidiaries shall make necessary filings in the Foreign Investment Comprehensive Management Information System, or FICMIS. Pursuant to the Interim Measures on the Management of Foreign Debts promulgated jointly by SAFE, Ministry of Finance, the NDRC, effective on March 1, 2003, PRC foreign-invested companies may not procure loans which exceed the difference between its registered capital and its total investment amount as recorded in FICMIS.

On January 12, 2017, the People's Bank of China promulgated the Circular on Management of Cross-border Financing. According to this circular, an enterprise shall file the cross-border financing contracts for the record with the Capital Project Information System of SAFE after the execution date of the contracts but no later than three working days before the withdrawal date. In addition, according to the Circular on Promoting the Administrative Reform, promulgated by the NDRC on September 14, 2015, any medium or long term loan to be provided by foreign entities to domestic enterprises must be recorded and registered by the NDRC.

Outbound Investment and Financing and Roundtrip Investment

On July 4, 2014, the Circular on the Relevant Issues Concerning Foreign Exchange Control on Domestic Residents Outbound Investment and Financing and Roundtrip Investment though Special Purpose Vehicles promulgated by SAFE came into effect. This circular prescribes operational procedures and registration requirements for roundtrip investment through special purpose companies and others. In particular, it states that a domestic resident shall apply to the relevant local branch of SAFE for foreign exchange registration of overseas investment, prior to making contribution to a special purpose company with legitimate domestic or overseas assets or interests.

Equity Incentive Plans

On February 15, 2012, the Notice of SAFE on Relevant Issues Concerning the Foreign Exchange Administration for Domestic Individuals' Participation in Equity Incentive Plans of Overseas-Listed Companies came into effect. This notice prescribes foreign exchange registration requirements for domestic individuals such as directors, supervisors, officials and other employees in relation to equity incentive plans of companies listed abroad, including employee stock ownership plans, employee stock option plans and other equity incentive programs permitted by applicable laws and regulations. Under the notice, individuals who participate in equity incentive plans of an overseas listed company shall, through the domestic companies they serve, collectively entrust a domestic agency to handle matters such as foreign exchange registration with SAFE, account opening, and funds transfer and remittance, and also entrust an overseas institution to handle matters such as exercise of options, purchasing and sale of related equity and transfer of funds. An individual may use his/her own foreign currency funds in his/her personal foreign currency deposit account, RMB funds or other legitimate domestic funds to participate in an equity incentive plan.

Regulations on Dividend Distribution

The principal legislation with respect to payment or distribution of dividends by wholly foreign-owned enterprises include (i) the Company Law of the People's Republic of China, most recently amended by the Standing Committee of the National People's Congress as of October 26, 2018, and (ii) Foreign Investment Law of the People's Republic of China, which was promulgated on March 15, 2019 and effective from January 1, 2020. Under these laws, wholly foreign-owned enterprises in the PRC may pay dividends only out of accumulated profits, after setting aside annually at least 10% of accumulated after-tax profits as reserve fund, if any, until such time as the accumulative amount of such fund reaches 50% of the enterprise's registered capital. A wholly foreign-owned enterprise may allocate a portion of its after-tax profits to its employee welfare and bonus funds at its discretion. These reserve funds may not be distributed as cash dividends.

Regulations on Foreign Investment

According to the Negative List, there is no restriction on the foreign-invested advertising company as advertising industry falls within neither the catalogue of prohibitions nor the catalogue of restrictions. Moreover, the Regulations for the Administration of Foreign-Invested Advertising Enterprises, which prescribed certain restrictions on foreign investors were abolished on June 29, 2015.

According to the Negative List, market survey falls into the catalogue of restrictions, which means foreign investors can engage in businesses in this industry only through a sino-foreign enterprise, while social survey falls into the catalogue of prohibitions.

On March 15, 2019, the National People's Congress approved the Foreign Investment Law, which came into effect on January 1, 2020 and on December 26, 2019, the State Council adopted Implementing Rules for the Foreign Investment Law of the People's Republic of China which took effect from January 1, 2020, to interpret and implement the Foreign Investment Law. These rules replaced the trio of existing laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations. The organization form and activities of foreign-invested enterprises shall be governed by the laws of the Company Law of the People's Republic of China and the Partnership Enterprise Law of the People's Republic of China. Foreign-invested enterprises established before the implementation of the Foreign Investment Law may retain the original business organization and so on within five years after the implementation of the Foreign Investment Law.

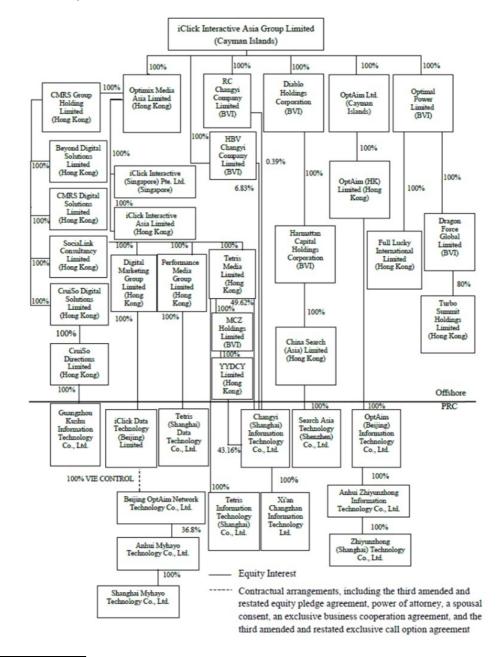
The Foreign Investment Law is formulated to further expand opening-up, promote foreign investment and protect the legitimate rights and interests of foreign investors. According to the Foreign Investment Law, foreign investments are entitled to pre-entry national treatment and are subject to negative list management system. The pre-entry national treatment means that the treatment given to foreign investors and their investments at the stage of investment access shall not be less favorable than that of domestic investors and their investments. The negative list management system means that the state implements special administrative measures for access of foreign investment in specific fields. Foreign investors shall not invest in any forbidden fields stipulated in the negative list effective on June 2018 and shall meet the conditions stipulated in the negative list before investing in any restricted fields.

The Foreign Investment Law does not mention the relevant concept and regulatory regime of VIE structures, since it is relatively new, uncertainties still exist in relation to its interpretation and implementation. Under the Foreign Investment Law, "foreign investment" refers to the investment activities directly or indirectly conducted by foreign individuals, enterprises or other entities in China. Though the Foreign Investment Law does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the Stale Council to provide for contractual arrangements as a form of foreign investment.

If our contractual arrangements is considered a form of foreign investment, then we may be required to complete the MOC market entry clearance, and we face uncertainties as to whether such clearance can be timely obtained, or at all. If we are not able to obtain such clearance when required, VIE structure may be regarded as invalid and illegal. As a result, we would not be able to (i) continue our business in China through our contractual arrangements with the VIE and shareholder of the VIE, (ii) exert control over the VIE, (iii) receive the economic benefits of the VIE under such contractual arrangements, or (iv) consolidate the financial results of the VIE. Were this to occur, our results of operations and financial condition would be materially and adversely affected and the market price of our ADSs may decline. Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

C. <u>Organizational Structure</u>

The following chart illustrates our company's organizational structure, including our principal subsidiaries and consolidated affiliated entities as of March 31, 2023:



⁽¹⁾ The nominee shareholder of OptAim Network is Mr. Jian Tang, who is our co-founder, chairman of the board and chief executive officer.

We conduct substantially all our operations through the following consolidated subsidiaries:

- iClick Interactive Asia Limited: primarily focusing on providing online advertising, SaaS products and services to Hong Kong and overseas clients
- Tetris Media Limited and Tetris Information Technology (Shanghai) Co., Ltd.: primarily focusing on providing online
 advertising, SaaS products and services. Its business to Hong Kong and overseas clients are gradually being transferred to
 iClick Interactive Asia Limited
- Performance Media Group Limited: primarily focusing on providing online advertising services to Hong Kong clients
- Tetris (Shanghai) Data Technology Co., Ltd.: primarily focusing on providing online advertising, SaaS products and services to PRC clients
- China Search (Asia) Limited and its subsidiary: promoting content distribution opportunities for the publisher under our sales agency arrangement
- iClick Interactive (Singapore) Pte. Ltd: primarily focusing on providing online advertising services to Singapore and other overseas clients
- iClick Data Technology (Beijing) Limited (previously named iClick Interactive (Beijing) Advertisement Co., Ltd.): primarily focusing on providing our online advertising, SaaS products and services to PRC clients, through itself, and the VIE entities
- Anhui Zhiyunzhong Information Technology Co., Ltd.: primarily focusing on providing mobile online advertising to PRC clients
- OptAim (Beijing) Information Technology Co., Ltd.: primarily focusing on providing mobile online advertising, SaaS products and services to PRC clients
- Beijing OptAim Network Technology Co., Ltd., the VIE, and its subsidiaries: primarily focusing on providing mobile online advertising services to PRC clients
- Changyi (Shanghai) Information Technology Co., Ltd. and its subsidiaries: primarily focusing on providing SaaS products and services
- Shanghai Myhayo Technology Co., Ltd. and Anhui Myhayo Technology Co., Ltd.: primarily focusing on providing mobile
 content distributions in PRC
- Optimal Power Limited and its subsidiaries: primarily focusing on providing online advertising, SaaS products and services
 with premium media licensing assets
- CMRS Group Holding Limited and its subsidiaries: primarily focusing on promoting online advertising, social media, KOLs and smart content generation services

After the abolishment of the foreign ownership restriction in advertising business, we had been transferring the advertising business previously operated by the VIE, OptAim Network, primarily consisted of our mobile marketing solution business, to our wholly-owned subsidiaries. As of December 31, 2018, our wholly-owned subsidiaries had replaced OptAim Network as contracting party for all our mobile marketing solution business. OptAim Network acquired Shanghai Myhayo Technology Co., Ltd. and Anhui Myhayo Technology Co., Ltd. in November 2018 and March 2019 respectively, providing a content distribution channel and a mobile content aggregator of articles and short videos in the PRC, which presents customized feeds to users via its mobile application.

Contractual Arrangements with OptAim Network

Foreign ownership in advertising companies used to be subject to certain restrictions under the PRC laws and regulations. For example, according to the Administrative Provisions on Foreign-Invested Advertising Enterprises, foreign investors were required to meet several conditions in order to invest in the PRC advertising business, such as a minimum number of years of advertising-related experience and an approval from the relevant PRC regulatory authority. OptAim is a Cayman Islands company and iClick Beijing, its PRC subsidiary, is considered an FIE. To comply with the then-effective PRC laws and regulations, including the Administrative Provisions on Foreign-Invested Advertising Enterprises, iClick Beijing entered into a set of contractual arrangements with OptAim Network and its shareholder. The laws and regulations that imposed restrictions on foreign ownership in advertising companies, including the Administrative Provisions on Foreign-Invested Advertising Enterprises were abolished in June 2015.

Under the Measures on the Administration of Foreign-related Surveys, or the Foreign-related Surveys Measures, promulgated by the National Bureau of Statistics of China on October 13, 2004, no individual or organization may conduct any foreign-related survey without a license for foreign-related survey granted by the National Bureau of Statistics in China or its local counterparts. Under the Catalogue for the Guidance of Foreign Investment Industries, promulgated by the Ministry of Commerce and National Development and Reform Commission on June 28, 2017, only a domestic enterprise or a sino-foreign enterprise which meets the several requirements stipulated in the Foreign-related Surveys Measures can apply for a license for the foreign-related survey. We do not believe our collection and use of multiple kinds of data from multiple sources in China to improve the cost-effectiveness of marketing campaigns for marketers in and outside China fall within the scope of "foreign-related survey" under the Foreign-related Survey Measures. However, there are uncertainties under the PRC laws whether such activities may be deemed as "foreign-related survey," which would require a foreignrelated survey license from the National Bureau of Statistics in China or its local counterparts. In light of these uncertainties and out of prudence, we, through the VIE, OptAim Network, applied for and were granted a foreign-related survey license on June 6, 2017. If the PRC regulatory authorities disagree with our interpretation of what would constitute foreign-related survey and enforcement practices on foreign-related survey licensing requirement or if we expand our business scope to engage in activities falling within the scope of foreign-related survey, we will need to continue to rely on iClick Beijing's contractual arrangements with OptAim Network and its shareholder to conduct certain of our operations in China, including to transfer such operations to VIE to the extent they are deemed foreign-related survey. See "Item 3 Key Information-D. Risk Factors-Risk Related to Our Corporate Structure-We rely on the contractual arrangements that establish the structure for certain of our operations in China."

Under the relevant PRC laws, commercial operators of value-added telecommunication services, which refer to providers of telecommunications and information services through public network infrastructures that provide information or services to internet users with a charge, shall obtain a value-added telecommunications business operation license. See "Regulations -Regulations on Value-added Telecommunication Services" and "—Regulations on Internet Content Providers." It is unclear whether Myhayo's business model would render it a commercial operator of value-added telecommunication services under the relevant PRC laws, in which case Myhayo would be required to hold a value-added telecommunication license. Pursuant to the Negative List, jointly promulgated by MOFCOM and the NDRC on October 24, 2019, foreign investment in value-added telecommunication services is subject to certain restrictions. See "—Regulations—Regulations on Foreign Direct Investment in Value-Added Telecommunications Companies". As a result, we acquired Myhayo through OptAim Network, the VIE. In August 2019, Myhayo obtained the value-added telecommunication business operation license from the relevant local counterpart of MIIT.

The contractual arrangements between iClick Beijing, OptAim Network and the shareholder of OptAim Network allow us to:

- exercise effective control over OptAim Network and its subsidiaries;
- receive substantially all of the economic benefits of OptAim Network and its subsidiaries; and
- have an exclusive option to purchase all or part of the equity interests and assets in OptAim Network.

As a result of these contractual agreements, we control and receive the economic benefits of the business operations of the VIE entities, which is not equivalent to equity ownership in the VIE entities. Accordingly, under the U.S. GAAP, the financial statements of the VIE entities are consolidated as part of our financial statements. Accordingly, we are the primary beneficiary of the VIE entities for accounting purposes and consolidate the financial results of the VIE entities in our consolidated financial statements in accordance with the U.S. GAAP. Neither we nor our investors own any equity ownership in, direct foreign investment in, or control of VIE as a result of the contractual agreements with the VIE, its nominee shareholder and our subsidiary, and these agreements have not been tested in a court of law in the PRC.

These contractual arrangements may not be as effective as direct ownership in providing us with control over the VIE. If the VIE or its shareholder fails to perform their respective obligations under these contractual arrangements, our recourse to the assets held by the VIE 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 VIE, 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.

The following is a summary of the currently effective contractual arrangements by and among iClick Data Technology (Beijing) Limited, our wholly-owned subsidiary, OptAim Network, our consolidated VIE, the shareholder of OptAim Network.

Agreements that Provide Us with Effective Control over OptAim Network Third Amended and Restated Equity Pledge Agreement

iClick Beijing, OptAim Network and the shareholder of OptAim Network entered into the third amended and restated equity pledge agreement on November 1, 2021. Pursuant to the third amended and restated equity pledge agreement, the shareholder of OptAim Network has pledged all of his equity interest in OptAim Network to iClick Beijing to guarantee the performance by such shareholder and OptAim Network of his obligations under the exclusive business cooperation agreement, power of attorney and the third amended and restated exclusive call option agreement as well as his liabilities arising from any breach. If OptAim Network or its shareholder breaches any obligations under these agreements, iClick Beijing, as pledgee, will be entitled to dispose of the pledged equity and have priority to be compensated by the proceeds from the disposal of the pledged equity. The shareholder of OptAim Network agrees that before his obligations under the contractual arrangements are discharged, he will not dispose of the pledged equity interests, create or allow any encumbrance on the pledged equity interests, or take any action which may result in any change of the pledged equity that may have material adverse effects on the pledgee's rights under this agreement without the prior written consent of iClick Beijing. The third amended and restated equity pledge agreement will remain effective until OptAim Network and its shareholder discharge all their obligations under the contractual arrangements and pay out all consulting and services fees under the exclusive business cooperation agreement. We have completed the registration of the equity pledge with the relevant office of the State Administration for Market Regulation in accordance with PRC Property Rights Law on December 15, 2021.

Power of Attorney

Through power of attorney dated November 1, 2021, the shareholder of OptAim Network irrevocably authorizes iClick Beijing or any person(s) designated by iClick Beijing to act as his attorney-in-fact to exercise all of such shareholder's voting and other rights associated with the shareholder's equity interest in OptAim Network, such as the right to appoint directors, supervisors and officers, as well as the right to sell, transfer, pledge and dispose of all or a portion of the shares held by such shareholder. The power of attorney will remain in force unless iClick Beijing gives out any instruction in writing otherwise. Once the power of attorney are terminated in whole or in part, each shareholder shall revoke his/her power of attorney to iClick Beijing and immediately sign another power of attorney with the person(s) designated by iClick Beijing.

Spousal Consent

The spouse of Mr. Jian Tang signed a spousal consent letter on November 1, 2021. Mr. Jian Tang holds 100% equity interest in OptAim Network. Under the spousal consent letter, the signing spouse unconditionally and irrevocably agreed that she was aware of the disposal of OptAim Network shares held by Mr. Jian Tang in the following third amended and restated exclusive call option agreement, the abovementioned power of attorney, and the third amended and restated equity pledge agreement. The signing spouse confirmed not having any interest in the OptAim Network shares and committed not to impose any adverse assertions upon those shares. The signing spouse further confirmed that her consent and approval are not needed for any amendment or termination of the abovementioned agreements and committed that she shall take all necessary measures needed for the performance of those agreements.

Agreement that Allows Us to Receive Economic Benefits from OptAim Network Exclusive Business Cooperation Agreement

iClick Beijing, OptAim Network and Zhiyunzhong entered into an exclusive business cooperation agreement on November 1, 2021. Pursuant to this agreement, iClick Beijing or its designated party has the exclusive right to provide OptAim Network and Zhiyunzhong with technical support, consulting services and other services. Without iClick Beijing's prior written consent, OptAim Network and Zhiyunzhong shall not accept any technical support and services covered by this agreement from any third party. OptAim Network and Zhiyunzhong agree to pay service fees in an amount equal to 100% of their respective net income for the relevant period on a monthly basis. iClick Beijing owns the intellectual property rights arising out of the provisions of services under this agreement. OptAim Network and Zhiyunzhong shall grant an irrevocable call option to iClick Beijing to purchase all or any of their assets or business with the lowest price allowed by PRC law. Unless iClick Beijing terminates this agreement, this agreement will remain effective until any party thereto is dissolved in accordance with PRC law.

Agreement that Provides Us with the Option to Purchase the Equity Interest in OptAim Network Third Amended and Restated Exclusive Call Option Agreement

iClick Beijing, OptAim Network and the shareholder of OptAim Network entered into a third amended and restated exclusive call option agreement on November 1, 2021. Pursuant to the third amended and restated exclusive call option agreement, the shareholder of OptAim Network has irrevocably granted iClick Beijing or any third party designated by iClick Beijing a third amended and restated exclusive call option to purchase all or part of his respective equity interests in OptAim Network. Until there is any evaluation request by PRC law, the purchase price is equal to RMB100 or the lowest price allowed by PRC law. Unless otherwise agreed, the shareholder of OptAim Network will immediately gift iClick Beijing or any third party designated by iClick Beijing with the purchase price after iClick Beijing or any third party designated by iClick Beijing exercises the option. iClick Beijing may transfer all or part of its option under this agreement to a third party under the approval of the shareholder of iClick Beijing. Without iClick Beijing's prior written consent, the shareholder of OptAim Network shall not, among other things, amend its articles of association, increase or decrease the registered capital, sell, dispose of or set any encumbrance on its assets, business or revenue outside the ordinary course of business, enter into any material contract, merge with any other persons or make any investments, distribute dividends, or enter into any transactions which have material adverse effects on its business. The shareholder of OptAim Network also undertakes that he will not sale, transfer, pledge, or otherwise dispose of his equity interests in OptAim Network to any third party designated by iClick Beijing has acquired all equity interests. This agreement will remain effective until iClick Beijing or any third party designated by iClick Beijing has acquired all equity interest of OptAim Network from its shareholder.

In the opinion of Jingtian & Gongcheng, our PRC legal counsel:

- the ownership structures of iClick Beijing and OptAim Network do not contravene any applicable PRC laws or regulations currently in effect; and
- the contractual arrangements among iClick Beijing, OptAim Network, the shareholder of OptAim Network and Zhiyunzhong governed by PRC law are valid, binding and enforceable, and do not contravene any PRC laws or regulations currently in effect.

However, there are substantial uncertainties regarding the interpretation and application of current and future PRC laws, regulations and rules. Accordingly, the PRC regulatory authorities may in the future take a view that is contrary to or otherwise different from the above opinion of our PRC legal counsel. It is uncertain whether any new PRC laws or regulations relating to VIE structures will be adopted or if adopted, what they would provide. If the PRC government finds that the agreements that establish the structure for the operation of OptAim Network do not comply with PRC government restrictions on foreign investment in our businesses, we could be subject to severe penalties including being prohibited from continuing operations. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure—We rely on the contractual arrangements that establish the structure for certain of our operations in China," and "—Substantial uncertainties exist with respect to the newly enacted PRC Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations."

D. Property, Plant and Equipment

Our headquarters, principal executive office and some subsidiaries are located in Hong Kong, in an approximately 2,300 square-meter facility, under certain lease agreements expiring on or before August 1, 2025. As of December 31, 2022, we leased approximately 10,100 square-meter office space in China located in Beijing, Shanghai, Shenzhen, Anhui, Xi'an and Guangzhou, which primarily carry out the functions of technology and data engineering, sales and business development and operation support. Outside of mainland China and Hong Kong, we also have subsidiaries or sales offices in Singapore, Taiwan, Korea, Thailand and London.

We lease all of our facilities and do not own any real property. Our leases will expire from 2023 to 2025, and we have renewed leases that expired on or before the date of this annual report. We believe that our current facilities are suitable and adequate to meet our current needs. If we require additional space, we expect to be able to obtain additional facilities on commercially reasonable terms.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included elsewhere in this annual report on Form 20-F. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Item 3. Key Information—D. Risk Factors" or in other parts of this annual report on Form 20-F.

ITEM 5A. OPERATING RESULTS

Key Factors Affecting Our Results of Operations

We believe the key factors affecting our financial condition and results of operations include the following:

- Our ability to expand enterprise solutions;
- Our ability to implement "SaaS+X" model;
- Our ability to raise funds from financing activities to support business;
- Our revenue models;
- Our ability to optimize client base and increase client spending;
- Our ability to enlarge audience data set, strengthen data analytics capabilities and innovate technologies; and
- Seasonality;

Our Ability to Expand Enterprise Solutions

Our future growth depends on our ability to expand our enterprise solutions. Since May 2018, we started to offer enterprise solutions and have gradually scaled up our enterprise solution business. In 2022, net revenues from enterprise solutions accounted for 37% of our total net revenues, increasing from 21% in 2021 and 11% in 2020. The markets for certain of our offerings remain relatively new and it is uncertain whether our efforts, and related investments, will ever result in significant profits for us. Also, if we are unable to develop enhancements to and new features for our existing services that keep pace with rapid technological developments, our business could be impacted. The budget and spending from clients on SaaS products and services could be impacted by COVID-19 pandemic and macro-economic environment. The success of our development, and implementation of new features and services depends on several factors, including the timely completion, introduction and market acceptance of the feature, service or enhancement by customers, administrators and developers, as well as our ability to integrate all of our service offerings and develop adequate selling capabilities in this new market. Failure in this regard may significantly impair our revenue growth as well as negatively impact our operating results if additional costs are not offset by additional revenues.

Our Ability to Implement "SaaS+X" Model

We have effectively leveraged the digitalization of China's economy in the recent years as we accelerate the evolution of our SaaS product matrix. We have also continued to gain practical operational experience in establishing our "SaaS+X" business model. The "SaaS+X" business model that we have established aims to help companies strengthen their productivity and enhance their private domains through effective KOL recommendations, efficient targeted marketing and e-commerce partnerships while integrating and digitalizing data assets and managing and solidifying their brand profiles.

We released our "SaaS+X 2022 White Paper on Digital Operations" in March 2022. Combining our in-depth understanding of China's digital landscape and abundant experience working with more than 1,000 leading banks brands to power sales growth. The white paper is an authoritative resource for companies looking to take their marketing and business development in China to the next level. This white paper combines the theoretical research results and operation methodology that we have developed over the past years since we launched our comprehensive digital transformation strategy in 2019. In the paper we introduce a methodology for implementing digital operation concepts and applying them to all aspects of organization and team collaboration.

Our Ability to Raise Funds from Financing Activities to Support Business

Our business also depends on our ability to raise funds for operations and expansion by broadening our business scope as well as penetration into new markets. External funding also strengthening our capabilities and competitiveness through resources for innovation and promotional activities.

We have been raising funds through different channels such as bank borrowings, IPO, follow-on securities offering and issuance of convertible notes. As a Chinese concept stock with a small market capitalization, we faced significant challenges in obtaining additional equity financing from the capital market. We will continue to manage our own cash positions prudently, including but not limited to close monitoring of cash collection and payment capabilities of clients, balancing the working capital management versus. clients' demand and business growth opportunities. Meanwhile, we will continue to strategically shift the focus to the higher growth potential of enterprise solutions segment and implement a larger scale of strategic unwind lower margin, higher risk clients under marketing solutions segment.

Our Revenue Models/ Solution Mix

We derive revenue primarily from four sources and report them on either the net or gross basis. For our marketing solutions, we derive revenue from (i) incentives earned from the website publishers, for which we act as a sales agent for their content distribution opportunities, or the sales agency arrangement, which is reported on a net basis, (ii) performing cost-plus marketing campaigns, which is reported on a net basis, (iii) performing specified actions marketing campaigns (i.e., a CPM and CPC basis), which is reported on a gross basis. For our enterprise solutions, we derive revenue from the offering of SaaS products and services, which is reported on a gross basis and a net basis. Please see "—Key Components of Results of Operations—Net Revenues" above for more details.

With respect to our marketing solutions, the gross profit margins for our sales agency arrangement and cost-plus marketing campaigns are higher than that for our specified action marketing campaigns as cost of revenues for our sales agency arrangement and cost-plus marketing campaigns does not include media cost. As a result, an increase in the percentage of gross billing recognized as net revenues from performing specified actions marketing campaigns will have a positive impact on our net revenues and a negative impact on gross profit margin. On the other hand, an increase in the percentage of gross billing recognized as net revenues from our sales agency arrangement and from performing cost-plus marketing campaigns will have a negative impact on our net revenues and a positive impact on gross profit margin.

Our marketing solutions and enterprise solutions each represent a mixture of revenue recognized on gross basis and on net basis and the proportion of each fluctuates from period to period. Therefore, our net revenues, net revenues as a percentage of gross billing, gross profit margin and the comparability of our financial results in one period to another may be affected by the relative proportion of our gross billing recognized as net revenues on a gross basis and a net basis. The relative proportions of gross billing recognized as net revenues on a gross basis and a net basis are affected by a variety of factors, in particular, the terms of the arrangements with our clients, including whether to conduct their marketing campaigns on a specified-action (i.e., gross) or cost-plus (i.e., net) basis in a particular period, which in turn depends on clients' needs and goals.

In addition, enterprise solutions generally have higher margin than marketing solutions. Within our enterprise solutions, since the margin of providing services is generally lower than providing pure SAAS product as it involves additional labor costs, our overall margin may be impacted as we ramp up our "SaaS+X" model.

Our Ability to Optimize Client Base and Increase Client Spending

Our growth and profitability are dependent upon our ability to optimize our client base and increase our clients' spending related to marketing and customer management. In 2022, we strategically reduced lower margin and higher risk businesses and continued to perform comprehensive review of our client base to improve liquidity. The budget and spending from clients on SaaS products and services have been significantly impacted by COVID-19 pandemic and macro-economic environment.

Our ability to increase clients' spending on our platform depends on whether we can successfully expand our "SaaS+X" business model and our solutions can effectively address marketers' evolving and diverse needs in a cost-efficient manner. To that end, we plan to develop and offer more tailored, innovative and user-friendly solutions and services and enhance our sales, marketing and account servicing efforts. For example, we strive to promote our newly launched enterprise solutions to clients by enhancing our ability to effectively identify and address clients' needs on CRM and comprehensive and customized data acquisition, mining and analytics for real-time, data-driven and more accurate decision making.

Our Ability to Enlarge Audience Data Set, Strengthen Data Analytics Capabilities and Innovate Technologies

Our performance is significantly dependent on our ability to enlarge audience data set, strengthen data analytics capabilities and innovate technologies. This helps clients achieve more precise audience targeting and enables us to retain clients and increase their marketing spend. It also helps drive up our gross profit margin under our gross revenue model as we make better decisions about which content distribution opportunities to bid for and at which price, and better predict user interaction with a marketing message to achieve our clients' minimum key performance indicator, or KPI requirements without having to purchase additional content distribution opportunities and incur additional media cost. Such KPIs generally include target audience reach (i.e., the percentage of target audience we successfully engage through our platform), click-through rate (i.e., the ratio of users who click on a specific link to the number of total users who view a marketing message) and landing rate (i.e., the ratio of users who arrive at the clients' websites to the number of total users who view a marketing message). Furthermore, our ability to enlarge audience data set, strengthen data analytics capabilities and innovate technologies enables us to extend our data application across more aspects in online marketing and beyond to capitalize on more growth opportunities.

We plan to continue collaborating with clients and other third parties to increase the dimensions and varieties of our data assets and develop new strategic relationships to exploit new data sources and enlarge audience data set. We also plan to continue investing in our data science technologies and upgrading our technology infrastructure.

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Seasonality

We have experienced seasonal fluctuations in revenue. The fourth quarter of each calendar year generally contributes the largest portion of our annual gross billing as marketers tend to allocate a significant portion of their online marketing budgets to that quarter, which coincides with Chinese consumers' increased purchases around the holidays and shopping events in that quarter, such as Single's Day on November 11 of each year. The first quarter of each calendar year generally contributes the smallest portion of our annual gross billing, primarily due to a lower level of allocation of online marketing budgets by marketers at the beginning of the calendar year in which the Chinese New Year holidays fall, during which time businesses in China are generally closed. We expect our gross billing to continue fluctuating based on seasonal factors that affect the online marketing industry as a whole.

Impact of COVID-19

Since December 2019, there has been an outbreak of COVID-19 in China and around the world. The pandemic has resulted in quarantines, travel restrictions, home office policies, and temporary closure of stores and facilities in mainland China, Hong Kong and many other jurisdictions. These measures have slowed down the development of the China's economy and adversely affected the global economic conditions and financial markets. Majority of our revenues are derived from, and our workforce are based in China. Our operations have been, and may continue to be, materially and adversely affected by potential delays in or reductions of business activities and commercial transactions, as well as by general uncertainties surrounding the duration of Chinese government's business and travel restrictions. In 2020, especially in the first half thereof, the industries in which our clients operate were adversely affected by the COVID-19 outbreak, including travel and hospitality sectors. Our clients in these industries reduced their budgets on advertising, which had an adverse impact on our results of operations. In 2022, our marketing solutions business was materially and adversely affected by various control measures implemented by the government in different regions in China, substantial uncertainties remained around the macro-economic conditions and tightened regulation targeting certain industries in which our clients operate, which led to reduced budget and spending from clients and a broad-based slowdown in the advertising market in China. In addition, the travel restrictions and lockdowns materially reduced the efficiency of communication between our employees and customers, delayed our working process and solution delivery. As a result, our business and revenues in 2022 were adversely affected and may continue to be adversely affected in the future. In addition, considering these factors, we recorded significant impairment charges in 2022.

Gross Billing

We regularly review a number of financial and operating metrics, including those set forth below, to help us evaluate our business, measure our performance, identify trends affecting our business, establish budgets, measure the effectiveness of sales and marketing, and assess our operational efficiencies.

	Year Ended December 31,						
	20	20	2021		20	22	
	(WS\$ in gross thousands) billing)		(US\$ in thousands)	(% of total gross billing)	(US\$ in thousands)	(% of total gross billing)	
Operating metrics:							
Gross billing from marketing solutions	648,922	95.7	727,340	91.3	217,364	77.0	
Gross billing from enterprise solutions	28,893	4.3	69,512	8.7	64,865	23.0	
Total	677,815	100.0	796,852	100.0	282,229	100.0	

Gross billing is an important operating measure by which we evaluate and manage our business. We define gross billing as the aggregate dollar amount that our clients pay us, after deducting rebates paid and discounts given to clients.

We use gross billing to assess our business growth, market share and scale of operations, and our ability to generate gross billing is strongly correlated to our ability to generate net revenues. As we have defined gross billing for internal uses, it may not be comparable to similarly titled measures used by other companies in the industry which present the impact of media costs differently.

Our gross billing increased from US\$677.8 million in 2020 to US\$796.9 million in 2021 and decreased to US\$282.2 million in 2022. The decrease in 2022 was primarily because we strategically moving to unwind lower-margin, higher-risk marketing solutions business, COVID-19 pandemic and uncertainties of the macro-economic environment from pandemic impact in China.

Gross billing derived from our sales agency arrangement was US\$20.4 million, US\$16.8 million and US\$11.1 million in 2020, 2021 and 2022, respectively, none of which was recognized as net revenues for the respective periods.

Gross billing derived from our cost-plus marketing campaigns was US\$435.3 million, US\$498.2 million and US\$111.8 million in 2020, 2021 and 2022, respectively, out of which US\$26.7 million, US\$26.1 million and US\$8.9 million was recognized as net revenues for the respective periods.

Gross billing derived from our specified action marketing campaigns was US\$193.3 million, US\$212.4 million and US\$94.5 million in 2020, 2021 and 2022, respectively, all of which was recognized as net revenues for the respective periods.

Gross billing derived from our enterprise solutions was US\$28.9 million, US\$69.5 million and US\$64.9 million in 2020, 2021 and 2022, respectively, out of which US\$28.9 million and US\$65.1 million and US\$63.1 million was recognized as net revenues for the respective periods.

Our gross billing per client increased by US\$28,420, or 9%, from US\$300,450 in 2020 to US\$328,870 in 2021, while decreased by US\$177,052, or 54%, from US\$328,870 in 2021 to US\$151,818 million in 2022. The total number of our clients increased by 7% from 2,256 in 2020 to 2,423 in 2021 and decreased to 1,859 in 2022. The decreases in gross billing per client and the total number of clients from 2021 to 2022 were primarily due to (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition from COVID-19 impact and tightening regulatory environment that affected our clients in certain industry sectors, (ii) our strategic scale-down of lower margin, higher risk marketing solutions business, and (iii) lockdowns and other control measures, which adversely affected the progress of our client on-boarding and solution implementation.

Results of Operations

The following table sets forth a summary of our consolidated results of operations for the periods indicated. This information should be read together with our consolidated financial statements and related notes included elsewhere in this annual report. The operating results in any period are not necessarily indicative of the results that may be expected for any future period and the period-toperiod comparisons discussed below may not be meaningful and are not indicative of our future trends.

	Year Ended December 31,					
	202	0	202	1	202	2
	(US\$ in	(% of net	(US\$ in	(% of net	(US\$ in	(% of net
	thousands)	revenues)	thousands)	revenues)	thousands)	revenues)
Net revenues	254,745	100.0	307,702	100.0	169,080	100.0
Cost of revenues	(181,482)	(71.2)	(218,549)	(71.0)	(173,212)	(102.4)
Gross profit/(loss)	73,263	28.8	89,153	29.0	(4,132)	(2.4)
Operating expenses						
Research and development expenses	(5,349)	(2.1)	(9,527)	(3.1)	(9,216)	(5.5)
Sales and marketing expenses	(38,028)	(14.9)	(52,872)	(17.2)	(44,613)	(26.4)
General and administrative expenses	(31,648)	(12.5)	(39,643)	(12.9)	(51,668)	(30.6)
Impairment of long-lived assets	_	_	_	_	(4,403)	(2.6)
Impairment of goodwill	_	_	_	_	(80,137)	(47.4)
Total operating expenses	(75,025)	(29.5)	(102,042)	(33.2)	(190,037)	(112.4)
Operating loss	(1,762)	(0.7)	(12,889)	(4.2)	(194,169)	(114.8)
Interest income	1,297	0.5	824	0.2	1,478	0.9
Interest expense	(2,650)	(1.0)	(4,089)	(1.3)	(2,057)	(1.2)
Other gains/(losses), net	5,852	2.3	2,203	0.7	(19,165)	(11.4)
Fair value losses on convertible notes	(4,433)	(1.8)	_	_	_	_
Fair value losses on derivative liabilities	(11,466)	(4.5)				
Loss before share of loss from an equity investee and income tax						
expense	(13,162)	(5.2)	(13,951)	(4.6)	(213,913)	(126.5)
Share of loss from an equity investee	(111)	(0.1)	(107)	(0.0)	(75)	(0.0)
Income tax (expense)/credit	(1,633)	(0.6)	(2,540)	(8.0)	11,182	6.6
Net loss	(14,906)	(5.9)	(16,598)	(5.4)	(202,806)	(119.9)

Key Components of Results of Operations

Net Revenues

We generate revenue primarily from clients' marketing spend through our platform as they utilize our solutions in cost-plus and specified action marketing campaigns, and to a less extent from incentives granted by the publishers under our sales agency arrangement. We derive revenue primarily from four sources and report them on either the net or gross basis. For our marketing solutions, we derive revenue from (i) incentives earned from the website publishers, for which we act as a sales agent for their content distribution opportunities, or the sales agency arrangement, which is reported on a net basis, (iii) performing specified actions marketing campaigns (i.e., a CPM and CPC basis), which is reported on a gross basis. For our enterprise solutions, we derive revenue from the offering of SaaS products and services, which is reported on a gross basis and a net basis.

We record incentives from the publishers under the sales agency arrangement as net revenues. We consider the publishers to be our customers under the sales agency arrangement. The amount of such incentives is determined based on a variety of factors, including yearly market spending at the publishers' platforms. Under our sales agency arrangement, we do not receive any rebate from the publishers. Net revenues from our sales agency arrangement, which equal the incentives received from the publishers under the sales agency arrangement were US\$5.8 million, US\$4.2 million and US\$2.6 million, in 2020, 2021 and 2022, respectively.

We record service fees, net of media costs and rebates and discounts to clients for cost-plus marketing campaigns, as net revenues. We consider these clients to be our customers for cost-plus marketing campaigns. Service fees are generally calculated as a percentage of media cost. Such percentage is negotiated on a client-by-client, and campaign-by-campaign basis. Rebates received from the publishers for cost-plus marketing campaigns are recorded as net revenues. Net revenues from our cost-plus marketing campaigns were US\$26.7 million, US\$26.0 million and US\$8.9 million, in 2020, 2021 and 2022, respectively.

We record the aggregate gross dollar amount that our clients spend through our platform for specified action marketing campaigns, which includes media cost, as net revenues. We consider these clients to be our customers for specified action marketing campaigns. We charge our clients for specified actions, such as when a user clicks on their marketing messages, or a CPC pricing model, or when their marketing messages are displayed, or a CPM pricing model. Rebates received from publishers for specified action marketing campaigns are recorded as deduction of cost of revenues. Net revenues from our specified action marketing campaigns were US\$193.3 million, US\$212.4 million and US\$94.5 million, in 2020, 2021 and 2022, respectively.

We grant rebates and discounts to marketers and marketing agencies to incentivize and encourage them to use our solutions. These rebates and discounts are calculated based on certain factors, including yearly market spending of the marketers and marketing agencies that we reasonably estimate that they are able to achieve based on the historical spending patterns of similar clients on our platform. The rebates and discounts we grant are settled when the relevant account receivables from the marketers and marketing agencies are settled, and the timing of settlement is independent of the settlement of the rebates or incentives, as the case may be, from the publishers, which is generally three to six months after the end of the relevant period to which such rebates or incentives, as the case may be, relate. In all other circumstances, rebates and discounts we grant are recorded as reduction of revenue.

Starting from 2019, we also generate revenue from SaaS products which are cloud-hosted software offering enterprise solutions to customers through provision of software licenses and retail and CRM solutions. Revenues under this arrangement primarily consist of fees for (i) licensing to provide customers with access to one or more of the existing cloud applications for e-commerce, marketing and customer management, (ii) the development of new cloud applications customized for individual customer, and (iii) various combinations of technical support, maintenance services and digitalized operational services provided by us. Net revenues from our enterprise solutions were US\$28.9 million, US\$65.1 million and US\$63.1 million in 2020, 2021 and 2022, respectively.

The table below shows our net revenues breakdown for our marketing solutions, and enterprise solutions for the periods presented.

		Year Ended December 31,					
	20	2020		2021		22	
	(US\$ in thousands)	(% of net revenues)	(US\$ in thousands)	(% of net revenues)	(US\$ in thousands)	(% of net revenues)	
Net revenues from marketing solutions	225,852	88.7	242,610	78.8	105,956	62.7	
Net revenues from enterprise solutions	28,893	11.3	65,092	21.2	63,124	37.3	
Total net revenues	254,745	100.0	307,702	100.0	169,080	100.0	

In 2020, 2021 and 2022, US\$61.3 million, US\$77.5 million and US\$18.6 million rebates were received from publishers under cost-plus marketing campaigns, respectively, which were recognized as net revenues for our marketing solutions, representing 24.1%, 31.9% and 17.5%, of our net revenues in respective periods. Of these rebates, US\$0.5 million, US\$0.2 million and US\$45 thousand were received under cost-plus marketing campaigns from the publisher for which we acted as its sales agent under our sales agency arrangement in respective periods.

In 2020, 2021 and 2022, US\$7.1 million, US\$5.1 million and US\$3.4 million incentive revenues were received from publishers under our sales agency arrangement, respectively, which were recognized as net revenues for our marketing solutions, representing 2.8%, 2.1% and 3.2% of our net revenues in respective periods. These exclude US\$0.5 million, US\$0.2 million and US\$45 thousand rebates that were received under cost-plus marketing campaigns from the publisher for which we acted as its sales agent under our sales agency arrangement in respective periods.

In 2020, 2021 and 2022, we granted rebates and discounts of US\$48.5 million, US\$76.2 million and US\$15.6 million, respectively, to marketers and marketing agencies under our cost-plus and specified action marketing campaigns for our marketing solutions, which were recognized as reduction of revenue in respective periods, representing 19.0%, 31.4% and 14.7% of our net revenues in respective periods. Of these rebates and discounts we granted, US\$8.6 million, US\$15.1 million and US\$2.9 million was in connection with our specified action (i.e., gross) marketing campaigns in respective periods, and US\$40.0 million, US\$61.1 million and US\$12.7 million, were in connection with our cost-plus (i.e., net) marketing campaigns in respective periods.

We have a diverse client base in terms of the geographic location of our clients' or marketers' headquarters as we help them, especially multinational marketers, navigate through the fragmented online marketing landscapes in mainland China to identify and reach their potential audience. In determining the geographic classification of our revenue, we look at the geographic location of our subsidiary or the VIE entities which executed the marketing campaign contract. Our subsidiaries or the VIE entities in mainland China generally are our signing entities for marketing campaign contracts with clients which are based in mainland China. Our Singapore subsidiary generally is our signing entities for the other clients. Our clients are primarily based in Southeast Asia. Our Hong Kong subsidiaries generally are our signing entities for the other clients. Our clients are primarily based in mainland China. Our net revenues from clients in mainland China increased significantly from 2020 to 2021, and decreased to 2022 as a result of our strategic move to unwind lower-margin, higher-risk Marketing Solutions businesses, and uncertainties of the macro-economic environment from pandemic impact. In 2020, 2021 and 2022, we derived 15.8%, 17.2% and 17.1% of our net revenues from outside mainland China, respectively. The table below shows our net revenues breakdown by geographic region for the periods presented.

	Year Ended December 31,					
	20	20	2021		2022	
	(US in thousands)	(% of net revenues)	(US in thousands)	(% of net revenues)	(US in thousands)	(% of net revenues)
Mainland China	214,444	84.2	254,874	82.8	140,211	82.9
Hong Kong	40,197	15.8	52,599	17.1	28,661	17.0
Others	104	0.0	229	0.1	208	0.1
Total net revenues	254,745	100.0	307,702	100.0	169,080	100.0

Cost of Revenues

The table below sets forth a breakdown of our cost of revenues for the periods indicated:

	Year Ended December 31,			
	2020 2021		2022	
	(US\$ in thousands)			
Cost of revenues:				
Marketing solutions	(172,917)	(194,912)	(138,140)	
Enterprise solutions	(8,565)	(23,637)	(35,072)	
Total cost of revenues	(181,482)	(218,549)	(173,212)	

Cost of revenues for our marketing solutions primarily consists of:

- *Media cost in connection with specified-action marketing campaigns.* Media cost refers to cost we pay to publishers for acquisition of content distribution opportunities, which is partially offset by rebates we receive from publishers in specified-action marketing campaigns. Media cost represented 93.2%, 88.1% and 50.5% of our cost of revenues in 2020, 2021 and 2022, respectively.
- Impairment of intangible assets. This impairment is primarily related to premium media licensing assets, due to (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition from COVID-19 impact and tightening regulatory environment that affected our clients in certain industry sectors, (ii) our strategic scaledown of lower margin, higher risk marketing solutions business. It represented 28.3% of our cost of revenues in 2022. We did not incur any impairment of intangible assets under cost of revenues in 2020 and 2021.

Cost of revenues for our enterprise solutions primarily consists of amortization expenses related to the computer software and systems, salaries and benefits of relevant operations and support personnel, depreciation of relevant property and equipment and other direct services costs.

Operating Expenses

We classify our operating expenses into five categories: research and development expenses, sales and marketing expenses, general and administrative expenses, impairment of long-lived assets and impairment of goodwill. The following table sets forth our operating expenses, both in absolute amount and as a percentage of our net revenues, for the periods presented.

	Year Ended December 31,					
	2020		2021		202	22
	(US\$ in thousands)	(% of net revenues)	(US\$ in thousands)	(% of net revenues)	(US\$ in thousands)	(% of net revenues)
Operating expenses	(75,025)	(29.5)	(102,042)	(33.2)	(190,037)	(112.4)
Research and development expenses	(5,349)	(2.1)	(9,527)	(3.1)	(9,216)	(5.5)
Sales and marketing expenses	(38,028)	(14.9)	(52,872)	(17.2)	(44,613)	(26.4)
General and administrative expenses	(31,648)	(12.5)	(39,643)	(12.9)	(51,668)	(30.6)
Impairment of long-lived assets	_	_	_	_	(4,403)	(2.6)
Impairment of goodwill		_			(80,137)	(47.4)

- Research and development expenses. Research and development expenses consist primarily of (i) salary and welfare for
 research and development personnel, (ii) rental expenses, and (iii) server hosting and internet expenses.
- Sales and marketing expenses. Sales and marketing expenses consist primarily of (i) salary and welfare expenses, and (ii) marketing and promotional costs.
- General and administrative expenses. General and administrative expenses consist primarily of (i) salary and welfare for
 general and administrative personnel, (ii) provision for bad debt and other receivables, and (iii) audit, legal and other
 professional service fees.
- Impairment of long-lived assets and goodwill. Impairment of long-lived assets consists of impairment of property and equipment, right-of-use assets and intangible assets. Impairment of goodwill was recorded under marketing solutions and enterprise solutions segment. The impairment of long-lived assets and goodwill impairment under marketing solutions reporting unit were as a result of (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition and tightening regulatory environment that affected our clients in certain industry sectors, and (ii) our larger scale strategic scale-down of lower margin, higher risk marketing solutions business as we prioritized growth focus and resource allocation in light of the challenges in obtaining additional financing. The goodwill impairment under enterprise solutions reporting unit was as a result of (i) our clients' tightened IT budget and reduced spending on digitalization products and services in light of a slowdown of China's economy and the uncertain macroeconomic conditions, (ii) increased competition in the SaaS market, in response to which we revisit our pricing strategy and enhance our research and development capacity, and (iii) limited additional equity financing from the capital market and debt financing from banks, which hinder our business expansion to new markets.

Other Gains/(Losses), Net

Other gains/(loess), net consist primarily of (i) impairment on long-term investments, (ii) fair value change in contingent consideration payable in relation to our acquisitions, (iii) government subsidy income, (iv) net exchange gains/(losses), and (v) impairment and fair value gains/(losses) on short-term investments.

Taxation

The Cayman Islands

We and our subsidiary incorporated in the Cayman Islands are not subject to income, corporation or capital gains tax, estate duty, inheritance tax or gift tax. In addition, payment of dividends to our shareholders or the shareholder of our subsidiary in the Cayman Islands are not subject to withholding tax in the Cayman Islands.

The British Virgin Islands

Our subsidiaries incorporated in the British Virgin Islands are not subject to income or capital gains taxes, estate duty, inheritance tax or gift tax. In addition, payment of dividends to the shareholders of our subsidiaries in British Virgin Islands are not subject to withholding tax in the British Virgin Islands.

Hong Kong

Our subsidiaries incorporated in Hong Kong are subject to 16.5% Hong Kong profit tax on their taxable income generated from operations in Hong Kong under the current Hong Kong Inland Revenue Ordinance. Under the Hong Kong tax laws, we are exempted from the Hong Kong income tax on our foreign-derived income. In addition, payments of dividends from our Hong Kong subsidiary to us are not subject to any Hong Kong withholding tax.

PRC

Generally, our PRC subsidiaries, our consolidated VIE entities, which are considered PRC resident enterprises under PRC tax law, are subject to enterprise income tax on their worldwide taxable income as determined under PRC tax laws and accounting standards at a rate of 25%. High and new technology enterprises ("HNTE") will enjoy a preferential enterprise income tax rate of 15% under the EIT Law. Our certain subsidiaries in the PRC, which are qualified as a HNTE under the EIT Law, are eligible for a preferential enterprise income tax rate of 15% for a period of three years so long as these entities obtain approval from relevant tax authority if they are profitable during the period.

We are subject to value added tax, or VAT, at a rate of 6% on the services we provide, less any deductible VAT we have already paid or borne. We are also subject to surcharges on VAT payments in accordance with PRC law. VAT has been phased in since August 2013 to replace the business tax that was previously applicable to the services we provide. During the periods presented, we were not subject to business tax on the services we provide.

Dividends paid by our wholly foreign-owned subsidiary in mainland 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 PRC and the Hong Kong Special Administrative Region on the Avoidance of Double Taxation and Prevention of Fiscal Evasion with respect to Taxes on Income and receives approval from the relevant tax authority. If our Hong Kong subsidiary satisfies all the requirements under the tax arrangement and receives approval from the relevant tax authority, then the dividends paid to the Hong Kong subsidiary would be subject to withholding tax at the standard rate of 5%. See "Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—We rely on dividends and other distributions on equity paid by our PRC subsidiaries to fund any cash and financing requirements we may have, and any limitation on the ability of our PRC subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business."

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

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Net Revenues

Our net revenues decreased by US\$138.6 million, or 45.1%, from US\$307.7 million in 2021 to US\$169.1 million in 2022.

Net revenues from our marketing solutions revenues decreased by US\$136.7 million, or 56.3%, from US\$242.6 million in 2021 to US\$106.0 million in 2022, primarily as a result of (i) a decline in marketers' advertising budget, and their potential liquidity issue and difficulty to settle trade debts, due to a broad-based slowdown in China's advertising market, uncertainties around the macroeconomic condition from COVID-19 impact and tightening regulatory environment that affected our clients in certain industry sectors, and (ii) our strategic scale-down of lower margin, higher risk marketing solutions business.

Net revenues from our enterprise solutions was dropped by 3.0% to US\$63.1 million in 2022, compared to US\$65.1 million in 2021, primarily due to challenges from the pandemic and lockdowns, which affected the progress of our client on-boarding and solution implementation in 2022.

Cost of Revenues, Gross Profit and Gross Profit Margin

Our cost of revenues decreased by US\$45.3 million, or 20.7%, from US\$218.5 million in 2021 to US\$173.2 million in 2022, primarily as a result of contraction in marketing solutions segment during the year.

Cost of revenues for our marketing solutions decreased by US\$56.8 million, or 29.1%, from US\$194.9 million in 2021 to US\$138.1 million in 2022, which was primarily due to the scale down of our advertising business and impairment of intangible assets of US\$48.6 million in 2022.

Cost of revenues for our enterprise solutions increased by US\$11.4 million, or 48.4%, from US\$23.6 million in 2021 to US\$35.1 million in 2022, primarily as a result of more customized services demand from clients.

As a result of the above, we incurred gross loss of US\$4.1 million in 2022, compared to a gross profit of US\$89.2 million. Specifically, we incurred gross loss of US\$32.2 million in 2022 for marketing solutions, compared to a US\$47.7 million gross profit in 2021. Gross profit for our enterprise solutions decreased by US\$13.4 million, or 32.3%, from US\$41.5 million in 2021 to US\$28.1 million in 2022.

Our gross loss margin of 2.4% in 2022, compared to a gross profit margin of 29.0% in 2021.

Operating Expenses

Our operating expenses increased by US\$88.0 million, or 86.2%, from US\$102.0 million in 2021 to US\$190.0 million in 2022, primarily due to the impairment of goodwill and long-lived assets of US\$80.1 million and US\$4.4 million respectively, and increase in bad debt expenses and provision of other receivables, partially offset by reduced share-based compensation expenses of US\$9.7 million and optimizing cost effectiveness. The operating expenses as a percentage of net revenues increased from 33.2% in 2021 to 112.4% in 2022.

- Sales and marketing expenses. Our sales and marketing decreased by US\$8.3 million, or 15.6%, from US\$52.9 million in 2021 to US\$44.6 million in 2022. The decrease was primarily related to the reduction of share-based compensation expenses of US\$8.2 million. Sales and marketing expenses as a percentage of net revenues increased from 17.2% in 2021 to 26.4% in 2022.
- General and administrative expenses. Our general and administrative expenses increased by US\$12.0 million, or 40.0%, from US\$39.6 million in 2021 to US\$51.7 million in 2022, primarily due to the increase of bad debt expenses and provision of other receivables. General and administrative expenses as a percentage of net revenues increased from 12.9% in 2021 to 30.6% in 2022.

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- Research and development expenses. Our research and development expenses decreased by US\$0.3 million, or 3.3%, from US\$9.5 million in 2021 to US\$9.2 million in 2022, primarily due to the decrease on bonus with the weaker operational performance due to uncertainties in macro-environment and COVID-19 pandemic. Research and development expenses as a percentage of net revenues increased from 3.1% in 2021 to 5.5% in 2022.
- Impairment of goodwill and long-lived assets. In 2022, we recorded US\$4.4 million in impairment of long-lived assets and US\$80.1 million in goodwill (US\$53.0 million under marketing solutions reporting unit and US\$27.1 million under enterprise solutions reporting unit). We did not record any impairment of long-lived assets or goodwill in 2020 and 2021. The goodwill impairment in marketing solutions reporting unit and impairment of long-lived assets were as a result of (i) a decline in marketers' advertising budget, and their potential liquidity issue and the difficulty to settle accounts receivables, due to a broad-based slowdown in China's advertising market and tightening regulatory environment that affected our clients in certain industry sectors, and (ii) our strategic scale-down of lower margin, higher risk marketing solutions business. The goodwill impairment in enterprise solutions reporting unit was as a result of (i) our clients' tightened IT budget and reduced spending on digitalization products and services in light of a slowdown of China's economy and the uncertain macroeconomic conditions, (ii) increased competition in the SaaS market, in response to which we revisit our pricing strategy and enhance research and development capacity, and (iii) limited additional equity financing from the capital market and debt financing from banks, which has hindered our business expansion to new markets.

Interest Income

Our interest income was US\$0.8 million and US\$1.5 million in 2021 and 2022, respectively. The change was primarily attributable to the increase of interest rate for US\$ deposit.

Interest Expense

Our interest expense was US\$4.1 million and US\$2.1 million in 2021 and 2022, respectively. The change was primarily attributable to the decrease of credit facilities used during the year, as a result of the increase of cash inflow from operating activities.

Other (Losses)/Gains, Net

Our other gains, net was US\$2.2 million in 2021 and it was other losses of US\$19.2 million in 2022, respectively. The change was affected by impairment loss on our long-term investments of US\$10.8 million, fair value loss on contingent consideration payables of US\$8.4 million, and exchange loss of US\$3.2 million, partially offset by government subsidy income of US\$4.5 million in 2022.

Share of Loss from an Equity Investee

Our share of loss of an equity investee was US\$0.1 million in 2021 and 2022 each. Our share of losses of an equity investee is primarily associated with net losses from our joint venture with VGI Global Media Plc in Thailand that was set up in May 2019.

Income Tax (Credit)/Expense

We recorded an income tax expenses of US\$2.5 million and income tax credit of US\$11.2 million in 2021 and 2022, respectively. The income tax credit in 2022 was primarily due to impairment of intangible assets which resulted in reversal of deferred tax liabilities during the year.

Net Loss

As a result of the foregoing, our net loss increased from US\$16.6 million in 2021 to US\$202.8 million in 2022.

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

Net Revenues

Our net revenues increased by US\$53.0 million, or 21%, from US\$254.7 million in 2020 to US307.7 million in 2021.

Net revenues from our marketing solutions increased by US\$16.7 million, or 7% from US\$225.9 million in 2020 to US\$242.6 million in 2021, primarily as a result of the growing market demand from specified action marketing campaigns.

Net revenues from our enterprise solutions increased by US\$36.2 million, or 125% from US\$28.9 million in 2020 to US\$65.1 million in 2021, which was primarily driven by our strategic focus on this segment with more diversified new products and services offering during the year, the growing market demand for the collection of information from different consumer online and offline touchpoints, integration of such information into a single data management platform to facilitate better informed business decisions, and the value added services we tailor made to clients for content creation, integrated multi-channel distribution transformation, private domain management, etc.

Cost of Revenues, Gross Profit and Gross Profit Margin

Our cost of revenues increased by US\$37.0 million, or 20.4%, from US\$181.5 million in 2020 to US\$218.5 million in 2021, primarily as a result of an increase in media cost, which increased by US\$24.1 million, or 14.3%, from US\$168.5 million in 2020 to US\$192.6 million in 2021 as a result of our sales growth during the year.

Cost of revenues for our marketing solutions increased by US\$22.0 million, or 12.7%, from US\$172.9 million in 2020 to US\$194.9 million in 2021, which was in line with the higher market demand for our marketing solutions.

Cost of revenues for our enterprise solutions increased by US\$15.0 million, or 176.0%, from US\$8.6 million in 2020 to US\$23.6 million in 2021, primarily as a result of increase of staff expenses, development cost and service expenses to capture the market growth on this business stream.

As a result of the above, our gross profit increased from US\$73.3 million in 2020 to US\$89.2 million in 2021. Specifically, gross profit for our marketing solutions decreased by US\$5.2 million, or 10.0%, from US\$52.9 million in 2020 to US\$47.7 million in 2021. Gross profit for our enterprise solutions increased by US\$21.2 million, or 103.9%, from US\$20.3 million in 2020 to US\$41.5 million in 2021.

Our gross profit margin increased from 28.8% in 2020 to 29.0% in 2021, primarily due to our strong momentum in enterprise solutions with higher margin, partially offset by the lower margin in marketing solutions due to the changing regulatory environment and heightened macro-economic uncertainties. We have started to strategically reduce lower margin and higher risk businesses in our more capital-intensive marketing solutions segment in order to focus on the higher growth potential of enterprise solutions.

Operating Expenses

Our operating expenses increased by US\$27.0 million, or 36.0%, from US\$75.0 million in 2020 to US\$102.0 million in 2021, primarily due to increase of share-based compensation, staff cost for product innovation and business development, and bad debt expenses. The operating expenses as a percentage of net revenues increased from 29.5% in 2020 to 33.2% in 2021.

- Sales and marketing expenses. Our sales and marketing expenses increased by US\$14.9 million, or 39.0%, from US\$38.0 million in 2020 to US\$52.9 million in 2021. The increase was primarily related to new business development, and the nature includes year on year increment in share-based compensation expenses of US\$7.3 million, staff cost of US\$4.6 million especially from newly acquired subsidiaries, and promotional expenses of US\$1.8 million. Sales and marketing expenses as a percentage of net revenues increased from 14.9% in 2020 to 17.2% in 2021.
- *General and administrative expenses*. Our general and administrative expenses increased by US\$8.0 million, or 25.3%, from US\$31.6 million in 2020 to US\$39.6 million in 2021, primarily due to increase in staff cost of US\$0.9 million and bad debt expenses of US\$5.8 million on specific provision of certain clients in 2021. General and administrative expenses as a percentage of net revenues increased from 12.5% in 2020 to 12.9% in 2021.
- Research and development expenses. Our research and development expenses increased by US\$4.2 million, or 78.1%, from US\$5.3 million in 2020 to US\$9.5 million in 2021, primarily due to increase in staff cost for continuous product innovation and development. Research and development expenses as a percentage of net revenues increased from 2.1% in 2020 to 3.1% in 2021.

Interest Income

Our interest income was US\$1.3 million and US\$0.8 million in 2020 and 2021, respectively.

Interest Expense

Our interest expense was US\$2.7 million and US\$4.1 million in 2020 and 2021, respectively. The change was primarily attributable to the increase of credit facilities used during the year, with the increase of banking facilities offered by banks.

Other Gains, Net

Our other gains, net was US\$5.9 million in 2020 and US\$2.2 million in 2021, respectively. The change was affected by impairment loss of long-term investments.

Fair Value Losses on Derivative Liabilities

We recorded fair value losses on derivative liabilities of US\$11.5 million in 2020 while we did not record any fair value gains or losses on derivative liabilities in 2021. Our fair value losses on derivative liabilities were primarily in relation to a call option for investors to purchase our convertible notes.

Fair Value Losses on Convertible Notes

We recorded fair value losses on convertible notes of US\$4.4 million in 2020 while we did not record any fair value gains or losses on convertible notes in 2021. The amount of our fair value losses on convertible notes in 2020 was primarily impacted by volatility in the price of our ADSs.

Share of Losses from an Equity Investee

Our share of losses of an equity investee was US\$0.1 million in 2020 and 2021. Our share of losses of an equity investee is primarily associated with net losses from our joint venture with VGI Global Media Plc in Thailand that was set up in May 2019.

Income Tax Expense

We recorded an income tax expenses of US\$1.6 million and US\$2.5 million in 2020 and 2021, respectively. The increase was primarily due to increasing profitability of operating companies.

Net Loss

As a result of the foregoing, our net loss increased by 11.4% from US\$14.9 million in 2020 to US\$16.6 million in 2021.

Recent Accounting Pronouncements

For detailed discussion on recent accounting pronouncements, see Note 2(an) to our consolidated financial statements included elsewhere in this annual report.

B. Liquidity and Capital Resources

Cash Flows and Working Capital

Our principal sources of liquidity have been cash generated from our operating activities, proceeds from our equity and debt issuances and proceeds from bank borrowings. As of December 31, 2022, we had US\$82.8 million in cash and cash equivalents, time deposits of US\$10 thousand, restricted cash of US\$22.5 million, and borrowing capacity of US\$44.3 million under our revolving credit facilities of a total principal amount of US\$165.3 million. As of December 31, 2022, our cash and cash equivalents primarily consisted of cash on hand, cash held at bank, and time deposits placed with banks or other financial institutions, which have original maturities of three months or less. Out of our cash and cash equivalents as of December 31, 2022, US\$17.3 million was held in U.S. dollar, RMB378.0 million (US\$54.6 million) was held in Renminbi, HK\$78.0 million (US\$10.1 million) was held in Hong Kong dollar, EUR106 thousand (US\$111 thousand) was held in European dollar, SGD471 thousand (US\$345 thousand) was held in Singapore dollar, TWD3.1 million (US\$99 thousand) was held in New Taiwan dollar, JPY11.8 million (US\$91 thousand) was held in Japanese Yen and a subsequent 133 thousand (US\$104 thousand) was held in other currencies. We closely monitor our cash balance and future payments obligations by preparing monthly management account and regular fund reports to provide a timely overview of our overall cash position and liquidity and risk control measurements. Such reports will be reviewed by our chief financial officer and our financial controller. In addition, we have adopted a stringent cash management policy. We also regularly monitor our current and expected liquidity requirements to ensure that we maintain sufficient cash balances to meet our liquidity needs. As of December 31, 2022, the VIE entities held US\$1.5 million cash and cash equivalents.

We believe that our current cash and cash equivalents, short-term investments, together with the borrowing capacity under our revolving credit facilities and the term loan facility will be sufficient to meet our anticipated working capital requirements and capital expenditures for the next 12 months. We may, however, need additional capital in the future to fund our continued operations. If we determine that our cash requirements exceed our available financial resources, we may seek to issue equity or debt securities or obtain credit facilities.

The issuance and sale of additional equity would result in further dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could result in operating and financial covenants that might restrict our operations. We cannot assure you that financing will be available in amounts or on terms acceptable to us, if at all.

In addition, although we consolidate the results of our consolidated VIE entities, we only have access to the assets or earnings of our consolidated VIE entities through our contractual arrangements with our consolidated VIE entities and its shareholder. See "Item 4. Information on the Company—C. Organizational Structure—Contractual Arrangements with OptAim Network." For restrictions and limitations on liquidity and capital resources as a result of our corporate structure, see "-Holding Company Structure." A substantial amount of our future revenues are likely to be denominated in Renminbi. Under existing PRC foreign exchange regulations, payments of current account items, including profit distributions, interest payments and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval from SAFE as long as certain routine procedural requirements are fulfilled. However, approval from or registration with competent government authorities is required where Renminbi is to be converted into foreign currency and remitted out of mainland China to pay capital expenses such as the repayment of loans denominated in foreign currencies. The PRC government may at its discretion restrict access to foreign currencies for current account transactions or change the foreign exchange control policy in the future. In addition, current PRC regulations permit our PRC subsidiary to pay dividends to us only out of its accumulated profits, if any, determined in accordance with Chinese accounting standards and regulations. Our PRC subsidiary is required to set aside at least 10% of its after-tax profits after making up previous years' accumulated losses each year, if any, to fund certain reserve funds until the total amount set aside reaches 50% of its registered capital. These reserves are not distributable as cash dividends. Furthermore, capital account transactions, which include foreign direct investment and loans, must be approved by and/or registered with SAFE and its local branches. See "Item 3. Key Information-D. Risk Factors-Risks Relating to Doing Business in China—Governmental control of currency conversion may limit our ability to utilize our revenues effectively and affect the value of your investment."

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

	Year Ended December 31,		
	2020	2021	2022
	(U	S\$ in thousands)	
Selected Consolidated Cash Flow Data:			
Net cash used in operating activities	(19,633)	(19,673)	71,104
Net cash provided by/(used in) investing activities	(27,693)	(22,390)	(3,977)
Net cash provided by financing activities	79,983	24,743	(37,289)
Effect on exchange rate changes on cash and cash equivalents and restricted cash	1,014	532	(2,130)
Net increase in cash and cash equivalents and restricted cash	32,657	(17,320)	29,838
Cash and cash equivalents and restricted cash at the beginning of year	60,706	94,377	77,589
Cash and cash equivalents and restricted cash at the end of year	94,377	77,589	105,297

Operating Activities

Net cash provided by operating activities amounted to US\$71.1 million in 2022, which was mainly attributable to non-cash items of US\$181.6 million and a net increase in working capital of US\$92.3 million, partially offset by net loss of US\$202.8 million. The non-cash items of US\$181.6 million were primarily attributable to goodwill impairment of US\$80.1 million, impairment on intangible assets of US\$49.8 million, allowance for credit losses on accounts receivable of US\$18.5 million, impairment on long-term investments of US\$10.8 million, provision of loan and other receivables of US\$11.2 million, and fair value change on contingent consideration payable of US\$8.4 million. The net increase in working capital of US\$92.3 million was primarily attributable to decrease in accounts receivable of US\$104.0 million and decrease in prepaid media cost of US\$17.5 million, partially offset by decrease in accounts payable of US\$24.9 million, and decrease in deferred revenue of US\$6.9 million.

Net cash used in operating activities amounted to US\$19.7 million in 2021, which was mainly attributable to a net loss of US\$16.6 million and a net decrease in working capital of US\$37.4 million, partially offset by non-cash items of US\$34.3 million. The net decrease in working capital of US\$37.4 million was primarily attributable to increase in accounts receivable of US\$58.6 million and decrease in deferred revenue of US\$5.3 million, partially offset by an increase in accounts payable of US\$23.4 million. The non-cash items of US\$34.3 million were primarily attributable to allowance for credit losses on accounts receivable of US\$12.4 million, share-based compensation expenses of US\$13.5 million and impairment on long-term investments of US\$4.0 million.

Net cash used in operating activities amounted to US\$19.6 million in 2020, which was mainly attributable to a net loss of US\$14.9 million and a net decrease in working capital of US\$34.9 million, partially offset by non-cash items of US\$30.2 million. The net decrease in working capital of US\$34.9 million was primarily attributable to decrease in accounts payable of US\$23.3 million, and increase in prepaid media cost and rebate receivables of US\$8.4 million and US\$5.0 million, respectively. The non-cash items of US\$30.2 million were primarily attributable to fair value loss on derivative liabilities and convertible notes of US\$11.5 million and US\$4.4 million, respectively, share based compensation of US\$6.2 million, and amortization of intangible assets and right-of-use assets of US\$6.1 million.

Investing Activities

Net cash used in investing activities in 2022 was US\$4.0 million, due to US\$7.7 million and US\$6.5 million for acquisition of businesses and long-term investments, respectively, partially offset by cash inflow from time deposits of US\$11.1 million.

Net cash used in investing activities in 2021 was US\$22.4 million, due to an increase in time deposits of US\$11.0 million, US\$10.9 million of net loan amount to third parties, US\$10.0 million and US\$4.5 million for acquisition of businesses and long-term investments respectively, partially offset by a decrease in short-term investments of US\$15.6 million.

Net cash used in investing activities in 2020 was US\$27.7 million, due to an increase in short-term investments of US\$22.3 million, prepaid long-term investment costs and other long-term investments of US\$1.9 million and US\$7.1 million, respectively.

Financing Activities

Net cash used in financing activities in 2022 was US\$37.3 million, which was primarily attributable to net repayments of bank borrowings of US\$29.8 million and share repurchase amounting to US\$7.6 million.

Net cash provided by financing activities in 2021 was US\$24.7 million, which was primarily attributable to net proceeds from bank borrowings of US\$17.8 million and net proceeds from issuance of ordinary shares upon subscription from Baozun Inc. of US\$17.0 million respectively, partially offset by share repurchase amounting to US\$10.7 million.

Net cash provided by financing activities in 2020 was US\$80.0 million, which was primarily attributable to net proceeds from follow-on and private placement of US\$53.4 million and US\$18.5 million respectively.

Credit Facilities

In March 2019, we entered into a facility agreement with a commercial bank, which provides for a one-year factoring loans of HK\$24.0 million (US\$3.1 million). We provide corporate guarantee and accounts receivable as pledge to secure our obligations under this revolving loan. The interest rate of this loan facility was at 4.25% per annum over 1-month Hong Kong Interbank Offered Rate ("HIBOR") for loan in HK\$, 2.00% per annum over 1-month HIBOR for loan in RMB, or 4.25% per annum over 1-month London Interbank Offered Rate ("LIBOR") for loan in US\$. The interest rate of facilities in US\$ was amended to 4.32% over US\$ reference rate from April 2022. As of December 31, 2022, the total outstanding amount of the revolving loan was HK\$31.6 thousand (US\$4.1 thousand).

In April 2019, we entered into a facility agreement for working capital loans with a commercial bank. The loan facility provides for a one-year revolving loan of US\$13.6 million, which is supported by standby documentary credit facilities of US\$15.0 million. In April 2021, this loan was subsequently amended. The amended agreement provides for a one-year revolving loan of US\$50.0 million. We provide corporate guarantee, deposits and accounts receivable as pledge to secure our obligations under this revolving loan. The interest rate of this loan facility is either (i) 5.22% in RMB, or (ii) 1-month LIBOR plus 3.00% per annum if the loan is drawn down in US\$. As of December 31, 2022, the total outstanding amount of the revolving loan was RMB127.4 million (US\$18.4 million).

In August 2019, we entered into two facility agreements for working capital loans with a commercial bank, which provide for (i) a one-year revolving loan of RMB18.5 million (US\$2.7 million) and (ii) a one-year revolving loan of US\$1.6 million, respectively. We provide corporate guarantee and deposits as pledge to secure our obligations under this revolving loan. The interest rate of this loan facility was the benchmark interest rate determined by the People's Bank of China for loans over one year granted by financial institutions plus 0.97% per annum. This loan was subsequently renewed in September 2019 and August 2020. The one-year revolving loan of US\$1.6 million was replaced by a one-year revolving loan of RMB11.5 million (US\$1.7 million). The interest rate of these facilities is 3.60% per annum and reduced to 3.00% in August 2021. As of December 31, 2022, we had no outstanding balance under this revolving loan.

In October 2019, we entered into a one-year facility agreement for working capital loans with a commercial bank, which provides for (i) US\$15.0 million standby documentary credit facilities, (ii) US\$10.0 million combined limit for pre-shipment buyer loan and revolving loan, and (iii) US\$1.0 million overdraft facilities. We provide corporate guarantee and bank deposits as pledge to secure our obligations under these loan facilities. In March 2021, this loan was subsequently amended, which provides for (i) US\$15.0 million combined limit for pre-shipment buyer loan and post-shipment buyer loan, (ii) US\$6.0 million revolving loan, and (iii) US\$1.0 million overdraft facilities. For the pre-shipment buyer loan and post-shipment buyer loan, the interest rate is at either (i) HIBOR plus 3.85% per annum if the loan is drawn down in US\$. For the revolving loan, the interest rate is at either (i) HIBOR plus 4.25% per annum if the loan is drawn down in HK\$, or (ii) LIBOR plus 4.25% per annum if the loan is drawn down in US\$. For the overdraft facility, the interest rate is at the bank's US\$ best lending rate. From April 2022, interest rate of the pre-shipment buyer loan and post-shipment buyer loan in US\$ was amended to 3.95% over US\$ reference rate, and interest rate of the revolving loan in US\$ was amended to 4.35% over US\$ reference rate. We had no outstanding balance under these loan facilities as of December 31, 2022.

In December 2019, we entered into a facility agreement for working capital loans with a commercial bank, which provide for a half-year revolving loan of RMB50.0 million (US\$7.2 million). We provide corporate guarantee and accounts receivable of certain subsidiaries to secure our obligations. It was subsequently renewed and amended in December 2020 and December 2021. The amended agreement provides for a half-year revolving loan of RMB80.0 million (US\$11.6 million). The interest rate of this facility was 6.35%, reduced to 6.25% in December 2021, and reduced to 5.00% in December 2022. As of December 31, 2022, the total outstanding amount of this revolving loan was RMB80.0 million (US\$11.6 million).

In December 2019, we entered into a facility agreement for working capital loans with a commercial bank, which provide for one-year revolving loan of RMB50.0 million (US\$7.2 million). We provide corporate guarantee and deposits as pledge to secure our obligations under this revolving loan. It was subsequently renewed and amended in December 2020. The interest rate of this loan facility was subsequently amended to 3.00% per annum. As of December 31, 2022, the total outstanding amount of this revolving loan was RMB30.0 million (US\$4.3 million).

In August 2020, we entered into a bank acceptance draft discount facility agreement with a commercial bank, which provides for a revolving loan of RMB40.0 million (US\$5.8 million). The interest rate of this loan facility is based on cost of funding at the time of discounting plus a risk premium depending on the accepting bank's credit rating. As of December 31, 2022, we had no outstanding balance under this revolving loan.

In October 2020, we entered into a facility agreement for working capital loans with a commercial bank, which provide for one-year revolving loan of RMB100.0 million (US\$14.5 million). We provide corporate guarantee and deposits as pledge to secure our obligations under this revolving loan. The interest rate of this loan facility is fixed at 3.25% per annum and reduced to 3.00% in August 2021. As of December 31, 2022, the total outstanding amount of this revolving loan was RMB54.5 million (US\$7.9 million).

In February 2021, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a revolving loan of RMB220.0 million (US\$31.8 million). The interest rate of this loan facility is fixed at 4.00% per annum. As of December 31, 2022, we had no outstanding balance under this loan.

In April 2021, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a one-year non-revolving loan of RMB20.0 million (US\$2.9 million). The interest rate of this loan facility is 0.50% over loan prime rate ("LPR"). As of December 31, 2022, we had no outstanding balance under this loan.

In December 2021, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a revolving loan of US\$30.0 million. The interest rate of this loan facility is LIBOR plus 0.70% (or higher) per annum over the bank's cost of funds. As of December 31, 2022, we had no outstanding balance under this revolving loan.

In February 2022, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a one-year non-revolving loan of RMB3.5 million (US\$0.5 million). The interest rate of this loan facility is fixed at 4.00% per annum. As of December 31, 2022, the total outstanding amount of this loan was RMB3.5 million (US\$0.5 million).

In March 2022, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a one-year non-revolving loan of RMB20.0 million (US\$2.9 million). The interest rate of this loan facility is fixed at 3.90% per annum. As of December 31, 2022, the total outstanding amount of this loan was RMB2.0 million (US\$0.3 million).

In May 2022, we entered into a facility agreement for working capital loans with a commercial bank, which provides for a non-revolving loan of RMB9.0 million (US\$1.3 million) until June 2023. The interest rate of this loan facility is LPR minus 0.05%. As of December 31, 2022, the total outstanding amount of this loan was RMB9.0 million (US\$1.3 million).

As of December 31, 2020, no financial covenants as set out in these loan agreements have been breached. As of December 31, 2021, certain financial covenant (minimum quarterly EBITDA as defined in the banking facilities agreements) as set out in these loan agreements have been breached. We have obtained waiver letter such that the bank would not demand immediate repayment. As of December 31, 2022, no financial covenants as set out in these loan agreements have been breached.

Out of our banking facilities of US\$213.3 million and US\$165.3 million available as of December 31, 2021 and 2022, respectively, US\$75.5 million and US\$44.3 million have been utilized by us as of December 31, 2021 and 2022, respectively. As of December 31, 2022, total unutilized revolving, service trade and term loan facilities amounted to US\$97.4 million, US\$18.1 million and US\$5.5 million (December 31, 2021: US\$115.4 million, US\$18.0 million and US\$4.4 million respectively). Total undrawn facilities available for drawdown as of December 31, 2022, net of bank deposits that would need to be pledged as restricted cash upon utilization of the facilities, amounted to US\$41.2 million. Subsequent to December 31, 2022, available facilities from certain banks to the Group were reduced whereby total undrawn facilities available for drawdown, net of bank deposits that would need to be pledged as restricted cash upon utilization of the facilities as of February 28, 2023 would be US\$17.4 million.

Other than those shown in "—Credit Facilities," we did not have any significant capital and other commitments, long-term obligations, or guarantees as of December 31, 2022.

Capital Expenditures

We made capital expenditures of US\$1.1 million, US\$1.6 million and US\$0.5 million in 2020, 2021 and 2022, respectively. In these periods, our capital expenditures were mainly used for the purchase of property and equipment. We will continue to make capital expenditures to support our business.

Material Cash Requirements

Our material cash requirements as of December 31, 2022 and any subsequent interim period primarily include our bank borrowings, operating lease obligations, purchase obligations and investment commitment obligations.

Holding Company Structure

iClick Interactive Asia Group Limited is a Cayman Islands exempted limited liability company, used as a holding company with no material operations of its own. We conduct our operations primarily through our wholly-owned subsidiaries, our consolidated VIE entities in China. As a result, our ability to pay dividends depends upon dividends paid by our PRC subsidiaries. If our PRC subsidiaries or any newly formed subsidiaries incur debt on their own behalf in the future, the instruments governing their debt may restrict their ability to pay dividends to us. In addition, our wholly-owned subsidiaries 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 wholly-owned PRC subsidiaries and consolidated affiliated entities is required to set aside at least 10% of its after-tax profits each year, if any, to fund a statutory reserve until such reserve reaches 50% of its registered capital. Although the statutory reserves can be used, among other ways, to increase the registered capital and eliminate future losses in excess of retained earnings of the respective companies, the reserve funds are not distributable as cash dividends except in the event of liquidation. Remittance of dividends by a wholly foreign-owned company out of China is subject to examination by the banks designated by SAFE. We currently plan to reinvest all earnings from our PRC subsidiaries to their business developments and do not plan to request dividend distributions from them.

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

See "Item 4. Information On the Company—B. Business Overview—Research and Development" and "—Intellectual Property."

D. <u>Trend Information</u>

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events since January 1, 2021 that are reasonably likely to have a material effect on our net revenues, income, profitability, liquidity or capital resources, or that would cause reported consolidated financial information not necessarily to be indicative of future operating results or financial condition.

E. <u>Critical Accounting Estimates</u>

Our discussion and analysis of our financial condition and results of operations relates to our consolidated financial statements, which have been prepared in accordance with United States of America generally accepted accounting principles ("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: (i) the accounting estimate requires us to make assumptions about matters that were highly uncertain at the time the accounting estimate was made, and (ii) 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.

Management has discussed the development and selection of these critical accounting estimates with the Audit Committee of our Board of Directors. There are other items within our 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, see "Notes to Consolidated Financial Statements – Note 2 Principal accounting policies".

Impairment assessment of goodwill

Nature of estimate: Goodwill is subject to periodic assessments of impairment. We conduct a goodwill impairment test at the reporting unit level annually in the fourth quarter, or more frequently when events or circumstances occur indicating that the recorded goodwill may be impaired. We assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If a qualitative assessment identifies a possible impairment or we impair the assets of a reporting unit, then a quantitative goodwill impairment test is performed. If the carrying value of the reporting unit is above fair value, an impairment loss is recognized in an amount equal to the excess.

We have two reporting units, which include (i) the Marketing Solutions business and (ii) the Enterprise Solutions business. Our consolidated goodwill balance was nil as of December 31, 2022.

Assumptions: We estimate the fair values of our Marketing Solutions and Enterprise Solutions reporting units using the market approach and the income approach, respectively as of December 31, 2021. During the year ended December 31, 2022, due to our plan to strategically downsize the Marketing Solutions reporting unit, we considered the identification of companies comparable to the downsized Marketing Solutions reporting unit under a market approach using the guideline public company method to be not practical whereby the use of an income approach to estimate the fair value of Marketing Solutions reporting unit as of December 31, 2022 is considered to be more appropriate. Therefore, we determine the fair values of both Marketing Solutions reporting unit and the Enterprise Solutions reporting unit as of December 31, 2022 based on an income approach.

The market approach considers revenue multipliers based on market data of comparable companies engaged in similar operations and economic characteristics. The income approach considers a number of factors that include expected future cash flows, revenue growth rates, an estimated terminal value using a terminal year long-term future growth rate, a discount rate, and requires us to make certain assumptions and estimates regarding future profitability of the business. The goodwill impairment assessment is sensitive to our estimates in these factors. Some of the inherent estimates and assumptions used in determining fair value of the reporting units are outside the control of management, including interest rates, cost of capital, tax rates and market multiples on revenue for comparable entities. While we believe we have made reasonable estimates and assumptions to calculate the fair value of the reporting units, it is possible a material change could occur. If our actual results are not consistent with our estimates and assumptions used to calculate fair value, it could result in material impairments of our goodwill.

Based on the annual impairment test conducted for the years ended December 31, 2020 and 2021, the fair value of the reporting unit exceeded the carrying value, indicating that the goodwill was not impaired.

Based on the periodic impairment tests conducted for the year ended December 31, 2022, the carrying value of the reporting unit exceeded the fair value and indicating that the goodwill was fully impaired for both Marketing Solutions and Enterprise Solutions reporting units. The goodwill impairment in Marketing Solutions reporting unit was affected by (i) decline in marketers' advertising budgets, and the potential liquidity issue and the difficulty to settle trade debts, due to the slowdown of China's entire advertising sector growth as a result of changing regulatory environment, and unpredictable macro environment continued at post-pandemic era in which marketers are still cautious on advertising spending; and (ii) larger scale of strategic unwind lower margin, higher risk clients under Marketing Solutions segment because of the difficulty in obtaining additional equity financing from the capital market and debt financing from banks, which lead to the execution of balancing working capital management and business growth. The goodwill impairment in Enterprise Solutions reporting unit was affected by (i) slowdown of Chinese economy and unpredictable macro-economic environment, which consumers are shifting priorities towards cost-cutting measures rather than investing in new technology, causing them to tighten IT budgets and spending of digitalization products and services; (ii) higher competitive SaaS market, which we have to increase cost to develop more new SaaS related offerings as well as enhance additional research and development capacity, and revisit our pricing strategy with a downward pricing pressure; and (iii) limited additional equity financing from the capital market and debt financing from banks hinder our business expansions and penetration to new markets.

Impairment assessment of long-lived assets other than goodwill

Long-lived assets other than goodwill are tested at the level of the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

Nature of estimate: We test long-lived asset groups for impairment when an event occurs or circumstances change that indicate the asset groups may be impaired. When a triggering event occurs, a test for recoverability is performed, comparing projected undiscounted future cash flows to the carrying value of the asset group. If the test for recoverability identifies a possible impairment, the asset group's fair value is measured relying primarily on a discounted cash flow method. Judgment is used in estimating future cash flows, determining appropriate discount rates and making other assumptions. Changes in these estimates and assumptions could materially affect the determination of the asset group's fair value. An impairment charge is recognized for the amount by which the carrying value of the asset group exceeds its estimated fair value. When an impairment loss is recognized for assets to be held and used, the adjusted carrying amounts of those assets are depreciated over their remaining useful life.

Assumptions and Approach Used: Fair value of an asset group is determined from the perspective of a market-participant considering, among other things, appropriate valuation techniques, the most advantageous market, and assumptions about the highest and best use of the asset group. We measure the fair value of an asset group based on market prices (i.e., the amount for which the asset could be sold to a third party) when available. When market prices are not available, we generally estimate the fair value of the asset group using the income approach. The income approach uses cash flow projections. Inherent in our development of cash flow projections are assumptions and estimates derived from a review of our operating results, business plan forecasts, expected growth rates, and risk adjusted discount rates, similar to those a market participant would use to assess fair value. We also make certain assumptions about future economic conditions and other data. Many of the factors used in assessing fair value are outside the control of management, and these assumptions and estimates may change in future periods. Changes in assumptions or estimates can materially affect the fair value measurement of an asset group and, therefore, can affect the test results.

No impairment charge for long-lived assets and intangible assets was recognized for the years ended December 31, 2020 and 2021 given no such events nor changes in circumstances are noted in these fiscal years. We recorded impairment of US\$1.2 million, US\$2.4 million and US\$49.8 million on fixed assets, right-of-use assets and intangible assets respectively for the year ended December 31, 2022, as a result of (i) decline in marketers' advertising budgets, and the potential liquidity issue and the difficulty to settle trade debts, due to the slowdown of China's entire advertising sector growth as a result of changing regulatory environment, and unpredictable macro environment continued at post-pandemic era in which marketers are still cautious on advertising spending; and (ii) larger scale of strategic unwind lower margin, higher risk clients under Marketing Solutions segment because of the difficulty in obtaining additional equity financing from the capital market and debt financing from banks, which lead to the execution of balancing working capital management and business growth.

Fair value determination related to the accounting for business combinations

Nature: We completed business combinations in 2020 and 2021 which require us to perform purchase price allocations. We allocate the fair value of purchase consideration to the tangible assets acquired, liabilities assumed, and intangible assets acquired, including amounts attributed to noncontrolling interests based on their estimated fair values at the date of acquisition. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Allocation of purchase consideration to identifiable assets and liabilities affects our amortization expense, as acquired finite-lived intangible assets are amortized over the useful life, whereas any indefinite lived intangible assets, including goodwill, are not amortized.

Assumptions: In order to recognize the fair values of assets acquired and liabilities assumed, mainly consisting of intangible assets and goodwill, we use various models such as relief-from-royalty and multi-period excess earnings to value intangible assets and discounted cash flow to value goodwill. We make estimates and assumptions about projected future cash flows including sales growth, operating margins, attrition rates, and discount rates based on historical results, business plans, expected synergies, perceived risk and marketplace data considering the perspective of marketplace participants. Determining the useful life of an intangible asset also requires judgment as different types of intangible assets will have different useful lives and certain assets may be considered to have indefinite useful lives. For significant acquisitions we may use independent third-party valuation specialists to assist us in determining the fair values of assets acquired and liabilities assumed.

While we believe those expectations and assumptions are reasonable, they are inherently uncertain. Unanticipated market or macro-economic events and circumstances may occur, which could affect the accuracy or validity of the estimates and assumptions, which could result in subsequent impairments.

Impairment assessment of investments in equity securities without readily determinable fair value

Nature: We measure certain financial instruments at fair value on a nonrecurring basis, consisting primarily of our equity securities without readily determinable fair value. These investments are accounted for under the measurement alternative and are measured at cost, less impairment, subject to upward and downward adjustments resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. These adjustments require quantitative assessments of the fair value of equity securities, primarily using a market approach. These investments are also evaluated for impairment, based on qualitative factors and events including (i) adverse performance of investees; (ii) adverse industry developments affecting investees; and (iii) adverse regulatory, social, economic or other developments affecting investees and (iv) valuation methods and key valuation assumptions and data used in estimating the impairment amounts. If a qualitative assessment indicates that the investment is impaired, we estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, we recognize an impairment loss in net income equal to the difference between the carrying value and fair value. We recognized impairment losses of US\$4.0 million and US\$10.8 million for the years ended December 31, 2021 and 2022, respectively.

Assumptions: These judgements include valuation methods and key valuation assumptions and estimates used in estimating impairment amounts. The quantitative assessment requires the use of unobservable inputs, such as selection of comparable companies and multiples, and discount for lack of marketability. For the assessment of impairment based on qualitative factors, it considers the companies' financial and liquidity position and access to capital resources, among others. When our assessment indicates that an impairment exists, we write down the investment to its fair value. Our estimates of these inputs require subjective management judgment and are inherently uncertain. The fair value of equity securities is sensitive to changes in the unobservable inputs used to determine fair value. While we believe we have made reasonable estimates and assumptions to calculate the fair value of the equity securities, it is possible a material change could occur. As a result, if factors change and different assumptions are used, the fair value of the equity securities could be significantly different from what we recorded in the reporting period. When one of our estimates of a discount for lack of marketability and price-to-sales multiples of comparable companies decreased/increased by 5% while holding all other estimates constant, there would be no significant impact to our consolidated results of operations.

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.

Directors and Executive Officers	Age	Position/Title
Jian Tang	46	Chairman of the Board, Chief Executive Officer and Co-Founder
Wing Hong Sammy Hsieh	50	Director and Co-Founder
Lub Bun Chong	56	Director
Matthew Chu Pong Fong	42	Director
Dylan Huang	48	Director
Philip Kan	67	Director
David Zhang	50	Director and Chief Financial Officer

Mr. Jian Tang is our chairman of the board, chief executive officer and co-founder and has served as our chief operating officer since January 2016 and our chief technology officer since November 2016. Mr. Tang has approximately 20 years of experience in digital advertising and is well-known in the area of advertising technologies and big data in China. Prior to joining us, Mr. Tang founded OptAim in 2012, which was later acquired by us in July 2015. Prior to founding OptAim, Mr. Tang was Tencent's engineering director of Advertising Platform Department who helped initiate and develop Tencent's programmatic ad exchange platform. Mr. Tang had also served key research and engineering and management roles at Yahoo's global research and development center, Baidu and Microsoft Research from 2005 to 2011, where he led a number of major technical and research and development projects. Mr. Tang received his doctor's degree in computer engineering from Tsinghua University. Mr. Tang was named by Campaign Asia as one of the leaders in its Digital A-List in 2016.

Mr. Wing Hong Sammy Hsieh is our director and co-founder and served as our chief executive officer from 2009 to 2019. Prior to founding our company, Mr. Hsieh held senior positions in a number of prominent technology companies. Mr. Hsieh was general manager for Asia Pacific at Efficient Frontier (now an Adobe company), a leading digital performance marketing company in 2008. Prior to that, Mr. Hsieh was director of Search Marketing at Yahoo Hong Kong during 2000 to 2008, during which he oversaw the business operations, including sales, marketing, business development and product management. Mr. Hsieh also held various sales and marketing positions at the LVMH Group and British American Tobacco earlier in his career. Mr. Hsieh received his bachelor's degree in economics from the University of California, Los Angeles.

Mr. Lub Bun Chong has served as our director since July 2019. Mr. Chong is currently a partner of C Consultancy Limited, a Hong Kong-based corporate and financial advisory firm which specializes in the advertising, digital and media sectors of China and Southeast Asia. Prior to founding C Consultancy Limited, he was the chief financial officer and the director of mergers and acquisitions of Clear Media (00100.HK), and the chief financial officer of Focus Media (002027.SZ). Mr. Chong previously worked at PricewaterhouseCoopers in China, Hong Kong and Singapore during the 1990s. Mr. Chong is the author of "Managing a Chinese Partner" (published by Palgrave Macmillan) and a contributor of China articles to reputable publications. Mr. Chong received his bachelor's degree of accountancy from National University of Singapore and his MBA degree with merit from Manchester Business School. Mr. Chong is a chartered accountant in Singapore.

Mr. Matthew Chu Pong Fong has served as our director since January 2020. Mr. Fong has more than 10 years of professional experience in auditing, corporate finance and financial management for both private and listed corporations. He held multiple financial leadership positions, including as a manager at a Hong Kong-based multi-strategy private investment fund, from 2015 to 2017, and the chief financial officer of Fornton Group Limited, a knitwear manufacturer, from 2011 to 2014. Mr. Fong also led teams in performing financial audit-related engagements including initial public offering and acquisition at Ernst & Young from 2007 to 2009. Mr. Fong obtained his bachelor degree in accountancy from The Hong Kong Polytechnic University in 2003 and is currently a fellow member of the Association of Chartered Certified Accountants.

Mr. Dylan Huang has served as our director since December 2017. Mr. Huang has served as senior vice president of Meituan-Dianping since 2017. Mr. Huang served as the corporate vice president, group chief technology officer and general manager at Tencent Online Media Group from 2008 to 2017, leading its media's mobile initiative. He was the senior lead program manager, program manager, software design engineer and software design engineer in test at Microsoft Corporation from 2001 to 2008. Mr. Huang received his bachelor's degree in electrical engineering from Zhejiang University and his MBA degree from Washington Business School.

Mr. Philip Kan has served as our director since January 2021. Mr. Kan has extensive experience in management, finance, banking, capital market, information technology, risk management, corporate governance and corporate development. Mr. Kan has been the responsible officer, director and the senior management of several financial institutions regulated by SFC since 2003. Mr. Kan was the founder and a director of Galileo Capital Group Ltd (HKEX:8029) from July 2000 to October 2008, a boutique corporate finance house providing services in co-sponsoring IPOs, shares placement, M&A, assets management and financial advisory. Prior to founding Galileo Capital Group Ltd, Mr. Kan held senior positions in a number of prominent companies. Mr. Kan was the senior vice president for First Pacific Bank Limited, oversees the centralized banking services units (i.e. processing support units) and the Information Technology Division of the Bank. Prior to that, Mr. Kan was the manager of Systems & Operations at HSBC from 1987 to 1992. Mr. Kan also held various management positions at the AIG Finance (HK) Ltd, General Electric Co and Bank of America earlier in his career. Mr. Kan received his MBA degree from Henley Management College, Brunel University in the United Kingdom. Mr. Kan also held a Fellow Membership of the Chartered Institute of Management (FCIM) and the Institute of Management Services (FMS) in the United Kingdom. Mr. Kan is currently a member of the Disciplinary Panel of the Hong Kong Institute of Certified Public Accountants.

Mr. David Zhang has served as our director and chief financial officer since January 31, 2022. Prior to joining iClick, Mr. Zhang served in senior management roles and advisory capacities at Big Four accounting firms and conglomerates listed on the Hong Kong and US stock exchanges. He received a bachelor's degree in accounting from the University of Shanghai for Science and Technology and studied civil law in Peking University. Mr. Zhang is a Member of the Chinese Institute of Certified Public Accountants. He holds qualification as a PRC lawyer.

Board Diversity Disclosure

The following information was provided by our directors on a voluntary basis.

Board Diversity Matrix (As of the date of this annual report)

Country of Principal Executive Offices	Hong Kong, China
Foreign Private Issuer	Yes
Disclosure Prohibited Under Home Country Law	No
Total Number of Directors	7
	Female Male Non-Binary Did not disclose
Part I: Gender Identity	
Directors	0 7 0 0
Part II: Demographic Background	
Underrepresented Individual in Home Country Jurisdiction	0
LGBTQ+	0
Did Not Disclose Demographic Background	0

Employment Agreements and Indemnification Agreements with Executive Officers

We have entered into employment agreements with each of our executive officers.

Term and Termination

Pursuant to these agreements, we will be entitled to terminate a senior executive officer's employment for cause at any time without remuneration for certain act of dishonesty, serious misconduct or any other act that justifies immediate dismissal of the officer, or if that officer is precluded by law from performing his duty as an officer. We may also terminate a senior executive officer's employment by giving three months' prior written notice or three months' salary if the senior executive officer is not qualified for his position after we provide relevant training to him. A senior executive officer may terminate his or her employment at any time by giving three months' prior written notice.

Confidentiality; IP

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence and not to use, except as required in the performance of his or her duties in connection with the employment or pursuant to applicable law, any of our confidential information, including but not limited to, trade secrets, any information concerning the process, system, data, financials, dealings or other confidential business information. The executive officers have also agreed that all intellectual property rights which they conceive, develop, write or otherwise created in the course of their employment, whether during or outside normal working hours, will be vested solely in us, and the officers will, at our request and expense, execute such assignments and assurances as may be reasonably necessary to perfect our ownership of those rights.

Non-Competition and Non-Solicitation

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 six months following the last date of employment, unless otherwise agreed. Specifically, during such term each executive officer has agreed not to (i) directly or indirectly engage or involve in any business which is in competition with us; (ii) directly or indirectly canvass or solicit from our clients any goods or services similar to ours; and (iii) entice, endeavor to entice, persuade or procure away any of our employees.

Indemnification Agreements

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

B. <u>Compensation of Directors and Executive Officers</u>

For the year ended December 31, 2022 we paid an aggregate of approximately US\$0.3 million in cash to our executive officers, and we paid an aggregate of approximately US\$0.2 million to our non-executive directors. Subject to the requirements under the applicable laws, we have not set aside or accrued any amount to provide pension, retirement or other similar benefits to our executive officers and directors. Our PRC subsidiaries and variable interest entity are required by law to make contributions based on the insurance scales set forth by the local government for employees' pension insurance, medical insurance, unemployment insurance and other statutory benefits and a housing provident fund. Our Hong Kong subsidiaries are required by the Hong Kong Mandatory Provident Fund Schemes Ordinance to make monthly contributions to the mandatory provident fund scheme in an amount equal to at least 5% of an employee's salary.

Share Incentive Plans

2018 Plan

Under the 2018 Plan, the maximum number of ordinary shares that may be issued to the beneficiaries is 2,398,137, which have been issued to Arda as trustee to the beneficiaries of the 2018 Plan. As of March 31, 2023, options to purchase 274,830 ordinary shares are outstanding, including vested and unexercised options to purchase 274,830 ordinary shares.

The following paragraphs describe the principal terms of the 2018 Plan.

Type of Awards. The 2018 Plan permits the award of options to purchase our ordinary shares.

Trustee. Mr. Wing Hong Sammy Hsieh through Arda upon trust serves as the trustee to the beneficiaries of the 2018 Plan. Upon a grantee's exercise of any options awarded under the 2010 Plan, the trustee shall hold the resulting ordinary shares until a public offering of our ordinary shares on a stock exchange or if our board of directors decides to transfer the ordinary shares to the grantee, and until either of such transfer events, the trustee shall pay cash or other dividend payments on these ordinary shares to the grantee. The trustee shall only deal with the trust properties in such manner as our board of directors from time to time directs in writing.

Award Agreement. Any award granted under the 2018 Plan is evidenced by an award agreement that sets forth terms, conditions and limitations on such award, which may include the number of options awarded, the exercise price, the vesting schedule, the provisions applicable in the event of the grantee's employment or service terminates, among others. We may amend or delete the terms of any award from time to time, provided that no such amendment shall impair the rights and benefits of any participant without his or her consent.

Eligibility. We may grant awards to employees of our company or any of our subsidiaries.

Vesting Schedule. Unless otherwise stated in respective grants, subject to forfeiture and arrangement on termination of employment or service, 25% of the share options shall be vested at the one-year anniversary of the grant date and 1/36 of the remaining 75% of the shares options shall be vested per month thereafter. In the event a take-over offer is made to our ordinary shares, we will use our best endeavors to procure that such take-over offer be extended to any ordinary shares that may be allotted pursuant to the exercise of unexercised share options.

Exercise of Options. Vested options will become exercisable during the first five business days of January, April, July and October until the termination date of the 2018 Plan, subject to other terms and conditions provided in the relevant award agreements. Once all the preconditions are met, a participant may exercise options in whole or in part by giving written notice of exercise to us specifying information such as the number of shares to be purchased.

Transfer Restrictions. The participant will not be permitted to transfer, assign, dispose of, or create or purport to create any encumbrances over any option. In principle, all options shall be exercisable only by the participants. Any such transfer, assignment, disposal or encumbrance or purported encumbrance shall result in the automatic cancellation of the option.

Termination and amendment of the 2018 Plan. Our board of directors may amend or discontinue the 2018 Plan, provided that such amendment or termination shall not impair the rights of a participant under any award without such participant's consent.

The following table summarizes, as of March 31, 2023, the outstanding options granted under the 2018 Plan to our directors, executive officers and other grantees.

<u>Name</u>	Ordinary Shares Underlying Outstanding Options	Exercise Price (US\$/Share)	Grant Date	Expiration Date
Jian Tang	*	0.2687—4.0304	August 1, 2015	August 1, 2025
Other grantees			August 18,	October 1,
			2014 to July 1,	2024 to April
	*	0.3224—20.0000	2017	1, 2027

Less than 1% of our total outstanding ordinary shares.

2017 and 2018 Performance-Based Incentive Shares

In December 2016, our board of directors and shareholders authorized the issuance of 1,068,114 ordinary shares to Mr. Jian Tang and certain other employees in China upon the fulfillment of certain performance conditions in 2017, and the issuance of 801,086 ordinary shares to Mr. Jian Tang and certain other employees in China upon the fulfillment of certain performance conditions in 2018.

Since the performance conditions were not fulfilled in 2017 and 2018, the 1,068,114 and 801,086 ordinary shares were not issued to Mr. Jian Tang and certain other employees.

Post-IPO Plan

Under our Post-IPO Plan, previously named as 2017 Share Incentive Plan, which became effective in December 2017, is to promote the success of our business. On September 22, 2018, August 31, 2020, February 26, 2021 and December 31, 2021, our board of directors approved an increase of 1,500,000 Class A ordinary shares, 1,000,000 Class A ordinary shares, and 1,500,000 Class A ordinary shares, respectively, to the award pool under the Post-IPO Plan. As a result, the maximum number of ordinary shares which may be issued pursuant to all awards under the Post-IPO Plan will initially be 6,000,000 Class A ordinary shares, plus an annual increase on the first day of each of our fiscal year during the term of the Post-IPO Plan commencing with the fiscal year beginning January 1, 2018, by an amount equal to the least of (i) 0.5% of the total number of Class A ordinary shares issued and outstanding on the last day of the immediately preceding fiscal year; (ii) 150,000 Class A ordinary shares or (iii) such number of Class A ordinary shares as may be determined by our board of directors. All of such shares will be Class A ordinary shares. As of March 31, 2023, the award pool under the Post-IPO Plan is 6,791,374 Class A ordinary shares. As of March 31, 2023, 427,880 Class A ordinary shares are outstanding under our Post-IPO Plan, representing the shares underlying the unvested 427,880 restricted Class A ordinary shares units.

The following paragraphs describe the principal terms of the Post-IPO Plan.

Types of Awards. The Post-IPO Plan permits the awards of options, restricted shares and restricted share units.

Plan Administration. Our board of directors or a committee of one or more members of the board of directors will administer the Post-IPO Plan. The committee or the full board of directors, as applicable, will determine the participants to receive awards, the type and number of awards to be granted to each participant, and the terms and conditions of each award grant.

Award Agreement. Awards granted under the Post-IPO Plan are evidenced by an award agreement that sets forth terms, conditions and limitations for each award, which may include the term of the award, the provisions applicable in the event of the grantee's employment or service terminates, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind the award.

Eligibility. We may grant awards to our employees, directors and consultants of our company. However, we may grant options that are intended to qualify as incentive share options only to our employees and employees of our parent companies and subsidiaries.

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

Exercise of Options. The plan administrator determines the exercise price for each award, which is stated in the award agreement. The vested portion of option will expire if not exercised prior to the time as the plan administrator determines at the time of its grant. However, the maximum exercisable term is ten years from the date of a grant.

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

Termination and amendment of the Post-IPO Plan. Unless terminated earlier, the Post-IPO Plan has a term often years. Our board of directors has the authority to amend or terminate the plan subject to shareholder approval to the extent necessary to comply with applicable law. Shareholder approval is required for any amendment to the Post-IPO Plan that (i) increases the number of shares available under the Post-IPO Plan, or (ii) permits the plan administrator to extend the term of the Post-IPO Plan or the exercise period for an option beyond ten years from the date of grant.

C. <u>Board Practices</u>

Our board of directors consists of seven directors, including executive directors and non-executive directors. Pursuant to our ninth amended and restated memorandum and articles of association, the size of our board of directors shall be limited to nine. Please refer to "Item 3. Key Information—D. Risk Factors—Risks Related to Our American Depositary Shares—As a company incorporated in the Cayman Islands, we have adopted certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ corporate governance requirements; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the NASDAQ corporate governance requirements." The powers and duties of our directors include convening general meetings and reporting our board's work at our shareholders' meetings, declaring dividends and distributions, determining our business and investment plans, appointing officers and determining the term of office of the officers, preparing our annual financial budgets and financial reports, formulating proposals for the increase or reduction of our authorized capital as well as exercising other powers, functions and duties as conferred by our articles of association. Our directors may exercise all the powers of our company to borrow money, mortgage its business, property and uncalled capital and issue debentures or other securities whenever money is borrowed or as security for any obligation of our company or of any third party. None of our non-executive directors has a service contract with us that provides for benefits upon termination of service.

A director may vote in respect of any contract or proposed contract or arrangement notwithstanding that he may be interested therein and if he does so his vote shall be counted and he may be counted in the quorum at any meeting of the directors at which any such contract or proposed contract or arrangement is considered. A director who is in any way, whether directly or indirectly, interested in a contract or proposed contract with us is required to declare the nature of his interest at a meeting of our directors. A general notice given to the directors by any director to the effect that he is a member, shareholder, director, partner, officer or employee of any specified company or firm and is to be regarded as interested in any contract or transaction with that company or firm shall be deemed a sufficient declaration of interest for the purposes of voting on a resolution in respect to a contract or transaction in which he has an interest, and after such general notice it shall not be necessary to give special notice relating to any particular transaction.

Committees of the Board of Directors

We are a foreign private issuer (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs are listed on the NASDAQ Global Market. Under Section 5615 of the NASDAQ Stock Market Rules, NASDAQ-listed companies that are foreign private issuers are permitted to follow home country practice in lieu of the corporate governance provisions specified by NASDAQ with limited exceptions. Please refer to "Item 3. Key Information—D. Risk Factors—Risks Related to Our American Depositary Shares—As a company incorporated in the Cayman Islands, we have adopted certain home country practices in relation to corporate governance matters that differ significantly from the NASDAQ corporate governance requirements; these practices may afford less protection to shareholders than they would enjoy if we complied fully with the NASDAQ corporate governance requirements." We have established an audit committee, a compensation committee, and a corporate governance and nominating committee under the board of directors. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee Our audit committee consists of Matthew Chu Pong Fong, Lub Bun Chong, and Dylan Huang, and is chaired by Matthew Chu Pong Fong. Lub Bun Chong, Matthew Chu Pong Fong and Dylan Huang each satisfy the "independence" requirements of the Rule 5605(a)(2) of the Listing Rules of the NASDAQ Stock Market and meet the independence standards under Rule 10A-3 under the Exchange Act. We have determined that each of Matthew Chu Pong Fong, and Lub Bun Chong qualify as "audit committee financial expert." The audit committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. The audit committee is responsible for, among other things:

- selecting the independent registered public accounting firm and pre-screening all auditing and non-auditing services
 permitted to be performed by the independent registered public accounting firm;
- reviewing with the independent registered public accounting firm any audit problems or difficulties and management's response;
- reviewing and approving all proposed related party transactions, as defined in Item 404 of Regulation S-K under the Securities Act;
- discussing the annual audited financial statements with management and the independent registered public accounting firm;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of material control deficiencies;
- annually reviewing and reassessing the adequacy of our audit committee charter;
- meeting separately and periodically with management and the independent registered public accounting firm; and
- reporting regularly to the board of directors.

Compensation Committee Our compensation committee consists of Dylan Huang, Wing Hong Sammy Hsieh and Jian Tang, and is chaired by Dylan Huang. Dylan Huang satisfies the "independence" requirements of the Listing Rules of the NASDAQ Stock Market. The compensation committee will assist the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated upon. The compensation committee is responsible for, among other things:

- reviewing the total compensation package for our executive officers and making recommendations to the board with respect to it;
- reviewing the compensation of our directors and making recommendations to the board with respect to it; and
- periodically reviewing and approving any long-term incentive compensation or equity plans, programs or similar arrangements, annual bonuses, and employee pension and welfare benefit plans.

Corporate Governance and Nominating Committee Our corporate governance and nominating committee consists of Philip Kan, Wing Hong Sammy Hsieh and Jian Tang, and is chaired by Philip Kan. Philip Kan satisfies the "independence" requirements of the Listing Rules of the NASDAQ Stock Market. The corporate governance and nominating committee will assist the board in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The corporate governance and nominating committee will be responsible for, among other things:

- recommending nominees to the board for election or re-election to the board, or for appointment to fill any vacancy on the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, age, skills, experience and availability of service to us; and

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

Duties of Directors

Under Cayman Islands law, our directors have a common law duty to act honestly in good faith with a view to our best interests and for a proper purpose. Our directors also have a duty to act with skill and care. It was previously considered that a director need not exhibit in the performance of his or her duties a greater degree of skill than may reasonably be expected from a person of his or her knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association. We have the right to seek damages if a duty owed by our directors is breached. In limited exceptional circumstances, a shareholder may have the right to seek damages in our name if a duty owed by our directors is breached.

Our board of directors has all the powers necessary for managing, and for directing and supervising, our business affairs. The functions and powers of our board of directors include, among others:

- convening general meetings and reporting our board's work at our shareholders' meetings;
- declaring dividends and distributions;
- determining our business and investment plans;
- appointing officers and determining the term of office of the officers;
- preparing our annual financial budgets and financial reports;
- formulating proposals for the increase or reduction of our authorized capital; and
- exercising other powers, functions and duties as conferred by our articles of association.

Our directors may exercise all the powers of our company to borrow money, mortgage its business, property and uncalled capital and issue debentures or other securities whenever money is borrowed or as security for any obligation of our company or of any third party.

Terms of Directors and Officers

Pursuant to our ninth amended and restated memorandum and articles of association, our board of directors shall have the power from time to time and at any time to appoint any person as a director to fill a casual vacancy on the board or as an addition to the existing board (subject to the maximum size limit). Any director so appointed by the board shall hold office only until the next following annual general meeting and shall then be eligible for re-election. Our directors will not be subject to a term of office and will hold their offices until such time as they are removed from office by an ordinary resolution of our shareholders with or without cause, or by the board of directors for cause. "Cause" shall mean a conviction for a criminal offence involving dishonesty or engaging in conduct which brings the director or us into disrepute or which results in material financial detriment to us. In addition, the office of any of our directors shall be vacated if the director (a) resigns his office by notice in writing to our company; (b) becomes of unsound mind or dies; (c) without special leave of absence from our board of directors, is absent from meetings of the board for six consecutive months and the board of directors resolves that his office be vacates; (d) becomes bankrupt or has a receiving order made against him or suspends payment or compounds with his creditors; (e) is prohibited by law from being a director; or (f) ceases to be a director by virtue of any provision of the Statutes or is removed from office pursuant to our memorandum and articles of association.

Pursuant to our ninth amended and restated memorandum and articles of association, any removal or appointment of chairman of the board is subject to shareholder approval by ordinary resolution.

D. <u>Employees</u>

Employees

As of December 31, 2020, 2021 and 2022, we had a total of 1,145, 1,192 and 1,209 employees, respectively. The table below provides a breakdown of our employees by function as of December 31, 2022:

	Number of	
	employees	% of Total
Product, technology and data engineering	492	41
Sales, business development and account management	578	48
General and administrative	139	11
Total	1,209	100

As of December 31, 2022, we had a total of 1,209 employees, increased by 1% from 1,192 as of December 31, 2021. The increase primarily resulted from the increase in headcount for sales and business development on Enterprise Solutions.

We enter into standard labor contracts and confidentiality agreements with our management and employees. Our success depends on our ability to attract, retain and motivate qualified personnel. We believe we offer our employees competitive compensation packages and an environment that encourages initiative and self-development. We provide specific training to new employees at orientation to familiarize them with our working environment and operational procedures. We also design and implement in-house training programs tailored to each job function and set of responsibilities to enhance performance. As a result, we have generally been able to attract and retain qualified personnel and maintain a stable core management team.

In addition to salaries and benefits, we provide commission-based compensation for our sales force and performance-based bonuses for other employees. We also allow many of our employees to participate in share-based incentive plans to align their interests more closely with those of our shareholders. As required by regulations in mainland China, we participate in various employee social security plans that are administered by municipal and provincial governments, including housing, pension, medical insurance and unemployment insurance plans. We are required under PRC law to make contributions to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local governments from time to time.

We believe that our working environment and the support and benefits provided to our employees have contributed to maintaining good working relationships with our employees. None of our employees are represented by labor unions.

E. Share Ownership

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of March 31, 2023 by:

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

As of March 31, 2023, there were 50,045,657 ordinary shares outstanding, par value \$0.001 per share, being the sum of 45,011,230 Class A ordinary shares and 5,034,427 Class B ordinary shares. The calculations in the table below are based on 48,783,628 ordinary shares outstanding as of March 31, 2023, comprising (i) 43,749,201 Class A ordinary shares, excluding (x) the 1,093,585.5 Class A ordinary shares held by Arda Holdings Limited underlying the options granted but not yet exercised (whether or not they are vested) and the options reserved for issuance under our 2018 Plan, and (y) the 168,443.5 Class A ordinary shares held by JPMorgan Chase Bank N.A., our depositary, underlying the unvested restricted Class A ordinary shares units under our Post-IPO Plan, and (ii) 5,034,427 Class B ordinary shares outstanding.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days as of March 31, 2023, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Ordinary Shares Beneficially Owned					
	Class A Class B Ordinary Ordinary Agg				Aggregate	
	Shares	Shares	Total Ordina	ry Shares	Voting	
	Number	Number	Number	%	Power %	
Directors and Executive Officers:						
Wing Hong Sammy Hsieh ⁽¹⁾	241,290	2,282,815	2,524,105	5.2 %	31.8 %	
Jian Tang ⁽²⁾	424,195	2,102,263	2,526,458	5.2 %	29.4 %	
Lub Bun Chong	(i)	_	(i)	(i) %	(i) %	
Matthew Chu Pong Fong	(i)	_	(i)	(i) %	(i) %	
Dylan Huang	(i)	_	(i)	(i) %	(i) %	
Philip Kan	(i)	_	(i)	(i) %	(i) %	
David Zhang	(i)	_	(i)	(i) %	(i) %	
All directors and executive officers as a group	694,485	4,385,078	5,079,563	10.4 %	61.2 %	
Principal Shareholders:						
Bubinga Holdings Limited ⁽¹⁾	_	2,282,815	2,282,815	4.7 %	31.6 %	
Igomax Inc. ⁽³⁾	396,290	2,102,263	2,498,553	5.1 %	29.4 %	
Baozun Inc. ⁽⁴⁾	1,235,730	649,349	1,885,079	3.9 %	9.9 %	
Creative Big Limited ⁽⁵⁾	3,589,740	_	3,589,740	7.4 %	2.5 %	
Integrated Asset Management (Asia) Ltd. ⁽⁶⁾	3,282,450	_	3,282,450	6.7 %	2.3 %	
Marine Central Limited ⁽⁷⁾	2,564,103	_	2,564,103	5.3 %	1.8 %	
TIAA-CREF Investment Management, LLC, Teachers Advisors,						
LLC, College Retirement Equities Fund-Stock Account and						
Nuveen Asset Management, LLC ⁽⁸⁾	3,709,380	_	3,709,380	7.6 %	2.6 %	

Notes:

- (i) Less than 1% of our total outstanding shares.
- †† For each person and group included in this column, percentage ownership is calculated by dividing the number of ordinary shares beneficially owned by such person or group, including shares that such person or group has the right to acquire within 60 days of March 31, 2023, by the sum of (1) 48,783,628, which is the total number of ordinary shares outstanding as of March 31, 2023; and (2) the number of ordinary shares that such person or group has the right to acquire within 60 days of March 31, 2023.
- For each person and group included in this column, 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. Each holder of Class A ordinary shares is entitled to one vote per share and each holder of our Class B ordinary shares is entitled to 20 votes per share on all matters submitted to them for a vote. Our Class A ordinary shares and Class B ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Our Class B ordinary shares are convertible at any time by the holder thereof into Class A ordinary shares on a one-for-one basis.
 - (1) Represents (a) 2,282,815 Class B ordinary shares held by Bubinga Holdings Limited, a British Virgin Islands company wholly owned by Mr. Wing Hong Sammy Hsieh, and (b) 241,290 Class A ordinary shares held by Mr. Hsieh. The registered office address of Bubinga Holdings Limited is Vistra Corporate Services Centre, Wickhams Cay II, Road Town, Tortola, VG1110, British Virgin Islands. The address of Mr. Wing Hong Sammy Hsieh is 15/F, Prosperity Millennia Plaza, 663 King's Road, Quarry Bay, Hong Kong S.A.R.

- (2) Represents (a) 2,102,263 Class B ordinary shares held by Igomax Inc., a British Virgin Islands company wholly owned by Mr. Jian Tang, (b) 27,905 Class A ordinary shares that are issuable upon exercise of options held in trust by Mr. Tang on behalf of certain consultants of OptAim, and (c) 396,290 Class A ordinary shares held by Igomax Inc..
- (3) Represents (a) 2,102,263 Class B ordinary shares held by Igomax Inc., a British Virgin Islands company wholly owned by Mr. Jian Tang, and (b) 396,290 Class A ordinary shares held by Igomax Inc..
- (4) Represents (a) 1,235,730 Class A ordinary shares in the form of 247,146 ADSs and (b) 649,349 Class B ordinary shares.
- (5) Represents 3,589,740 Class A ordinary shares held by Creative Big Limited. Creative Big Limited is a company incorporated in the British Virgin Islands. These ordinary shares were issued for acquisition of Optimal Power Limited. Mr. Kenny Sin Nang Chiu is the sole shareholder and the sole director of Creative Big Limited. The principal business office of Creative Big Limited is Flat 23B, Block 6, Hanley Villa, 22 Yau Lai Road, Yau Kom Tau, Tsuen Wan, Hong Kong S.A.R.
- (6) Represents 3,282,450 Class A ordinary shares directly held by Integrated Asset Management (Asia) Ltd., a company incorporated in the British Virgin Island. Mr. Yam Tak Cheung is the sole shareholder and the sole director of Integrated Asset Management (Asia) Ltd. The principal business office of Integrated Asset Management (Asia) Ltd. is 21/F, 88 Gloucester Road, Wan Chai, Hong Kong S.A.R.
- (7) Represents 2,564,103 Class A ordinary shares held by Marine Central Limited. Mr. Jianjun Huang is the majority shareholder and the sole director of Marine Central Limited, who possesses power to direct the voting and disposition of the shares beneficially owned by Marine Central Limited.
- (8) Represents aggregate 3,709,380 Class A ordinary shares held by TIAA-CREF Investment Management, LLC, Teachers Advisors, LLC, College Retirement Equities Fund-Stock Account and Nuveen Asset Management, LLC.

To our knowledge, as of March 31, 2023, 40,607,417, or 83.2% of our ordinary shares were held by one record holder in the United States, which was JPMorgan Chase Bank, N.A., the depositary of our ADS program. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holders of our ordinary shares in the United States.

We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

F. <u>Disclosure of a Registrant's Action to Recover Erroneously Awarded Compensation</u>

Not applicable.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

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

B. Related Party Transactions

There were no transactions nor balances with related parties as of and for the years ended December 31, 2020, 2021 and 2022.

Contractual Arrangements with our Variable Interest Entity and its Shareholder

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

Strategic Business Cooperation with Baozun Inc.

Strategic Cooperation Framework Agreement

In January 2021, we have entered into a strategic cooperation framework agreement with Baozun, pursuant to which both parties will collaborate in developing a full-cycle, closed-loop e-commerce service model, covering areas such as system development, IT services, digital marketing, store operation, customer services and warehousing and fulfillment services to better serve potential brand partners.

Registration Rights Agreement

In January 2021, we have also entered into a registration rights agreement with Baozun. Set forth below is a description of the registration rights granted under the registration rights agreement.

Demand registration. Holders of at least 5% of the voting power of the then outstanding shares, may, at any time, request registration of their shares and we will use our reasonable best efforts to cause such shares to be registered. We, however, are not obligated to effect a demand registration if we have already effected two demand registrations. We also have the right to defer the filing of a registration statement for up to forty-five days on any one occasion or for up to a total of ninety days during any twelve month period if our board of directors determines in good faith that the registration at such time would be materially detrimental to us and our shareholders, provided that we may not register any securities for our own account or any other person within such period other than pursuant to a registration statement relating to the sale of securities pursuant to our share incentive plan, relating to a corporate reorganization or other transaction under Rule 145 of the Securities Act, a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the registrable securities, or a registration in which the only ordinary shares being registered are ordinary shares issuable upon conversion of debt securities that are also being registered.

Form F-3 Registration Rights. When we are eligible for registration on Form F-3, upon a written request from any holder of the registrable securities then outstanding, we must promptly file a registration statement on Form F-3 covering the offer and sale of the registrable securities by the requesting shareholders and other holders of registrable securities who choose to participate in the offering upon notice. We, however, are not obligated to effect more than two such Form F-3 registrations that have been declared and ordered effective within any twelve-month period.

Piggyback Registration Rights. If we propose to file a registration statement for a public offering for our own account or for the account of holder of equity securities, other than pursuant to a registration statement relating to the sale of securities pursuant to our share incentive plan, relating to a corporate reorganization or other transaction under Rule 145 of the Securities Act, a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the registrable securities, or a registration in which the only ordinary shares being registered are ordinary shares issuable upon conversion of debt securities that are also being registered, then we must offer holders of our registrable securities an opportunity to include in this registration all or any part of their registrable securities.

Underwritten Offering. If the managing underwriters of any underwritten offering advises us in writing that, in its opinion, the number of securities to be included in such offering is greater than the total number of securities which can be sold therein without having a material adverse effect on the distribution of such securities or otherwise having a material adverse effect on the marketability thereof, or the "Maximum Number of Securities," then we shall include in such registration the registrable securities that the participating holders have requested to be registered thereunder only to the extent the number of such registrable securities does not exceed the Maximum Number of Securities. If such amount exceeds the Maximum Number of Securities, the number of registrable securities included in such Registration shall be allocated among all the participating holders on a pro rata basis (based on the number of registrable securities held by each participating holder). If the amount of such registrable securities does not exceed the Maximum Number of Securities, we may include in such Registration any ordinary shares of our company and other ordinary shares held by other security holders of us, as we may in our discretion determine or be obligated to allow, in an amount which together with the registrable securities included in such Registration shall not exceed the Maximum Number of Securities.

Expenses of Registration. We will pay all expenses incurred in complying with the terms of the registration rights provisions, other than the underwriting discounts and commissions applicable to the sale of registrable securities pursuant to the registration rights provisions (which shall be borne by the holders requesting registration on a pro rata basis in proportion to their respective numbers of registrable securities sold in such registration), provided that expenses for a demand or F-3 registration withdrawn at the request of a majority of holders of registrable securities shall be borne by the withdrawing shareholders unless such withdrawal is due to our action or inaction or an event outside of the reasonable control of such holders.

Termination of Obligations. The registration rights set forth above shall terminate with respect to any holder, the date on which such holder and its permitted transferee hold less than 5% of the voting power of the then outstanding shares of our company.

Employment Agreements and Indemnification Agreements

See "Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Employment Agreements and Indemnification Agreements with Executive Officers."

Share Incentive Plan

See "Item 6. Directors, Senior Management and Employees—B. Compensation of Directors and Executive Officers—Share Incentive Plans."

C. <u>Interests of Experts and Counsel</u>

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. <u>Consolidated Statements and Other Financial Information</u>

We have appended consolidated financial statements filed as part of this annual report.

Legal and Administrative Proceedings

Other than as disclosed in this annual report, we are not presently a party to any legal or administrative proceedings or claims that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation or any other legal or administrative proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Dividend Policy and Dividend Distribution

Our board of directors has discretion as to whether to distribute dividends, subject to applicable laws. In addition, our shareholders may, by ordinary resolution, declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend on its shares out of either profit or share premium amount, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant.

We have not previously declared or paid cash dividends and we do not currently plan to declare or pay any dividends in the near future on our shares or ADSs. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

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We are an exempted limited liability company, used as a holding company incorporated in the Cayman Islands. We rely principally on dividends from our PRC subsidiaries and VIE entities for our cash requirements, including any payment of dividends to our shareholders. PRC regulations may restrict the ability of our PRC subsidiaries to pay dividends to us. See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulations on Dividend Distribution."

If we pay any dividends, we will pay our ADS holders to the same extent as holders of our ordinary shares, subject to the terms of the deposit agreement, including the fees and expenses payable thereunder. Cash dividends on our ordinary shares, if any, will be paid in U.S. dollars.

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offering and Listing Details

Not Applicable.

B. <u>Plan of Distribution</u>

Not Applicable.

C. Markets

Our ADSs, one ADS representing five Class A ordinary shares, have been listed on the Nasdaq Global Market since December 21, 2017.

D. <u>Selling Shareholders</u>

Not Applicable.

E. Dilution

Not Applicable.

F. <u>Expenses of the Issue</u>

Not Applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not Applicable.

B. Memorandum and Articles of Association

In December 2018, the shareholders of our company approved a special resolution to delete certain provisions of our articles of association which can be more efficiently dealt with through our website and with public filings, and to adopt the ninth amended and restated memorandum an articles of association reflecting such changes. The following are summaries of material provisions of our ninth amended and restated memorandum and articles of association, as well as the Companies Act (Revised) insofar as they relate to the material terms of our ordinary shares.

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

Ordinary Shares. Our ordinary shares are issued in registered form and are issued when registered in our register of members. Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their shares.

Register of Members. Under Cayman Islands law, we must keep a register of members and there should be entered therein:

- (a) the names and addresses of the members;
- (b) a statement of the shares held by each member, and the statement shall:
 - i. confirm the amount paid or agreed to be considered as paid on the shares of each member;
 - ii. confirm the number and category of shares held by each member;
 - iii. confirm whether each relevant category of shares held by a member carries voting rights under our current memorandum and articles of association, and if so, whether such voting rights are conditional;
- (c) the date on which the name of any person was entered on the register as a member; and
- (d) the date on which any person ceased to be a member.

Under Cayman Islands law, the register of members of our company is prima facie evidence of the matters set out therein (i.e. the register of members will raise a presumption of fact on the matters referred to above unless rebutted) and a member registered in the register of members should be deemed as a matter of Cayman Islands law to have legal title to the shares as set against its name in the register of members. Upon the closing of our initial public offering, the register of members should be immediately updated to record and give effect to the issue of shares by us to the Depositary (or its nominee) as the depositary. Once our register of members has been updated, the shareholders recorded in the register of members should be deemed to have legal title to the shares set against their name.

If the name of any person is incorrectly entered in or omitted from our register of members, or if there is any default or unnecessary delay in entering on the register the fact of any person having ceased to be a member of our company, the person or member aggrieved (or any member of our company or our company itself) may apply to the Cayman Islands Grand Court for an order that the register be rectified, and the Court may either refuse such application or it may, if satisfied of the justice of the case, make an order for the rectification of the register.

Dividends. The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, dividends may be declared and paid only out of funds legally available therefor, namely out of either profit or our share premium account, and provided further that a dividend may not be paid if this would result in our company being unable to pay its debts as they fall due in the ordinary course of business.

Voting Rights. Our share capital is currently divided into Class A ordinary shares and Class B ordinary shares. On a show of hands each shareholder is entitled to one vote or, on a poll, each Class A ordinary share shall be entitled to one (1) vote on all matters subject to vote at general meetings of the Company, and each Class B ordinary share shall be entitled to twenty (20) votes on all matters subject to vote at general meetings of the Company. Unless otherwise required under the laws of the Cayman Islands, Class A ordinary shares and Class B ordinary shares shall vote together as a single class.

Voting at any meeting of shareholders is by way of a poll, unless the chairman allows a vote by show of hands on a resolution which relates purely to a procedural or administrative matter. Procedural and administrative matters are those that are not on the agenda of the general meeting and relate to the chairman's duties to maintain the orderly conduct of the meeting or allow the business of the meeting to be properly and effectively dealt with, while affording all shareholders a reasonable opportunity to express their views.

A quorum required for a meeting of shareholders consists of two shareholders entitled to vote present in person or by proxy or, if the shareholder is a legal entity, by its duly authorized representative. A majority of the board or the chairman of the board may call extraordinary general meetings, which extraordinary general meetings shall be held at such times and locations (as permitted hereby) as such person or persons shall determine. Advance notice of at least ten clear days is required for the convening of our annual general shareholders' meeting and any other general shareholders' meeting.

An ordinary resolution to be passed by the shareholders requires the affirmative vote of a simple majority of votes attached to the ordinary shares cast in a general meeting, while a special resolution requires the affirmative vote of no less than two-thirds of votes cast attached to the ordinary shares. Both ordinary resolutions and special resolutions may also be passed by unanimous written resolutions signed by all the shareholders of our company, as permitted by the Companies Act and our ninth amended and restated memorandum and articles of association. An ordinary resolution will be required for important matters including appointment or removal of the chairman of the board of directors, or removal of any directors (other than "for cause"), etc. A special resolution will be required for fundamental matters including a change of control event, and statutory matters such as merger, a change of name, making changes to our memorandum and articles of association or other matter as required under the laws of the Cayman Islands.

Conversion. Class B ordinary shares are convertible into Class A ordinary shares. All Class B ordinary shares are subject to automatic conversion into Class A ordinary shares when the beneficial ownership of Class B ordinary shares is transferred to persons who are not an affiliate of the holders of the Class B ordinary shares. Each Class B ordinary share is generally convertible into one Class A ordinary share. However, if and when the nominal amount of one Class A ordinary share changes by reason of consolidation or sub-division, the applicable conversion rate of Class B ordinary shares into Class A ordinary shares shall equal the quotient of the revised nominal amount, divided by the former nominal amount, of one Class A ordinary share.

Transfer of Ordinary Shares. Subject to the restrictions set out below, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in the usual or common form or any other form approved by our board of directors.

Our board of directors may, in its absolute discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our board of directors may also decline to register any transfer of any ordinary share unless:

- the instrument of transfer is lodged with us, accompanied by the certificate for the ordinary shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer;
- the instrument of transfer is in respect of only one class of shares;
- the instrument of transfer is properly stamped, if required;
- in the case of a transfer to joint holders, the number of joint holders to whom the ordinary share is to be transferred does not exceed four; and
- a fee of such maximum sum as the NASDAQ may determine to be payable or such lesser sum as our directors may from time to time require is paid to us in respect thereof.

If our directors refuse to register a transfer they shall, within three months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal.

The registration of transfers may, after compliance with any notice required of the NASDAQ, be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine, provided, however, that the registration of transfers shall not be suspended nor the register closed for more than 30 days in any year as our board may determine.

Liquidation. On a return of capital on winding up or otherwise (other than on conversion, redemption or purchase of shares), assets available for distribution among the holders of ordinary shares shall be distributed among the holders of our ordinary shares on a pro rata basis. If our assets available for distribution are insufficient to repay all of the paid-up capital, the assets will be distributed so that the losses are borne by our shareholders proportionately.

Calls on Shares and Forfeiture of Shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 days prior to the specified time and place of payment. The shares that have been called upon and remain unpaid are subject to forfeiture.

Redemption, Repurchase and Surrender of Ordinary Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders thereof, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by an ordinary resolution of our shareholders. Our company may also repurchase any of our shares provided that the manner and terms of such purchase have been approved by our board of directors or by ordinary resolution of our shareholders, or are otherwise authorized by our memorandum and articles of association. Under the Companies Act, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if the company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares issued and outstanding, or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of Rights of Shares. The rights attached to any class or series of shares (unless otherwise provided by the terms of issue of the shares of that class or series) may be varied with the consent in writing of all the holders of the issued shares of that class or series or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class or series. The rights conferred upon the holders of the shares of any class issued shall not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking pari passu with such existing class of shares.

Issuance of Additional Shares. Our ninth amended and restated memorandum and articles of association authorizes our board of directors to issue additional ordinary shares from time to time as our board of directors shall determine, to the extent of available authorized but unissued shares.

Our ninth amended and restated memorandum and articles of association also authorizes our board of directors to establish from time to time one or more series of preferred shares and to determine, with respect to any series of preference shares, the terms and rights of that series, including:

- the designation of the series;
- the number of shares of the series;
- the dividend rights, dividend rates, conversion rights, voting rights; and
- the rights and terms of redemption and liquidation preferences.

Our board of directors may issue preferred shares without action by our shareholders to the extent authorized but unissued.

Issuance of these shares may dilute the voting power of holders of ordinary shares.

Inspection of Books and Records. Holders of our ordinary shares will have no general right under Cayman Islands law to inspect or obtain copies of our list of shareholders or our corporate records. However, we will provide our shareholders with annual audited financial statements.

Anti-Takeover Provisions. Some provisions of our ninth amended and restated memorandum and articles of association may discourage, delay or prevent a change of control of our company or management that shareholders may consider favorable, including provisions that:

- authorize our board of directors to issue preference shares in one or more series and to designate the price, rights, preferences, privileges and restrictions of such preference shares without any further vote or action by our shareholders; and
- limit the ability of shareholders to requisition and convene general meetings of shareholders.

However, under Cayman Islands law, our directors may only exercise the rights and powers granted to them under our ninth amended and restated memorandum and articles of association for a proper purpose and for what they believe in good faith to be in the best interests of our company.

General Meetings of Shareholders and Shareholder Proposals. Our shareholders' general meetings may be held in such place within or outside the Cayman Islands as our board of directors considers appropriate.

As an exempted Cayman Islands company, we are not obliged by law to call shareholders' annual general meetings. Our ninth amended and restated memorandum and articles of association provide that we shall in each year hold a general meeting as our annual general meeting.

Shareholders' annual general meetings and any other general meetings of our shareholders may be convened by a majority of our board of directors or our chairman. Our board of directors shall give no less than ten clear days' written notice of a shareholders' meeting to those persons whose names appear as members in our register of members on the date the notice is given (or on any other date determined by our directors to be the record date for such meeting) and who are entitled to vote at the meeting.

Exempted Company. We are an exempted company with limited liability under the Companies Act. The Companies Act distinguishes between ordinary resident companies and exempted companies. Any company that is registered in the Cayman Islands but conducts business mainly outside of the Cayman Islands may apply to be registered as an exempted company. The requirements for an exempted company are essentially the same as for an ordinary company except that an exempted company:

- does not have to file an annual return of its shareholders with the Registrar of Companies;
- is not required to open its register of members for inspection;
- does not have to hold an annual general meeting;
- may issue negotiable or bearer shares or shares with no par value;
- may obtain an undertaking against the imposition of any future taxation (such undertakings are usually given for 20 years in the first instance);
- may register by way of continuation in another jurisdiction and be deregistered in the Cayman Islands;
- may register as a limited duration company; and
- may register as a segregated portfolio company.

C. <u>Material Contracts</u>

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

D. <u>Exchange Controls</u>

See "Item 4. Information on the Company—B. Business Overview—Regulation—Regulations on Foreign Exchange" and "—Regulations on Dividend Distribution."

E. Taxation

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

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to us or our shareholders or ADS holders levied by the government of the Cayman Islands except for stamp duties which may be applicable on instruments executed in, or brought within the jurisdiction of the Cayman Islands. The Cayman Islands is not party to any double tax treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

People's Republic of China Taxation

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

We believe that iClick Interactive Asia Group Limited is not a PRC resident enterprise for PRC tax purposes. iClick Interactive Asia Group Limited is not controlled by a PRC enterprise or PRC enterprise group and we do not believe that iClick Interactive Asia Group Limited meets all of the conditions above. iClick Interactive Asia Group Limited is a company incorporated outside the PRC. As a holding company, its key assets are its ownership interests in its subsidiaries, and its key assets are located, and its records (including the resolutions of its board of directors and the resolutions of its shareholders) are maintained, outside the PRC. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term "de facto management body."

If the PRC tax authorities determine that iClick Interactive Asia Group Limited is a PRC resident enterprise for enterprise income tax purposes, we may be required to withhold a tax at the rate of 10% (or other preferential rates in the applicable tax treaty) from dividends we pay to our shareholders that are non-resident enterprises, including the holders of our ADSs. In addition, non-resident enterprise shareholders (including our ADS holders) may be subject to a 10% PRC tax on gains realized on the sale or other disposition of ADSs or ordinary shares, if such income is treated as sourced from within the PRC. Furthermore, if we are deemed a PRC resident enterprise, dividends paid to our non-PRC individual shareholders (including our ADS holders) and any gain realized on the transfer of ADSs or ordinary shares by such shareholders may be subject to PRC tax at a rate of 20% (which in the case of dividends would be withheld at source) unless a reduced rate is available under an applicable tax treaty. It is also unclear whether non- PRC shareholders of iClick Interactive Asia Group Limited would be able to claim the benefits of any tax treaties between their country of tax residence and the PRC in the event that iClick Interactive Asia Group Limited is treated as a PRC resident enterprise.

According to the PRC Enterprise Income Tax Law, Law of the People's Republic of China on the Administration of Tax Collection promulgated on April 24, 2015, and the SAT's Announcement on Matters Concerning Withholding of Income Tax of Non-resident Enterprises at Source promulgated on October 17, 2017, entities that have the direct obligation to make certain payments to a non-resident enterprise should act as withholding agents for the non-resident enterprise, and such payments include: income from equity investments (including dividends and other return on investment), interest, rents, royalties and income from assignment of property as well as other incomes subject to enterprise income tax received by non-resident enterprises in China.

United States Federal Income Tax Considerations

The following is a summary of material U.S. federal income tax considerations that are likely to be relevant to the purchase, ownership and disposition of our ordinary shares or ADSs by a U.S. Holder (as defined below).

This summary is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations, rulings and judicial interpretations thereof, in force as of the date hereof. Those authorities may be changed at any time, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those summarized below.

This summary is not a comprehensive discussion of all of the tax considerations that may be relevant to a particular investor's decision to purchase, hold, or dispose of ordinary shares or ADSs. In particular, this summary is directed only to U.S. Holders that hold ordinary shares or ADSs as capital assets and does not address all of the tax consequences to U.S. Holders who may be subject to special tax rules, such as banks, brokers or dealers in securities or currencies, traders in securities electing to mark to market, financial institutions, life insurance companies, tax exempt entities, partnerships (including any entities treated as partnerships for U.S. tax purposes) and the partners therein, holders that own or are treated as owning 10% or more of our shares (measured by voting power or value), persons holding ordinary shares or ADSs as part of a hedging or conversion transaction or a straddle, or persons whose functional currency is not the U.S. dollar. Moreover, this summary does not address state, local or non-U.S. taxes, the U.S. federal estate and gift taxes, or the Medicare contribution tax applicable to net investment income of certain non-corporate U.S. Holders, or alternative minimum tax consequences of acquiring, holding or disposing of ordinary shares or ADSs.

For purposes of this summary, a "U.S. Holder" is a beneficial owner of ordinary shares or ADSs that is a citizen or resident of the United States or a U.S. domestic corporation or that otherwise is subject to U.S. federal income taxation on a net income basis in respect of such ordinary shares or ADSs.

You should consult your own tax advisors about the consequences of the acquisition, ownership and disposition of the ordinary shares or ADSs, including the relevance to your particular situation of the considerations discussed below and any consequences arising under non-U.S., state, local or other tax laws.

ADSs

In general, if you are a U.S. Holder of ADSs, you will be treated, for U.S. federal income tax purposes, as the beneficial owner of the underlying ordinary shares that are represented by those ADSs.

The U.S. Treasury has expressed concerns that parties to whom ADSs are released before the underlying shares are delivered to the depositary ("pre-release"), or intermediaries in the chain of ownership between holders of ADSs and the issuer of the security underlying the ADSs, may be taking actions that are inconsistent with the claiming of foreign tax credits by holders of ADSs. These actions would also be inconsistent with the claiming of the reduced rate of tax, described below, applicable to dividends received by certain non-corporate holders. Accordingly, the creditability of PRC taxes, and the availability of the reduced tax rate for dividends received by certain non-corporate U.S. Holders, each described below, could be affected by actions taken by such parties or intermediaries.

Taxation of Dividends

Subject to the discussion below under "Passive Foreign Investment Company Rules," the gross amount of any distribution of cash or property with respect to our ordinary shares or ADSs that is paid out of our current or accumulated earnings and profits (as determined for United States federal income tax purposes) will generally be includible in your taxable income as ordinary dividend income on the day on which you receive the dividend, in the case of ordinary shares, or the date the depositary receives the dividends, in the case of ADSs, and will not be eligible for the dividends-received deduction allowed to U.S. corporations under the Code.

We do not expect to maintain calculations of our earnings and profits in accordance with U.S. federal income tax principles.

Therefore, U.S. Holders should expect that distributions generally will be treated as dividends for U.S. federal income tax purposes.

Subject to certain exceptions for short-term positions, the dividends received by an individual with respect to the ordinary shares or ADSs will be subject to taxation at a preferential rate if the dividends are "qualified dividends." Dividends paid on the ordinary shares or ADSs will be treated as qualified dividends if:

- the ordinary shares or ADSs are readily tradable on an established securities market in the United States or we are eligible
 for the benefits of a comprehensive tax treaty with the United States that the U.S. Treasury determines is satisfactory for
 purposes of this provision and that includes an exchange of information program; and
- we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a PFIC.

The ADSs are listed on the NASDAQ Global Market, and will qualify as readily tradable on an established securities market in the United States so long as they are so listed. Based on our audited financial statements, we believe that we were not treated as a PFIC for U.S. federal income tax purposes with respect to our 2021 taxable year. As discussed further below under "Passive Foreign Investment Company Rules," however, the recent decline in the market price of our ADSs has resulted in a significant risk that we were a PFIC for our prior taxable year (or, alternatively, that we may become a PFIC for the current or subsequent taxable years).

Because the ordinary shares are not themselves listed on a U.S. exchange, dividends received with respect to the ordinary shares that are not represented by ADSs may not be treated as qualified dividends. U.S. Holders of ordinary shares or ADSs should consult their own tax advisors regarding the potential availability of the reduced dividend tax rate on shares in the light of their own particular circumstances.

In the event that we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law (see "Item 10. Additional Information—E. Taxation—People's Republic of China Taxation"), a U.S. Holder may be subject to PRC withholding taxes on dividends paid on our ADSs or ordinary shares. In that case, we may, however, be eligible for the benefits of the Agreement Between the Government of the United States of America and the Government of the People's Republic of China for the Avoidance of Double Taxation and the Prevention of Tax Evasion with Respect to Taxes on Income (the "Treaty"). If we are eligible for such benefits, dividends we pay on our ordinary shares, regardless of whether such shares are represented by the ADSs, would be eligible for the reduced rates of taxation described above. Subject to generally applicable limitations and conditions, PRC dividend withholding tax paid at the appropriate rate applicable to the U.S. Holder may be eligible for a credit against such U.S. Holder's U.S. federal income tax liability. These generally applicable limitations and conditions include new requirements recently adopted by the U.S. Internal Revenue Service ("IRS"), and any PRC tax will need to satisfy these requirements in order to be eligible to be a creditable tax for a U.S. Holder. In the case of a U.S. Holder that is eligible for, and properly elects, the benefits of the Treaty, the PRC tax on dividends will be treated as meeting the new requirements and therefore as a creditable tax. In the case of all other U.S. Holders, the application of these requirements to the PRC tax on dividends is uncertain, and we have not determined whether these requirements have been met. If the PRC dividend tax is not a creditable tax for a U.S. Holder or the U.S. Holder does not elect to claim a foreign tax credit for any foreign income taxes paid or accrued in the same taxable year, the U.S. Holder may be able to deduct the PRC tax in computing such U.S. Holder's taxable income for U.S. federal income tax purposes. Dividend distributions will constitute income from sources without the United States and, for U.S. Holders that elect to claim foreign tax credits, generally will constitute "passive category income" for foreign tax credit purposes.

The availability and calculation of foreign tax credits and deductions for foreign taxes depend on a U.S. Holder's particular circumstances and involve the application of complex rules to those circumstances. U.S. Holders should consult their own tax advisors regarding the application of these rules to their particular circumstances.

U.S. Holders that receive distributions of additional ADSs or ordinary shares or rights to subscribe for ADSs or ordinary shares as part of a pro rata distribution to all our shareholders generally will not be subject to U.S. federal income tax in respect of the distributions.

Taxation of Dispositions of ADSs or Ordinary Shares

Subject to the discussion below under "Passive Foreign Investment Company Rules," if a U.S. Holder realizes gain or loss on the sale, exchange or other disposition of ADSs or ordinary shares, that gain or loss will be capital gain or loss and generally will be long-term capital gain or loss if the ADS or ordinary shares have been held for more than one year. Long-term capital gain realized by a U.S. Holder that is an individual generally is subject to taxation at a preferential rate. The deductibility of capital losses is subject to limitations.

Capital gain or loss realized by a U.S. Holder on the sale or other disposition of the ADSs or ordinary shares generally will be U.S. source gain or loss for U.S. foreign tax credit purposes. However, in the event that gain from the disposition of the ADSs or ordinary shares is subject to tax in the PRC, we may be eligible for the benefits of the Treaty, in which case such gain may be treated as PRC source gain under the Treaty. Under the new foreign tax credit requirements recently adopted by the IRS, any PRC tax imposed on the sale or other disposition of the ADSs or ordinary shares generally will not be treated as a creditable tax for U.S. foreign tax credit purposes except in the case of a U.S. Holder that is eligible for, and properly elects to claim, the benefits of the Treaty. If the PRC tax is not a creditable tax or claimed as a credit by the U.S. Holder pursuant to the Treaty, the tax would reduce the amount realized on the sale or other disposition of the shares even if the U.S. Holder has elected to claim a foreign tax credit for other taxes in the same year. U.S. Holders should consult their own tax advisors regarding the application of the foreign tax credit rules to a sale or other disposition of the ADSs or ordinary shares and any PRC tax imposed on such sale or disposition.

Deposits and withdrawals of ordinary shares by U.S. Holders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

Passive Foreign Investment Company Rules

Special U.S. tax rules apply to companies that are considered to be PFICs. We will be classified as a PFIC in a particular taxable year if either

- 75 percent or more of our gross income for the taxable year is passive income; or
- the average percentage of the value of our assets that produce or are held for the production of passive income is at least 50 percent.

For this purpose, cash generally is treated as a passive asset. Goodwill is treated as an active asset under the PFIC rules to the extent attributable to activities that produce active income. We will be treated as owning our proportionate share of the assets and earning our proportionate share of the income of any other corporation in which we own, directly or indirectly, 25% or more (by value) of the stock. Although the law in this regard is not entirely clear, we treat our consolidated variable interest entities as being owned by us for U.S. federal income tax purposes because we control their management decisions and are entitled to substantially all of the economic benefits associated with these entities.

The determination of whether we are a PFIC is made annually after the close of each taxable year. This determination is based on the facts and circumstances at that time, some of which may be beyond our control, such as the amount and composition of our income and the valuation and composition of our assets, including goodwill and other intangible assets, as implied by the market price of our ADSs and ordinary shares. In particular, because the value of our assets for purposes of the asset test may be determined by reference to the market price of our ADSs, the recent decline in the market price of our ADSs has resulted in a significant risk that we were a PFIC for our prior taxable year (or, alternatively, that we may become a PFIC for the current or subsequent taxable years). The market price of our ADSs and/or ordinary shares may continue to fluctuate considerably and, consequently, we cannot assure you of our PFIC status for any taxable year. In addition, the composition of our income and assets will also be affected by how, and how quickly, we use our liquid assets. If we determine not to deploy significant amounts of cash for active purposes, or if it were determined that we do not own the stock of the consolidated variable interest entities for U.S. federal income tax purposes, our risk of being a PFIC may substantially increase.

In the event that we are classified as a PFIC in any year and a U.S. Holder does not make a mark-to-market election, as described below, the holder will be subject to a special tax at ordinary income tax rates on "excess distributions," including certain distributions by us and gain that the holder recognizes on the sale of our ordinary shares or ADSs. The amount of income tax on any excess distributions will be increased by an interest charge to compensate for tax deferral, calculated as if the excess distributions were earned ratably over the period that the U.S. Holder holds its ordinary shares or ADSs. Additionally, dividends paid by us will not be eligible for the special reduced rate of taxes described above under "—Taxation of Dividends." If we are classified as a PFIC for any taxable year in which a U.S. Holder owns our ordinary shares or ADSs, even if we cease to the U.S. Holder for all succeeding years during which the U.S. Holder owns our ordinary shares or ADSs, even if we cease to meet the threshold requirements for PFIC status (unless the U.S. Holder makes a deemed sale election with respect to our ordinary shares or ADSs once we are no longer a PFIC). Classification as a PFIC may also have other adverse tax consequences, including, in the case of individuals, the denial of a step-up in the basis of his or her ordinary shares or ADSs at death. U.S. Holders are urged to consult their own tax advisors about the application of the PFIC rules to us.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ordinary shares or ADSs and we have any direct, and in certain circumstances, indirect subsidiaries that are PFICs (each a "Subsidiary PFIC"), the U.S. Holder will be treated as owning its pro rata share of the stock of each Subsidiary PFIC for purposes of the application of these rules, and the U.S. Holder generally would be subject to similar rules with respect to distributions to us by, and dispositions by us of the stock of, any Subsidiary PFIC.

If we are a PFIC for any taxable year, in lieu of being subject to the general rules discussed above, a U.S. Holder may elect to mark its ordinary shares or ADS to market, provided that the ordinary shares or ADS are considered "marketable." The ordinary shares or ADS will be marketable if they are regularly traded on certain U.S. stock exchanges, including the NASDAQ Global Market, or on a non-U.S. stock exchange if (i) the exchange is regulated or supervised by a governmental authority in the country in which the exchange is located; (ii) the exchange has trading volume, listing, financial disclosure, surveillance and other requirements designed to prevent fraudulent and manipulative acts and practices, remove impediments to, and perfect the mechanism of, a free and open, fair and orderly, market and to protect investors; (iii) the laws of the country in which the exchange is located and the rules of the exchange ensure that these requirements are actually enforced; and (iv) the rules of the exchange ensure active trading during any calendar year during which they are traded, other than in *de minimis* quantities, on at least 15 days during each calendar quarter. It should be noted that only the ADSs, and not the ordinary shares, are listed on the NASDAQ Global Market, and the ordinary shares themselves are not listed on any stock exchange. Consequently, a mark-to-market election is not expected to be available for a U.S. Holder that holds ordinary shares that are not represented by ADSs.

If the U.S. Holder makes this mark-to-market election with respect to its ADSs, the holder will be required in any year in which we are a PFIC to include as ordinary income the excess of the fair market value of the ADSs at year-end over the holder's basis in those ADSs. If, at the end of the U.S. Holder's taxable year for a year in which we were a PFIC, the holder's basis in the ADSs exceeds their fair market value, the holder will be entitled to deduct the excess as an ordinary loss, but only to the extent of the holder's net mark-to-market gains from previous years. The holder's adjusted tax basis in the ADSs will be adjusted to reflect any income or loss recognized under these rules. In addition, any gain the U.S. Holder recognizes upon the sale of the holder's ADSs will be taxed as ordinary income in the year of sale, and any loss will be treated as an ordinary loss to the extent of the U.S. Holder's net mark-to-market gains from previous years. Once made, the election cannot be revoked without the consent of the IRS unless the shares cease to be marketable.

A U.S. Holder will not, however, be able to make a mark-to-market election with respect to the stock of any Subsidiary PFIC. Therefore, the U.S. Holder would continue to be subject to the excess distribution rules with respect to any of our subsidiaries that are PFICs, any distributions received by us from a subsidiary that is a PFIC and any gain recognized by us upon a sale of equity interests in a subsidiary that is a PFIC, even if the U.S. Holder has made a mark-to-market election with respect to our ADSs. The interaction of the mark-to-market rules and the rules governing lower-tier PFICs is complex and uncertain.

In some cases, a shareholder of a PFIC may be subject to alternative treatment by making a valid qualified electing fund election, or QEF election. If a QEF election is made, such U.S. Holder generally will be required to include in income on a current basis its pro rata share of the PFIC's ordinary income and net capital gains, regardless of whether or not such earnings and gains are actually distributed to such U.S. Holder. To make a QEF election, the PFIC must provide shareholders with certain information compiled according to U.S. federal income tax principles. We do not intend, however, to prepare or provide the information that would enable U.S. Holders to make QEF elections.

A U.S. Holder that owns an equity interest in a PFIC generally must annually file IRS Form 8621, and may be required to file other IRS forms. A failure to file one or more of these forms as required may toll the running of the statute of limitations in respect of each of the U.S. Holder's taxable years for which such form is required to be filed. As a result, the taxable years with respect to which the U.S. Holder fails to file the form may remain open to assessment by the IRS indefinitely, until the form is filed.

U.S. Holders should consult their own tax advisors regarding the U.S. federal income tax considerations discussed above and the availability and desirability of making a mark-to-market election.

Foreign Financial Asset Reporting

Certain U.S. Holders who are individuals that own "specified foreign financial assets" with an aggregate value in excess of US\$50,000 on the last day of the taxable year or \$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which would include the ordinary shares and the ADSs) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. Holders that fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the ADSs, including the application of the rules to their particular circumstances.

Backup Withholding and Information Reporting

Dividends paid on, and proceeds from the sale or other disposition of, the ADSs or ordinary shares to a U.S. Holder generally may be subject to the information reporting requirements of the Code and may be subject to backup withholding unless the U.S. Holder provides an accurate taxpayer identification number and makes any other required certification or otherwise establishes an exemption. Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a refund or credit against the U.S. Holder's U.S. federal income tax liability, provided the required information is furnished to the U.S. Internal Revenue Service in a timely manner.

A holder that is a foreign corporation or a non-resident alien individual may be required to comply with certification and identification procedures in order to establish its exemption from information reporting and backup withholding.

F. <u>Dividends and Paying Agents</u>

Not applicable.

G. Statement by Experts

Not applicable.

H. <u>Documents on Display</u>

We are subject to the periodic reporting and other informational requirements of the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F no later than four months after the close of each fiscal year. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system. As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We will furnish JPMorgan Chase Bank, N.A., the depositary of our ADSs, with our annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP, and all notices of shareholders' meetings and other reports and communications that are made generally available to our shareholders. The depositary will make such notices, reports and communications available to holders of ADSs and, upon our request, will mail to all record holders of ADSs the information contained in any notice of a shareholders' meeting received by the depositary from us.

I. <u>Subsidiary Information</u>

For a list of our subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Inflation

Since our inception, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the year over year percent change in the consumer price index for 2020, 2021 and 2022 were increases of 2.5%, 0.9% and 2.0%, respectively.

Quantitative and Qualitative Disclosures about Market Risk

Foreign Exchange Risk

Foreign currency risk arises from future commercial transactions and recognized assets and liabilities. A significant portion of our revenue-generating transactions and expense-related transactions are denominated in Renminbi, which is the functional currency of our subsidiaries and VIE entities in China. Our commercial transactions outside China are primarily denominated in U.S. dollars and Hong Kong dollars, which are pegged to U.S. dollars. We do not hedge against currency risk.

The value of the Renminbi against the U.S. dollar and other currencies may fluctuate and is affected by, among other things, changes in political and economic conditions in China and by China's foreign exchange policies. Accordingly, 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. In addition, the PBOC may, from time to time, release policies and measures concerning the foreign exchange market to limit fluctuations in Renminbi exchange rates and for other policy considerations.

To the extent that we need to convert U.S. dollars into Renminbi for our operations, appreciation of Renminbi against the U.S. dollar would reduce the Renminbi amount we receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, servicing our outstanding debts, or for other business purposes, appreciation of the U.S. dollar against the Renminbi would reduce the U.S. dollar amounts available to us. For U.S. dollars against Renminbi in term of average monthly exchange rate, there was appreciation of approximately 0.5%, depreciation of approximately 7.2% and appreciation of approximately 3.2% in 2020, 2021 and 2022, respectively.

Certain of our operating activities are transacted in HK dollars. We consider the foreign exchange risk in relation to transactions denominated in HK dollars with respect to U.S. dollars is not significant as HK dollar is pegged to U.S. dollar.

Interest Rate Risk

Our main interest rate exposure relates to bank borrowings. We also have interest-bearing assets, including cash and cash equivalents, short-term investments and restricted cash. We manage our interest rate exposure with a focus on reducing our overall cost of debt and exposure to changes in interest rates. 2.9% of the aggregate principal outstanding amount of our bank borrowings as of December 31, 2022 was at floating rates.

As of December 31, 2022, if interest rates increased/decreased by 1%, with all other variables having remained constant, and assuming the amount of bank borrowings outstanding at the end of the year was outstanding for the entire year, our net loss would have been US0.01 million higher/lower, respectively. These were mainly as a result of higher/lower interest expense for our bank borrowings at floating rates.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. <u>Debt Securities</u>

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. <u>American Depositary Shares</u>

Fees and Charges Our ADS Holders May Have to Pay

The depositary may charge each person to whom ADSs are issued, including, without limitation, issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by us or issuances pursuant to a merger, exchange of securities or any other transaction or event affecting the ADSs or deposited securities, and each person surrendering ADSs for withdrawal of deposited securities or whose ADRs are cancelled or reduced for any other reason, \$5.00 for each 100 ADSs (or any portion thereof) issued, delivered, reduced, cancelled or surrendered, as the case may be. The depositary may sell (by public or private sale) sufficient securities and property received in respect of a share distribution, rights and/or other distribution prior to such deposit to pay such charge.

The following additional charges shall be incurred by the ADR holders, by any party depositing or withdrawing shares or by any party surrendering ADSs and/or to whom ADSs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by us or an exchange of stock regarding the ADSs or the deposited securities or a distribution of ADSs), whichever is applicable:

- a fee of up to US\$0.05 per ADS for any cash distribution made pursuant to the deposit agreement;
- a fee of US\$1.50 per ADR or ADRs for transfers of certificated or direct registration ADRs;
- an aggregate fee of up to US\$0.05 per ADS per calendar year (or portion thereof) for services performed by the depositary
 in administering the ADRs (which fee may be charged on a periodic basis during each calendar year and shall be
 against holders of ADRs as of the record date or record dates set by the depositary during each calendar year and shall be
 payable in the manner described in the next succeeding provision);
- a fee for the reimbursement of such fees, charges and expenses as are incurred by the depositary and/or any of its agents (including, without limitation, the custodian and expenses incurred on behalf of holders in connection with compliance with foreign exchange control regulations or any law or regulation relating to foreign investment) in connection with the servicing of the shares or other deposited securities, the sale of securities (including, without limitation, deposited securities), the delivery of deposited securities or otherwise in connection with the depositary's or its custodian's compliance with applicable law, rule or regulation (which fees and charges shall be assessed on a proportionate basis against holders as of the record date or dates set by the depositary and shall be payable at the sole discretion of the depositary by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions);
- a fee for the distribution of securities (or the sale of securities in connection with a distribution), such fee being in an amount equal to the \$0.05 per ADS issuance fee for the execution and delivery of ADSs which would have been charged as a result of the deposit of such securities (treating all such securities as if they were shares) but which securities or the net cash proceeds from the sale thereof are instead distributed by the depositary to those holders entitled thereto;
- stock transfer or other taxes and other governmental charges;
- cable, telex and facsimile transmission and delivery charges incurred at your request in connection with the deposit or delivery of shares, ADRs or deposited securities;
- transfer or registration fees for the registration of transfer of deposited securities on any applicable register in connection with the deposit or withdrawal of deposited securities; and
- in connection with the conversion of foreign currency into U.S. dollars, JPMorgan Chase Bank, N.A. ("JPMorgan") shall deduct out of such foreign currency the fees, expenses and other charges charged by it and/or its agent (which may be a division, branch or affiliate) so appointed in connection with such conversion.

JPMorgan and/or its agent may act as principal for such conversion of foreign currency.

We will pay all other charges and expenses of the depositary and any agent of the depositary (except the custodian) pursuant to agreements from time to time between us and the depositary. The charges described above may be amended from time to time by agreement between us and the depositary.

Fees and Other Payments Made by the Depositary to Us

The depositary may make available to us a set amount or a portion of the depositary fees charged in respect of the ADR program or otherwise upon such terms and conditions as we and the depositary may agree from time to time. The depositary collects its fees for issuance and cancellation 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 will generally set off the amounts owing from distributions made to holders of ADSs. If, however, no distribution exists and payment owing is not timely received by the depositary, the depositary may refuse to provide any further services to holders that have not paid those fees and expenses owing until such fees and expenses have been paid. At the discretion of the depositary, all fees and charges owing under the deposit agreement are due in advance and/or when declared owing by the depositary. For the year ended December 31, 2022, we received US\$0.1 million reimbursement, after deduction of applicable U.S. taxes, from the depositary.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

A-D. Material Modifications to the Rights of Security Holders

See "Item 10. Additional Information—B. Memorandum and Articles of Association—Ordinary Shares" for a description of the rights of securities holders, which remain unchanged.

E. Use of Proceeds

The following "Use of Proceeds" information relates to the registration statement on Form F-1, as amended (File No. 333-221034) in relation to our initial public offering, which was declared effective by the SEC on December 21, 2017 and to the registration statement on Form F-3, as amended (File No. 333-232435) in relation to our follow-on offering, which was declared effective by the SEC on July 15, 2019.

In December 2017, we completed our initial public offering, in which we issued and sold an aggregate of 3,750,000 ADSs (excluding ADSs issued upon the exercise of the over-allotment options), representing 1,875,000 Class A ordinary shares, at an initial offering price of US\$8.00 per ADS. In the same month, the underwriters of our initial public offering exercised their over-allotment options to purchase an additional 562,500 ADSs in full. The net proceeds we received from the initial public offering and the exercise of the over-allotment options in full totaled approximately US\$27.5 million. Roth Capital Partners, LLC was the representative of the underwriters for our initial public offering. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities or our affiliates.

For the period from December 21, 2017, the date that the Form F-1 was declared effective by the SEC, to December 31, 2021, we had used the net proceeds from our initial public offering as follows:

- approximately US\$12 million of the net proceeds for research and development and expansion of our suite of solutions and service offerings; and
- approximately US\$16 million of the net proceeds for sales and marketing.

We intend to use the remainder of the proceeds from our initial public offering, as disclosed in our registration statement on Form F-1, for (i) research and development and expansion of our suite of solutions and service offerings, and (ii) funding our working capital and other general corporate purposes. None of the net proceeds from the initial public offering have been paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities or our affiliates.

In September 2020, we completed the follow-on offering of 8,500,001 ADSs, of which 6,877,214 ADSs (excluding ADSs issued upon the exercise of the over-allotment options), representing an aggregate of 3,438,607 Class A ordinary shares were sold by us. The net proceeds we raised from the follow-on public offering were approximately US\$53.0 million, after deducting underwriting discounts and commissions and offering expenses payable by us. BofA Securities, Inc. was the representative of the underwriters for our follow-on offering. None of the transaction expenses included payments to directors or officers of our company or their associates, persons owning more than 10% or more of our equity securities or our affiliates.

For the period from September 2, 2020, the date that we completed our follow-on offering, to December 31, 2022, we had used the net proceeds from our follow-on offering for working capital and other general corporate purpose and for investment, acquisition and business collaboration opportunities that complement or enhance our existing operations and are strategically beneficial to our long-term goals.

None of the net proceeds from the initial public offering have been paid, directly or indirectly, to any of our directors or officers or their associates, persons owning 10% or more of our equity securities or our affiliates. We still intend to use the remainder of the proceeds from our follow-on offering as disclosed in our prospectus dated September 2, 2020 on Form 424B5 filed with the SEC on September 4, 2020.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and our chief financial officer, we carried out an evaluation of the effectiveness of our disclosure controls and procedures, which is defined in Rules 13a-15(e) of the Exchange Act, as of December 31, 2022. Based upon that evaluation, our management, with the participation of our chief executive officer and chief financial officer, has concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures were not effective in ensuring that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act was recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act of 1934. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with U.S. GAAP. Because of its inherent limitations, a system of internal control over financial reporting may not prevent or detect misstatements. 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 and procedures may deteriorate.

Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2022. In making this assessment, it used the criteria established within the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 framework). Based on this assessment, our management has concluded that, as of December 31, 2022, our internal control over financial reporting was not effective. We and our independent registered public accounting firm identified two material weaknesses in our internal control over financial reporting. These two material weaknesses identified relate to (1) the lack of sufficient accounting personnel with appropriate understanding of U.S. GAAP and SEC reporting requirements, and (2) the lack of an up-to-date manual of accounting policies and procedures to facilitate preparation of U.S. GAAP financial statements, which could result in adjustments to U.S. GAAP not identified in a timely and complete manner, causing material misstatements in the Company's financial reporting. To remediate these two weaknesses, we have adopted the following measures to improve our internal control over financial reporting.

- In 2021 and 2022, we hired additional personnel with managerial positions in our finance department with an appropriate understanding of and work experience involving U.S. GAAP and SEC reporting requirements. We will continue to put effort in hiring additional personnel with an appropriate understanding of and work experience involving U.S. GAAP and SEC reporting requirements to ensure there are sufficient resources in the financial reporting functions.
- Besides, we established clear roles and responsibilities for financial reporting and accounting personnel to address complex accounting and financial reporting issues.
- Furthermore, we sponsored our existing financial reporting and accounting personnel to complete external courses relating
 to U.S. GAAP and SEC reporting such that the financial reporting and accounting personnel can earn the necessary
 credentials to be qualified as certified public accountants in the U.S.

- We are also establishing an ongoing program to provide sufficient and additional appropriate training to our financial reporting and accounting staff, especially trainings related to U.S. GAAP and SEC financial reporting requirements. For instance, we continue to require our existing financial reporting and accounting personnel to regularly attend U.S. GAAP and SEC reporting requirement training and workshops hosted by external organizations at least on an annual basis.
- In addition, we have formalized the procedures and controls regarding the financial reporting process and developed and implemented a comprehensive set of U.S. GAAP policies and standardized financial reporting procedures, including a manual of accounting policies and financial reporting checklists, to allow early detection, prevention and resolution of potential misstatements. However, we are in the process of hiring additional financial reporting and accounting personnel to timely update the manual of accounting policies, and properly prepare and review financial statements and related footnote /disclosures based on U.S. GAAP and SEC reporting requirements.

We are fully committed to continue to implement measures to remediate our material weaknesses in our internal control over financial reporting.

Attestation Report of the Independent Registered Public Accounting Firm

Pursuant to Regulation S-K Item 308(b), this annual report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting.

Changes in Internal Control over Financial Reporting

Other than the above, there have not been any changes in our internal control over financial reporting in the year ended December 31, 2022, which have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 16. [Reserved]

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Matthew Chu Pong Fong and Lub Bun Chong are our audit committee financial experts. Each of Matthew Chu Pong Fong and Lub Bun Chong satisfies the independent requirements of the Rule 5605(c)(2) of the Listing Rules of the NASDAQ Stock Market and meet the independence standards under Rule 10A-3 under the Exchange Act.

ITEM 16B. CODE OF ETHICS

Our board of directors adopted a code of business conduct and ethics that applies to our directors, officers and employees. We have filed our code of business conduct and ethics as an exhibit to our registration statement on Form F-1 (file No. 333-221034), as amended, initially filed with the SEC on October 20, 2017. We have posted a copy of our code of business conduct and ethics on our website at http://ir.i-click.com.

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, our independent registered public accounting firm, for the periods indicated. We did not pay any other fees to our independent registered public accounting firm during the periods indicated below.

	2021	2022
	(US\$ in tho	usands)
Audit fees (1)	1,570	1,155
Tax fees (2)	21	31
Audit related fees (3)	489	130

- (1) "Audit fees" means the aggregate fees billed for professional services rendered by our principal auditors for the audit of our annual financial statements and the review of our comparative interim financial statements.
- (2) "Tax fees" include fees billed for tax compliance and tax consultations.
- (3) "Audit-related fees" represent the aggregate fees billed in each of the fiscal years listed for the assurance and related services rendered by our principal auditors that are reasonably related to the performance of the audit or review of our financial statements and not reported under "Audit fees."

The policy of our audit committee is to pre-approve all audit and other service provided by PricewaterhouseCoopers as described above, other than those for *de minimis* services which are approved by the Audit Committee prior to the completion of the audit.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

The following table sets forth information about our purchases of outstanding ADSs in 2022:

Period	(a)Total Number of ADSs Purchased	(b)Average Price Paid per ADS (US\$) ⁽¹⁾	(c) Total Number of ADSs Purchased as Part of Publicly Announced Plans or Programs ⁽⁴⁾	(d) Approximately Dollar Value of ADSs that May Yet be Purchased Under the Plans or Programs (in US\$ million)(4)
January 2022	_	_	_	20.00
February 2022	29,295	27.83	29,295	19.18
March 2022	240,765	13.88	240,765	15.84
April 2022	171,687	10.57	171,687	14.03
May 2022	142,918	8.39	142,918	12.83
June 2022	_	_	_	12.83
July 2022	_	_	_	12.83
August 2022	_	_	_	12.83
September 2022	34,909	3.41	34,909	12.71
October 2022	3,610	2.37	3,610	12.70
November 2022	87,717	2.49	87,717	12.48
December 2022	20,980	2.73	20,980	12.43
Total	731,881	10.35	731,881	12.43

⁽¹⁾ One ADS represent five Class A ordinary shares. The average price per ADS is calculated using the execution price for each repurchase excluding commissions paid to brokers.

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- On November 28, 2018, we announced a share repurchase program in which we may purchase our own ADSs with an aggregate value of up to US\$10 million over the next 12-month period, ending November 27, 2019. On March 27, 2019, we entered into a trading plan with an authorized brokerage firm in the U.S. for the purpose of repurchasing our issued and outstanding ADSs in accordance with Rule 10b5-1 under the U.S. Securities Exchange Act of 1934, as amended, and has been established pursuant to, and as part of, the US\$10 million share buyback program that was previously authorized by our board of directors on November 28, 2018.
 - On January 15, 2020, we announced a share repurchase program in which we may purchase our own ADSs with an aggregate value of up to US\$10 million over the 12-month period ending on December 29, 2020. We expect to effect the proposed share repurchase on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as we deem appropriate. The share repurchase program does not obligate us to acquire any particular number of ADSs and may be suspended, terminated or extended at any time at our discretion without prior notice.
- On December 10, 2020, we further announced a share repurchase program in which we may purchase our own ADSs with an aggregate value of up to US\$15 million from December 30, 2020 to December 31, 2021. On August 25, 2021, we announced the upsize of share repurchase program by US\$10 million from US\$15 million to US\$25 million from December 30, 2020 to December 31, 2021. We expect to effect the proposed share repurchase on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as we deem appropriate. The share repurchase program does not obligate us to acquire any particular number of ADSs and may be suspended, terminated or extended at any time at our discretion without prior notice.
- On December 22, 2021, we announced a share repurchase program in which we may purchase its own ADSs with an aggregate value of up to US\$20 million from January 1, 2022 to December 31, 2022. We expect to effect the proposed share repurchase on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as the we deem appropriate. The share repurchase program does not obligate us to acquire any particular number of ADSs and may be suspended, terminated or extended at any time at our discretion without prior notice.
- On December 28, 2022, we announced a share repurchase program in which we may purchase its own ADSs with an aggregate value of up to US\$5 million from January 1, 2023 to December 31, 2023. We expect to effect the proposed share repurchase on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as the we deem appropriate. The share repurchase program does not obligate us to acquire any particular number of ADSs and may be suspended, terminated or extended at any time at our discretion without prior notice.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

As a Cayman Islands company listed on the NASDAQ Global Market, we are subject to the NASDAQ corporate governance requirements. However, NASDAQ Global 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 corporate governance requirements. We follow our home country practices and rely on certain exemptions provided by the Nasdaq Stock Market Rules to a foreign private issuer, including exemptions from the requirements to have:

- shareholder approval for certain events, including the establishment or amendment of certain equity based compensation plans and arrangements and certain transactions involving issuances of a 20% or more interest in our company;
- majority of independent directors on our board of directors;
- only independent directors being involved in the selection of director nominees and determination of executive officer compensation; and
- regularly scheduled executive sessions of independent directors.

As a result of our reliance on the corporate governance exemptions available to foreign private issuers, you will not have the same protection afforded to shareholders of companies that are subject to all of Nasdaq's corporate governance requirements. See "Item 3. Key Information—D. Risk Factors—Risks Related to Our American Depositary Shares—We are a foreign private issuer within the meaning of the rules under the Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies."

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

On June 1, 2022, we were conclusively listed by the SEC as a Commission-Identified Issuer under the HFCA Act following the filing of our annual report for the fiscal year ended December 31, 2021. Our auditor, a registered public accounting firm that the PCAOB was not able to inspect or investigate completely in 2021 according to the PCAOB's December 16, 2021 determinations, issued the audit report for us for the fiscal year ended December 31, 2021. On December 15, 2022, the PCAOB issued a report that vacated its December 16, 2021 determinations and removed mainland China and Hong Kong form the list of jurisdictions where it is unable to completely inspect of investigate the registered public accounting firms. For this reason, we do not expect to be identified as a Commission-Identified Issuer under the HFCA Act after we file this annual report.

As of the date of this annual report, to our best knowledge, (i) no governmental entities in the Cayman Islands or in China own shares of the Company, (ii) the governmental entities in China do not have a controlling financial interest in the Company, (iii) none of the members of the board of directors of the Company or its operating entities, including the VIE entities, is an official of the Chinese Communist Party, and (iv) none of the currently effective memorandum and articles of association (or equivalent organizing document) of the Company contains any charter of the Chinese Communist Party.

ITEM 16J. INSIDER TRADING POLICIES

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to "Item 18. Financial Statements.".

ITEM 18. FINANCIAL STATEMENTS

See pages beginning on page F-1 in this annual report.

ITEM 19. EXHIBITS

Exhibit Number	Description of Document
1.1	Ninth Amended and Restated Memorandum and Articles of Association, as currently in effect (incorporated by reference to Exhibit 1.1 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on April 25, 2019)
2.1	Registrant's Specimen American Depositary Receipt (included in Exhibit 2.3)
2.2	Registrant's Specimen Certificate for Class A Ordinary Shares (incorporated by reference to Exhibit 4.2 of our Registration Statement on Form F-1 (file No. 333-221034) filed with the Securities and Exchange Commission on October 20, 2017)
2.3	Form of Amendment No. 1 to Deposit Agreement among the Registrant, the depositary and holders of the American Depositary Receipts (incorporated by reference to Exhibit (a)(2) to the Post-effective Amendment No. 1 to Form F-6 Registration Statement (file No. 333-221860) filed with the Securities and Exchange Commission on October 31, 2022)
2.4	Post-effective Amendment No.1 to Form F-6 Registration Statement under the Securities Act of 1933 for Depositary Shares Evidenced by American Depositary Receipts (file No. 33-221860) filed with the Securities and Exchange Commission on October 31, 2022
4.1	English translation of Exclusive Business Cooperation Agreement between iClick Beijing, OptAim Network and Zhiyunzhong dated November 1, 2021 (incorporated by reference to Exhibit 4.1 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
4.2	English translation of Third Amended and Restated Exclusive Call Option Agreement among iClick Beijing, OptAim Network and the shareholders of OptAim Network dated November 1, 2021 (incorporated by reference to Exhibit 4.2 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
4.3	English translation of Third Amended and Restated Equity Pledge Agreement among iClick Beijing, OptAim Network and the shareholders of OptAim Network dated November 1, 2021 (incorporated by reference to Exhibit 4.3 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
4.4	English translation of Irrevocable Power of Attorney granted by the Jian Tang dated November 1, 2021 (incorporated by reference to Exhibit 4.4 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
4.5	English translation of Spousal Consent granted by Xinyu Fan dated November 1, 2021 (incorporated by reference to Exhibit 4.5 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
4.6	2018 Share Incentive Plan (incorporated by reference to Exhibit 10.2 of our Registration Statement on Form S-8 (file No. 333-225568) filed with the Securities and Exchange Commission on June 12, 2018)

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4.7	Form of Indemnification Agreement with Executive Officers and Directors (incorporated by reference to Exhibit 10.9 of our Registration Statement on Form F-1 (file No. 333-221034) filed with the Securities and Exchange Commission on October 20, 2017)
4.8	Form of Employment Agreement and One Way Non-disclosure Agreement with Executive Officers (incorporated by reference to Exhibit 10.10 of our Registration Statement on Form F-1 (file No. 333-221034) filed with the Securities and Exchange Commission on October 20, 2017).
4.9	Post-IPO Share Incentive Plan, as amended and restated on February 26, 2021 (incorporated by reference to Exhibit 10.1 of our Registration Statement on Form S-8 (file No. 333-253596) filed with the Securities and Exchange Commission on February 26, 2021)
4.11	Strategic Cooperation Framework Agreement, dated January 26, 2021, by and among the Registrant and Baozun Inc. (incorporated by reference to Exhibit 4.11 of our annual report on Form 20-F (file No. 001-38313) filed with the Securities and Exchange Commission on May 2, 2022)
8.1*	Subsidiaries of the Registrant
11.1	Code of Business Conduct and Ethics of the Registrant (incorporated by reference to Exhibit 99.1 of our Registration Statement on Form F-1 (file No. 333-221034) filed with the Securities and Exchange Commission on October 20, 2017).
12.1*	CEO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	CFO Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	CEO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**	CFO Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Consent of Travers Thorp Alberga
15.2*	Consent of Jingtian & Gongcheng
15.3*	Consent of PricewaterhouseCoopers
101.INS*	Inline XBRL Instance Document—this instance document does not appear in the Interactive Data File because its XBRL tags are not 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 (embedded within the Inline XBRL document)

st Filed with this annual report on Form 20-F

^{**} Furnished with this annual report on Form 20-F

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on this Form 20-F on its behalf.

iClick Interactive Asia Group Limited

By: /s/ Jian Tang

Name: Jian Tang

Title: Chairman of the Board, Chief Executive Officer

Date: May 11, 2023

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of iClick Interactive Asia Group Limited

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of iClick Interactive Asia Group Limited and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive loss, of changes in shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for credit losses on financial instruments in 2020.

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill impairment assessment

As described in Notes 2(q) and 13 to the consolidated financial statements, the Company's consolidated goodwill balance was US\$nil as of December 31, 2022 which included the effects of the goodwill impairment charge of US\$80.1 million taken during the fiscal year. Management conducts a goodwill impairment test at the reporting unit level annually in the fourth quarter, or more frequently when events or circumstances occur indicating that the recorded goodwill may be impaired. The Company compared the fair value of each reporting unit to its carrying value, with an impairment charge recorded for the amount by which the carrying amount exceeded the reporting unit's fair value up to a maximum amount of the goodwill balance for the reporting unit. For evaluation of reporting units using a quantitative assessment, the Company determined the fair values of both the Marketing Solutions reporting unit and the Enterprise Solutions reporting unit based on an income approach. Under the income approach, the Company estimated the fair value of the reporting units based on the discounted cash flow method derived from the reporting units' long-term forecasts which included a five-year future cash flow projection and an estimated terminal value. Estimating fair value of individual reporting units requires the exercise of significant management judgment related to revenue growth rates, gross margin, estimated terminal value using a terminal year long-term future growth rate, and a discount rate.

The principal considerations for our determination that performing procedures relating to the goodwill impairment assessments of the Marketing Solutions and Enterprise Solutions reporting units is a critical audit matter are (i) the significant judgements made by management when developing the fair value of the reporting units; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumptions related to the revenue growth rates, gross margin, estimated terminal value using a terminal year long-term future growth rate and a discount rate for the reporting units; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included, among others (i) testing management's process for estimating the fair value of the reporting units; (ii) evaluating the appropriateness of the income approach (discounted cash flow method); (iii) testing the completeness, accuracy and relevance of the underlying data used in the model in estimating the fair values of the reporting units; and (iv) evaluating the reasonableness of the significant assumptions used by management in the cash flow projections related to the revenue growth rates, gross margin, the estimated terminal value using a terminal year long-term future growth rate and the discount rate for the reporting units by considering the current and past performance of the reporting units; the consistency with external market and industry data; and whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the Company's discounted cash flow method, and (ii) the reasonableness of significant assumptions related to the estimated terminal value using a terminal year long-term future growth rate and the discount rate, for the estimation of fair values of the reporting units.

Impairment assessments of long-lived assets that are held and used

As described in Notes 2(r), 11, 12 and 14 to the consolidated financial statements, the Company's consolidated long-lived assets balance was US\$2.5 million as of December 31, 2022 and comprised property and equipment, net, intangible assets, net, and right-of-use assets of US\$0.2 million, US\$1.0 million and US\$1.3 million, respectively. Long-lived assets which are held and used are reviewed for impairment when events or changes in circumstances indicate that the carrying value of an asset or asset group may no longer be recoverable. For an asset or asset group that is held and used, the asset or asset group represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or asset groups. Factors considered by the Company in its impairment assessments of long-lived assets that are held and used include, but are not limited to, significant underperformance relative to historical or projected operating results; significant changes in the manner of use of the assets or asset groups or the strategy for the overall business; and significant negative industry or economic trends. When the carrying value of a long-lived asset or asset group that is held and used may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Company estimates the future undiscounted cash flows expected to result from the use of the asset or asset group and its eventual disposition. If the sum of the expected future undiscounted cash flows from use and eventual disposition is less than the carrying amount of the asset or asset group, the Company recognizes an impairment loss. An impairment loss is reflected as the amount by which the carrying amount of the asset or asset group exceeds the fair value of the asset or asset group, based on the fair value if available, or discounted cash flows, if fair value is not available. The discounted cash flow model on which the fair value of the asset or asset group as part of the Company's impairment tests is based includes significant assumptions relating to revenue growth rates, gross margin, and other controllable expenses. The Company performed an impairment test and recognized impairment charges of US\$1.2 million, US\$49.8 million and US\$2.4 million on property and equipment, intangible assets and right-of-use assets, respectively, for the year ended December 31, 2022.

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The principal considerations for our determination that performing procedures relating to impairment assessments of long-lived assets that are held and used for which management identified impairment indicators is a critical audit matter are (i) the significant judgment by management when developing the undiscounted future cash flows for the recoverability of the asset or asset group being tested for impairment; and (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating management's significant assumptions related to the revenue growth rates, gross margin and other controllable expenses.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included, among others, (i) testing management's process for determining the recoverable amount of the asset or asset group tested for impairment, (ii) evaluating the appropriateness of the undiscounted cash flow model, (iii) testing the completeness, accuracy and relevance of the underlying data used in the model in estimating the recoverable amount of the asset or asset group, and (iv) evaluating the reasonableness of the significant assumptions used by management in the cash flow projections related to revenue growth rates, gross margin and other controllable expenses by considering the current and past performance of the asset or asset group tested for impairment; management's strategic plan; comparing market-related assumptions used in the model to external market and industry data; and whether these assumptions were consistent with evidence obtained in other areas of the audit.

/s/PricewaterhouseCoopers Hong Kong May 11, 2023

We have served as the Company's auditor since 2016.

CONSOLIDATED BALANCE SHEETS AS OF DECEMBER 31, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	NT 4		nber 31,
	Note	2021	2022
Assets			
Current assets			
Cash and cash equivalents	5	41,443	82,754
Time deposits	5	11,128	10
Restricted cash	6	36,146	22,543
Short-term investments	2(k)	7,771	7,011
Amount due from an equity investee	7(b)	276	312
Accounts receivable, net of allowance for credit losses of US\$22,786 and US\$37,215			
as of December 31, 2021 and 2022, respectively	9	187,261	64,556
Rebates receivable		5,575	2,933
Prepaid media costs		36,709	16,494
Other current assets, net of allowance for credit losses of US\$289 and US\$nil as of			
December 31, 2021 and 2022, respectively	10	24,957	8,047
Total current assets	•	351,266	204,660
	•		
Non-current assets			
Deferred tax assets	23(e)	1,185	720
Property and equipment, net	11	1,931	241
Investment in an equity investee	7(a)	354	279
Other long-term investments	8	12,114	5,970
Intangible assets, net	12	53,713	991
Goodwill	13	81,674	_
Right-of-use assets, net	14	3,834	1,292
Other assets, net of allowance for credit losses of US\$nil and US\$4,043 as of			
December 31, 2021 and 2022, respectively	10	1,663	7,629
Total non-current assets		156,468	17,122
	-		
Total assets		507,734	221,782

CONSOLIDATED BALANCE SHEETS (CONTINUED) AS OF DECEMBER 31, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

		As of December 31,		
	Note	2021	2022	
Liabilities and equity				
Current liabilities				
Accounts payable (including accounts payable of the consolidated variable interest				
entity ("VIE") and its subsidiaries without recourse to the Company of US\$2,262 and				
US\$2,008 as of December 31, 2021 and 2022, respectively)		66,587	41,728	
Deferred revenue (including deferred revenue of the consolidated VIE and its				
subsidiaries without recourse to the Company of US\$88 and US\$29 as of December				
31, 2021 and 2022, respectively)	15	22,802	16,975	
Accrued liabilities and other current liabilities (including accrued liabilities and other				
current liabilities of the consolidated VIE and its subsidiaries without recourse to the				
Company of US\$1,444 and US\$861 as of December 31, 2021 and 2022,				
respectively)	16	29,735	30,539	
Lease liabilities (including lease liabilities of the consolidated VIE and its subsidiaries				
without recourse to the Company of US\$295 and US\$111 as of December 31, 2021				
and 2022, respectively)	14	2,141	2,151	
Bank borrowings (including bank borrowing of the consolidated VIE and its				
subsidiaries without recourse to the Company of US\$1,889 and US\$1,590 as of				
December 31, 2021 and 2022, respectively)	17	75,530	44,283	
Income tax payable (including income tax payable of the consolidated VIE and its				
subsidiaries without recourse to the Company of US\$575 and US\$501 as of				
December 31, 2021 and 2022, respectively)		4,050	2,040	
Total current liabilities	_	200,845	137,716	
	-	<u> </u>	,	
Non-current liabilities				
Lease liabilities (including lease liabilities of the consolidated VIE and its subsidiaries				
without recourse to the Company of US\$89 and US\$24 as of December 31, 2021 and				
2022, respectively)	14	1,463	1,380	
Deferred tax liabilities (including deferred liabilities of the consolidated VIE and its				
subsidiaries without recourse to the Company of US\$99 and US\$64 as of December				
31, 2021 and 2022, respectively)	23(e)	13,378	1,326	
Accrued liabilities and other liabilities	16	459	2,071	
Total non-current liabilities	_	15,300	4,777	
	-		,	
Total liabilities		216,145	142,493	
	_	, -	,	
Commitments and contingencies	27			

CONSOLIDATED BALANCE SHEETS (CONTINUED) AS OF DECEMBER 31, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

		As of Decen	nber 31,
	Note	2021	2022
Equity			
Ordinary shares – Class A (80,000,000 shares authorized as of December 31, 2021 and			
2022, respectively; 42,865,515 and 43,736,801 shares issued and outstanding as of			
December 31, 2021 and 2022, respectively)	19	43	44
Ordinary shares – Class B (20,000,000 shares authorized as of December 31, 2021 and			
2022, respectively; 5,034,427 and 5,034,427 shares issued and outstanding as of			
December 31, 2021 and 2022, respectively)	19	5	5
Treasury shares (2,323,802 and 5,843,335 shares as of December 31, 2021 and 2022,			
respectively)	19	(20,908)	(28,457)
Additional paid-in capital		525,508	529,455
Statutory reserves		81	81
Accumulated other comprehensive income/(losses)		860	(4,086)
Accumulated deficit		(221,237)	(422,112)
Total iClick Interactive Asia Group Limited shareholders' equity		284,352	74,930
Non-controlling interests		7,237	4,359
Total equity		291,589	79,289
Total liabilities and equity		507,734	221,782

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	NT 4	For the years ended December 31, 2020 2021 2022			
Net revenues	Note	254,745	2021 307,702	2 022 169,080	
Cost of revenues		(181,482)	(218,549)	(173,212)	
		73,263	89,153	(4,132)	
Gross profit/(loss) Operating expenses		73,203	03,133	(4,132)	
Research and development expenses		(5,349)	(9,527)	(9,216)	
Sales and marketing expenses		(38,028)	(52,872)	(44,613)	
General and administrative expenses		(31,648)	(39,643)	(51,668)	
Impairment of long-lived assets		(31,040)	(55,045)	(4,403)	
Impairment of goodwill		_	_	(80,137)	
Total operating expenses		(75,025)	(102,042)	(190,037)	
Operating loss		(1,762)	(12,889)	(194,169)	
Interest income		1,297	824	1,478	
Interest expense		(2,650)	(4,089)	(2,057)	
Other gains/(losses), net	22	5,852	2,203	(19,165)	
Fair value losses on derivative liabilities	18	(11,466)		_	
Fair value losses on convertible notes	18	(4,433)	_	_	
Loss before share of loss from an equity investee and income tax expense		(13,162)	(13,951)	(213,913)	
Share of loss from an equity investee	7(a)	(111)	(107)	(75)	
Income tax (expense)/credit	23	(1,633)	(2,540)	11,182	
Net loss		(14,906)	(16,598)	(202,806)	
Net loss attributable to non-controlling interests		2,288	2,967	1,931	
Net loss attributable to iClick Interactive Asia Group Limited's ordinary					
shareholders		(12,618)	(13,631)	(200,875)	
Net loss		(14,906)	(16,598)	(202,806)	
Other comprehensive income/(loss):					
Foreign currency translation adjustment, net of US\$nil tax		5,274	3,484	(5,060)	
Comprehensive loss		(9,632)	(13,114)	(207,866)	
Comprehensive loss attributable to non-controlling interests		2,015	2,823	2,045	
Comprehensive loss attributable to iClick Interactive Asia Group Limited		(7,617)	(10,291)	(205,821)	
Net loss per share attributable to iClick Interactive Asia Group Limited					
- Basic	24	(0.32)	(0.28)	(3.98)	
- Diluted	24	(0.32)	(0.28)	(3.98)	
Weighted average number of ordinary shares used in per share					
calculation:					
- Basic	24	39,368,436	48,187,235	50,420,225	
- Diluted	24	39,368,436	48,187,235	50,420,225	

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	Ordinary shares		Ordinary shares Treasury shares						Total iClick Interactive		
	Number of shares	Amount	Number of shares	Amount	Additional paid-in capital	Accumulated deficit	Statutory reserves	Accumulated other comprehensive losses	Asia Group Limited	Non- controlling interests	Total equity
Balance as of											
December								,_ ,_a,			
31, 2019	28,690,635	29	1,744,873	(4,858)	305,344	(191,016)	81	(7,479)	102,101	12,455	114,556
Cumulative effect of											
adoption of new											
accounting											
standard											
(Note 2(j)) Reissuance of	_		_	_	_	(3,972)	_		(3,972)	_	(3,972)
treasury shares upon exercise of employee share options and vesting											
of RSUs	546,340	1	(546,340)	194	1,110	_	_	_	1,305	_	1,305
Share-based	5 10,540	1	(510,540)	107	1,110				1,000		1,505
compensation											
expense	_	_	_	_	6,249		_	_	6,249	_	6,249
Issuance of											
shares upon											
vesting of	454 000										
RSUs Repurchase of	171,932	_	_	_	_	_	_	_	_	_	_
ordinary											
shares	_	_	397,839	(5,677)	_	_	_	_	(5,677)	_	(5,677)
Issuance of			001,000	(0,011)					(0,011)		(0,011)
ordinary shares but held as treasury											
shares	_	_	800,000	_	_	_	_	_	_	_	_
Capital injection in a subsidiary (Note 1(a) (iv))	_	_	_	_	1,716	_	_	_	1,716	(1,716)	_
Purchase of										```	
interests in subsidiaries from non- controlling interests (Notes 1(a)											
(iv), (v))	313,011	_	_	_	2,795	_	_	_	2,795	(9,798)	(7,003)
Issuance of ordinary shares upon share offerings											
(Note 1(c))	5,546,007	5	_	_	71,912	_	_	_	71,917	_	71,917
Issuance of ordinary shares pursuant to convertible notes conversion	3,3-10,007	3			71,012				71,317		71,317
(Note 21(c))	6,776,204	7	_	_	68,888	_	_	_	68,895	_	68,895
Business	3,772,694	4		_	34,386		_	_	34,390	7,987	42,377
combinations											

(Note 4(c) (d))											
Contribution											
from non-											
controlling											
interests											
(Note 1(a)											
(iii))	_	_	_	_	_	_	_	_	_	73	73
Net loss for the											
year	_	_	_	_	_	(12,618)	_	_	(12,618)	(2,288)	(14,906)
Foreign											
currency											
translation								5,001	5,001	273	5,274
Balance as of											
December											
31, 2020	45,816,823	46	2,396,372	(10,341)	492,400	(207,606)	81	(2,478)	272,102	6,986	279,088

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	Ordinary shares		Treasury shares						Total iClick		
	Number of shares	Amount	Number of shares	Amount	Additional paid-in capital	Accumulated deficit	Statutory reserves	Accumulated other comprehensive (losses)/income	Interactive Asia Group Limited shareholders' equity	Non- controlling interests	Total equity
Balance as											
of											
December 31, 2020	45,816,823	16	2 206 272	(10.241)	492,400	(207 606)	01	(2.479)	272 102	£ 00£	270 000
Reissuance	45,010,023	46	2,396,372	(10,341)	492,400	(207,606)	81	(2,478)	272,102	6,986	279,088
of treasury											
shares upon											
exercise of											
employee											
share											
options and											
vesting of RSUs	677,530	1	(677,530)	120	540	_			661		661
Share-based	077,330	1	(0//,330)	120	340		<u>—</u>	_	001	_	001
compensatio	n										
expense	_	_	_	_	11,969	_	_	_	11,969	_	11,969
Issuance of											
shares upon											
vesting of	FF2 F00										
RSUs Repurchase	572,500	_	_	_		_				_	
of ordinary											
shares	_	_	604,960	(10,687)	_	_	_	_	(10,687)	_	(10,687)
Issuance of			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(-,)					(2,22)		(-,)
ordinary											
shares upon											
subscription											
from Baozun Inc.											
(Notes 1(d)											
and 21(d))	649,349	1	_	_	18,539	_	_	_	18,540	_	18,540
Issuance of					·						,
ordinary											
shares upon											
settlement											
for contingent											
consideration	n										
payable	_										
(Note 4(b))	183,740	_	_	_	2,060	_	_	_	2,060	_	2,060
Business											
combination										2.052	2.072
(Note 4(c)) Net loss for	_	_	_	_	_	_		_	_	3,072	3,072
the year			_	_		(13,631)		_	(13,631)	(2,967)	(16,598)
Foreign						(15,051)			(15,051)	(2,507)	(10,550)
currency											
translation								3,338	3,338	146	3,484
Balance as											
of December											
31, 2021	47,899,942	48	2,323,802	(20,908)	525,508	(221,237)	81	860	284,352	7,237	291,589
,				<u> </u>							



CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	Ordinary s	hares	Treasury	shares					Total iClick		
	Number of shares	Amount	Number of shares	Amount	Additional paid-in capital	Accumulated deficit	Statutory reserves	Accumulated other comprehensive income/(losses)	Interactive Asia Group Limited shareholders' equity	Non- controlling interests	Total equity
Balance as											
of December 31, 2021 Reissuance of treasury shares upon	47,899,942	48	2,323,802	(20,908)	525,508	(221,237)	81	860	284,352	7,237	291,589
exercise of employee share options and vesting of RSUs	139,871		(139,871)	25	43				68		68
Share-based	139,0/1	_	(139,0/1)	25	43		_		00	_	00
compensation	า										
expense	_	_	_	_	3,794	_	_	_	3,794	_	3,794
Issuance of					- ,				- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2,. 2 .
shares upon											
vesting of											
RSUs	345,000		_			_		_	_		_
Repurchase											
of ordinary											
shares	_	_	3,659,404	(7,574)	_	_	_	_	(7,574)	_	(7,574)
Purchase of interest in a subsidiary from non- controlling interests											
(Note 1(a)	206 415	1			110				111	(022)	(722)
(iv)) Net loss for	386,415	1	_	_	110	_	_		111	(833)	(722)
the year	_	_	_	_	_	(200,875)	_	_	(200,875)	(1,931)	(202,806)
Foreign						(200,070)			(200,075)	(1,551)	(202,000)
currency											
translation								(4,946)	(4,946)	(114)	(5,060)
Balance as											
of December	40.774.220	40	E 0.42 22E	(20.457)	F20 4FF	(422,112)	0.1	(4.006)	74.020	4.250	70.200
31, 2022	48,771,228	49	5,843,335	(28,457)	529,455	(422,112)	81	(4,086)	74,930	4,359	79,289

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

Cash flows from operating activities 2020 2021 Net loss (14,906) (16,598) Adjustments to reconcile net loss to net cash used in operating activities (14,906) (16,598) Depreciation of property and equipment 381 648 Amortization of intangible assets 4,189 3,238 Amortization of right-of-use assets 1,930 2,785 Losses/(gains) on disposals of property and equipment 3 (16) Allowance for credit losses on accounts receivable 6,587 12,424 Accounts receivable written off 289 - Other receivable written off - 289 Other scelevable written off - 1,530 Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. - 1,530 Other share-based compensation expenses 6,249 11,969 Fair value losses on derivative liabilities 11,466 -	2022 (202,806) 842 2,990 2,650 (40) 18,542 (1,978)
Net loss Adjustments to reconcile net loss to net cash used in operating activities Depreciation of property and equipment Amortization of intangible assets 4,189 3,238 Amortization of right-of-use assets 1,930 2,785 Losses/(gains) on disposals of property and equipment 3 (16) Allowance for credit losses on accounts receivable Accounts receivable written off 4,100 Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 11,969	842 2,990 2,650 (40) 18,542 (1,978)
Adjustments to reconcile net loss to net cash used in operating activities Depreciation of property and equipment Amortization of intangible assets Amortization of right-of-use assets 1,930 2,785 Losses/(gains) on disposals of property and equipment Allowance for credit losses on accounts receivable Allowance for credit losses on accounts receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 11,969	842 2,990 2,650 (40) 18,542 (1,978)
Depreciation of property and equipment Amortization of intangible assets Amortization of right-of-use assets Amortization of right-of-use assets Losses/(gains) on disposals of property and equipment Allowance for credit losses on accounts receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Accounts	2,990 2,650 (40) 18,542 (1,978)
Amortization of intangible assets Amortization of right-of-use assets 1,930 2,785 Losses/(gains) on disposals of property and equipment 3 (16) Allowance for credit losses on accounts receivable 6,587 12,424 Accounts receivable written off (2,621) (1,669) Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 11,969	2,990 2,650 (40) 18,542 (1,978)
Amortization of right-of-use assets Losses/(gains) on disposals of property and equipment Allowance for credit losses on accounts receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 1,930 2,785 1,669 1,669) 1,669)	2,650 (40) 18,542 (1,978)
Losses/(gains) on disposals of property and equipment Allowance for credit losses on accounts receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable — 289 Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. — 1,530 Other share-based compensation expenses 6,249 11,969	(40) 18,542 (1,978)
Allowance for credit losses on accounts receivable Accounts receivable written off Allowance for credit losses on loans and interest receivable Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 11,969	18,542 (1,978)
Accounts receivable written off Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. Other share-based compensation expenses 6,249 11,969	(1,978)
Allowance for credit losses on loans and interest receivable Other receivable written off Share-based compensation expenses Other share-based compensation expenses 6,249 11,969	
Other receivable written off Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. — 1,530 Other share-based compensation expenses 6,249 11,969	2 004
Share-based compensation expenses in relation to the to ordinary shares upon subscription from Baozun Inc. — 1,530 Other share-based compensation expenses 6,249 11,969	3,661
Other share-based compensation expenses 6,249 11,969	7,566
Other share-based compensation expenses 6,249 11,969 Fair value losses on derivative liabilities 11,466 —	_
Fair value losses on derivative liabilities 11,466 —	3,794
Fair value losses on convertible notes 4,433 —	_
Fair value (gains)/losses on short-term investments (1,404) 316	2,368
Impairment of goodwill — — —	80,137
Impairment of intangible assets — — —	49,778
Impairment of long-term investments — 4,038	10,805
Impairment of property and equipment — — —	1,206
Impairment of right-of-use assets — — —	2,365
Fair value changes on contingent consideration payables — (418)	8,396
Deferred tax (1,151) (905) Share of losses from an equity investee 111 107	(11,557) 75
Changes in operating assets and liabilities, net	/3
	104,006
	912
Prepayments and other assets (1,426) 3,333	
Rebates receivables (4,987) 5,626	2,642
Prepaid media costs (8,383) (1,463)	17,515
Accounts payable (23,345) 23,447	(24,859)
Accrued liabilities and other current liabilities 3,392 (1,504)	3,999
Deferred revenue 265 (5,323)	(6,935)
Income tax payable (121) (80)	(1,839)
Income tax recoverable (55) 7	(319)
Lease liabilities (2,781)	(2,776)
Amount due from an equity investee (63) (58)	(36)
Net cash (used in)/provided by operating activities (19,633) (19,673)	71,104
Cash flows from investing activities	
Purchase of property and equipment (556) (1,386)	(506)
Purchase of intangible assets (575) (203)	_
(Purchase)/redemption of short-term investments (22,267) 15,633	(99)
Investment in an equity investee (412)	(55)
Purchase of other long-term investments (7,129) (4,108)	(6,500)
Prepayment for long-term investment costs (1,901) (394)	(0,500)
Redemption/(purchase) of time deposits (1304) (1304)	11,118
Disposal/(acquisition) of businesses, net of cash received 6,226 (11,007)	(7,742)
Disposal/acquisition) of utsintesess, net of cash received 0,220 (10,007) Purchase of interest in a subsidiary from non-controlling interests — — —	
	(722)
Loan to hird parties (1,400) (17,303)	434
Repayment of loan from third parties — 6,400	
Proceeds from disposals of property and equipment	40
Net cash used in investing activities (27,693) (22,390)	(3,977

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED) FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	For the ye	ears ended Decem	aber 31, 2022
Cash flows from financing activities			
Proceeds from exercise of share options	1,305	661	68
Proceeds from bank borrowings	180,511	248,784	180,006
Repayments of bank borrowings	(165,131)	(231,025)	(209,789)
Proceeds from issuance of convertible notes, net of transaction expenses	19,184	· –	
Redemption of convertible notes	(15,196)	_	_
Contribution from non-controlling interests	73	_	_
Repurchase of ordinary shares	(5,677)	(10,687)	(7,574)
Net proceeds from issuance of ordinary shares upon share offerings	71,917	_	_
Net proceeds from issuance of ordinary shares upon subscription from Baozun Inc.	_	17,010	_
Purchase of interests in subsidiaries from non-controlling interests	(7,003)	_	_
Net cash provided by/(used in) financing activities	79,983	24,743	(37,289)
Net increase/(decrease) in cash and cash equivalents and restricted cash	32,657	(17,320)	29,838
Cash and cash equivalents and restricted cash at the beginning of year	60,706	94,377	77,589
Effect on exchange rate changes on cash and cash equivalents and restricted cash	1,014	532	(2,130)
Cash and cash equivalents and restricted cash at the end of year	94,377	77,589	105,297
Reconciliation of cash and cash equivalents and restricted cash within the consolidated balance sheets to the amounts shown in the consolidated statements of cash flows above:			
Cash and cash equivalents	52,232	41,443	82,754
Restricted cash, current	42,145	36,146	22,543
	94,377	77,589	105,297
Supplemental disclosure of cash flow information:			
Interests paid	(2,545)	(3,922)	(2,114)
Cash paid for income taxes	(2,960)	(3,677)	(1,949)
Supplemental schedule of non-cash investing and financing activities:			
Fair value losses on convertible notes	4,433	_	_
Fair value losses on derivative liabilities	11,466	_	_
Issuance of ordinary shares upon conversion of convertible notes	68,895	_	_
Issuance of ordinary shares upon acquisition of subsidiaries	42,377	_	_
Issuance of convertible notes upon exercise of call option	11,466	_	_
Issuance of ordinary shares upon acquisition of interest in a subsidiary from non-controlling			
interests	_	_	1,577
Issuance of ordinary shares upon settlement for contingent consideration payable	_	2,060	_
Transfer of prepayments for long-term investments to other long-term investments	_	7,023	_

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities

(a) Organization and nature of operation

iClick Interactive Asia Group Limited (the "Company") and its subsidiaries are collectively referred to as the Group. The Company was incorporated under the law of Cayman Islands as a limited company on February 3, 2010. The Group is principally engaged in (i) the provision of online advertising services ("Marketing Solutions") and (ii) the provision of software and data analytical tool licenses, customer relationship management solutions, and digitalized operational solutions ("Enterprise Solutions"). The Group's principal operations and geographic market are in Greater China and have offices in Hong Kong and The People's Republic of China ("the PRC"). There are also sales teams in Singapore and the United Kingdom.

The accompanying consolidated financial statements include the financial statements of the Company, its principal subsidiaries and consolidated VIE and the VIE's subsidiaries (defined in Note 1(b)) as follows:

Effective interest held

Name	Relationship	Effective interest held through equity ownership/ contractual arrangements (Note (i))	Date of incorporation/establishment	Place of incorporation/establishment	Principal activities
Tetris Media Limited	Subsidiary	100 %	July 2007	Hong Kong	Investment holding
iClick Interactive Asia Limited	Subsidiary	100 %	December 2008	Hong Kong	Online advertising, SaaS products and services
China Search (Asia) Limited iClick Interactive (Singapore) Pte. Ltd.	Subsidiary Subsidiary	100 % 100 %	September 2010 January 2011	Hong Kong Singapore	Online advertising Online advertising
iClick Data Technology (Beijing) Limited ("Beijing WFOE")	Subsidiary	100 %	January 2011	The PRC	Online advertising, SaaS products and services
Search Asia Technology (Shenzhen) Co., Ltd. Performance Media Group Limited	Subsidiary Subsidiary	100 % 100 %	January 2011 January 2013	The PRC Hong Kong	Online advertising Online advertising
CMRS Digital Solutions Limited	Subsidiary		April 2008	Hong Kong	Online advertising, SaaS products and services
Beyond Digital Solutions Limited	Subsidiary		April 2010	Hong Kong	Online advertising, SaaS products and services
CruiSo Digital Solutions Limited	Subsidiary	100 %	May 2011	Hong Kong	Online advertising, SaaS products and services
Tetris Information Technology (Shanghai) Co., Ltd.	Subsidiary	100 %	April 2008	The PRC	Online advertising, SaaS products and services
OptAim (Beijing) Information Technology Co., Ltd. ("OptAim WFOE")	Subsidiary	100 %	November 2014	The PRC	Online advertising, SaaS products and services

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(a) Organization and nature of operation (Continued)

The accompanying consolidated financial statements include the financial statements of the Company, its principal subsidiaries and consolidated VIE and the VIE's subsidiaries (defined in Note 1(b)) as follows: (Continued)

Effective

Name	Relationship	interest held through equity ownership/ contractual arrangements (Note (i))	Date of incorporation/ establishment	Place of incorporation/ establishment	Principal activities
Anhui Zhiyunzhong Information Technology Co., Ltd.			November		Online advertising, SaaS
("OptAim Anhui")	Subsidiary	100 %	2017	The PRC	products and services
Tetris (Shanghai) Data Technology Co., Ltd.	Subsidiary	100 %	October 2020	The PRC	Online advertising, SaaS products and services
Zhiyunzhong (Shanghai) Technology Co., Ltd. ("Shanghai OptAim")	Subsidiary	100 %	September 2014	The PRC	Online advertising
Beijing OptAim Network Technology Co., Ltd. ("Beijing OptAim")	VIE	100 %	September 2012	The PRC	Online advertising
Shanghai Myhayo Technology Co., Ltd. ("Myhayo") (Notes (ii), (iii))	VIE's subsidiary	36.8 %	May 2017	The PRC	Mobile content aggregator and online advertising
Anhui Myhayo Technology Co., Ltd. ("Anhui Myhayo") (Notes (ii), (iii))	VIE's subsidiary	36.8 %	September 2018	The PRC	Mobile content aggregator and online advertising
Changyi (Shanghai) Information Technology Ltd. ("Changyi") (Note (iv))	Subsidiary	100 %	January 2014	The PRC	SaaS products and services
Xi'an Changzhan Information Technology Ltd. ("Xian Changyi")	Subsidiary	100 %	August 2019	The PRC	SaaS products and services
Optimal Power Limited ("Optimal") (Note (v))	Subsidiary	100 %	September 2019	BVI	Investment holding

Note:

- (i) Save for the impacts from the transactions detailed in Notes (iii), (iv) and (v) below, there was no change in the Company's effective interest held through equity ownership/ contractual arrangements over the principal subsidiaries and consolidated VIE and the VIE's subsidiaries during the years ended December 31, 2020, 2021 and 2022.
- (ii) Although the Company owns less than 50% ownership in these entities, these entities are consolidated as the Company obtains control with its controlling voting right at the level of both shareholders and board of directors pursuant to agreements with other investors of these entities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(a) Organization and nature of operation (Continued)

Note: (Continued)

- (iii) The Company acquired 40% equity interest of Anhui Myhayo and Shanghai Myhayo in November 2018. In August 2019 and August 2020, there were contribution from non-controlling interests of US\$2,905 to Anhui Myhayo and US\$73 to Shanghai Myhayo, respectively, whereby the Company's (i) equity interest in Anhui Myhayo was diluted to 36.8% in August 2019 and (ii) equity interest in Shanghai Myhayo was diluted to 36.8% in August 2020. These transactions did not result in a loss of the Company's control over Anhui Myhayo and Shanghai Myhayo and were accounted for as transactions with non-controlling interests, resulting in an increase in equity by US\$2,905 and US\$73 for the years ended December 31, 2019 and 2020, respectively.
- (iv) The Company acquired 34.38% equity interest of Changyi, which held 100% equity interest of Suzhou Changyi, Xian Changyi, Shanghai Changyu and Anhui Aizhishu, in January 2019. During the years ended December 31, 2019, 2020 and 2022, the Company has further completed the following transactions in relation to Changyi.
 - In May 2019, the Company injected a total cash of RMB15 million (equivalent to US\$2,217) to Changyi as paid-up capital, upon which the Company's equity interest in Changyi increased to 41.46%.
 - In September 2020, the Company further injected a total cash of RMB65 million (equivalent to US\$9,477) to Changyi as paid-up capital, resulting in a transfer of non-controlling interests of US\$1,716 to additional paid-in capital for the year ended December 31, 2020. The Company's equity interest in Changyi increased further to 52.62%.
 - In December 2020, the Company acquired 7.22% equity interest of Changyi from non-controlling interests using 313,011 Class A ordinary shares of the Company with a fair market value of US\$4,176, resulting in a transfer of non-controlling interests of US\$1,658 to additional paid-in capital for the year ended December 31, 2020. The Company's equity interests in Changyi increased further to 59.84%.
 - In August 2022, the Company acquired the remaining 40.16% equity interest of Changyi from non-controlling interests using cash consideration of US\$722 and 1,545,663 class A ordinary shares of the Company with a fair market value of US\$1,577, resulting in a transfer of non-controlling interests of US\$833 to additional paid-in capital for the year ended December 31, 2022. Upon completion of this transaction, the Company owns 100% equity interests in Changyi.

These transactions did not change the Company's control over Changyi and were not accounted for as transactions with non-controlling interests.

(v) The Company acquired 80% equity interest of Optimal in May 2020 (Note 4(a)). In December 2020, the Company acquired the remaining 20% equity interest of Optimal from the non-controlling interest at a cash consideration of US\$7,003, whereby the Company's equity interests in Optimal increased to 100%. This was accounted for as a transaction with non-controlling interests with an increase in additional paid-in capital of US\$1,137 and a reduction in non-controlling interests of US\$8,140 for the year ended December 31, 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(b) Consolidated VIE and VIE's subsidiaries

When the Company acquired OptAim WFOE in July 2015, OptAim WFOE is considered as a foreign invested enterprise and any foreign ownership in advertising business was subject to certain restrictions under the PRC laws and regulations at that time. To comply with the then-effective PRC laws and regulations, certain of the Group's operations are conducted through Beijing OptAim and its subsidiaries (together, "OptAim VIE"). OptAim WFOE, a wholly-owned subsidiary of the Company, or a wholly foreign owned enterprise ("WFOE") of the Company, entered into a series of contractual agreements among Beijing OptAim and Beijing OptAim's legal shareholders.

Management evaluated the contractual relationships among the Company, OptAim WFOE and OptAim VIE as detailed below, and concluded that OptAim WFOE is the primary beneficiary of OptAim VIE. As a result, OptAim VIE's results of operations, assets and liabilities have been included in the Group's consolidated financial statements.

As a result of an internal restructuring within the Group in 2021 to move the VIE structure from OptAim WFOE to Beijing WFOE (being another wholly-owned subsidiary of the Company in the PRC), on November 1, 2021, the VIE contractual agreements as detailed below were amended and restated, which were to provide Beijing WFOE with the power, rights and obligations equivalent in all material respects to those it would possess as the principal equity holder of OptAim VIE by signing such contractual agreements among Beijing OptAim and Beijing OptAim's legal shareholders to have Beijing WFOE replacing OptAim WFOE as the primary beneficiary of OptAim VIE.

OptAim VIE

The Company's relationships with Beijing OptAim and its shareholders are governed by the following contractual arrangements:

Cooperative Agreement

Under the cooperative agreement between OptAim WFOE/Beijing WFOE and Beijing OptAim, OptAim WFOE/Beijing WFOE has the exclusive right to provide to Beijing OptAim, among others, technical consulting, technical support, business consulting, and appointment and dismissal of employees. OptAim WFOE/Beijing WFOE will collect a fee from Beijing OptAim to be determined at the sole discretion of OptAim WFOE/Beijing WFOE. The term of this agreement will not expire unless OptAim WFOE/Beijing WFOE provides prior written notice to Beijing OptAim.

• Purchase Option Agreement

The parties to the purchase option agreement are OptAim WFOE/Beijing WFOE, Beijing OptAim and each of the shareholders of Beijing OptAim. Under the purchase option agreement, each of the shareholders of Beijing OptAim irrevocably granted OptAim WFOE/Beijing WFOE or its designated representative(s) an exclusive option to purchase, to the extent permitted under PRC law, all or part of its equity interests in Beijing OptAim. OptAim WFOE/Beijing WFOE or its designated representative(s) have sole discretion as to when to exercise such options, either in part or in full. Without prior written consent from OptAim WFOE/Beijing WFOE, Beijing OptAim's shareholders shall not sell, transfer, mortgage or otherwise dispose their equity interests in Beijing OptAim. The agreement will not expire until all shares of Beijing OptAim are transferred to OptAim WFOE/Beijing WFOE or its designated representative(s).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(b) Consolidated VIE and VIE's subsidiaries (Continued)

Power of Attorney

Pursuant to the irrevocable power of attorney executed by the shareholders of Beijing OptAim, Beijing OptAim appointed OptAim WFOE/Beijing WFOE as its attorney-in-fact to exercise all shareholders' rights in Beijing OptAim, including, without limitation, the power to vote on all matters of Beijing.

OptAim requiring shareholder approval under PRC laws and regulations and the articles of association of Beijing OptAim. The power of attorney will remain in force until OptAim WFOE/Beijing WFOE provides prior written notice to Beijing OptAim.

Pledge Agreement

Pursuant to the pledge agreement between OptAim WFOE/Beijing WFOE and the shareholders of Beijing OptAim, the shareholders of Beijing OptAim have pledged all of their equity interests in Beijing OptAim to OptAim WFOE/Beijing WFOE to guarantee the performance by Beijing OptAim under the cooperative agreement, purchase option agreement, and powers of attorney. If Beijing OptAim and/or its shareholders breach their contractual obligations under those agreements, OptAim WFOE/Beijing WFOE, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. Under the pledge agreement, the shareholders of Beijing OptAim are not able to provide any other guarantee by pledging the shares of Beijing OptAim, transfer or sell their pledged shares to other individual, change share capital of Beijing OptAim or transfer or sell the assets out of Beijing OptAim. The shareholders of Beijing OptAim have completed the registration of the equity pledge with the relevant office of the Administration for Industry and Commerce in accordance with the PRC Property Rights Law on June 21, 2017.

Through the aforementioned contractual agreements, OptAim VIE is considered VIE in accordance with Generally Accepted Accounting Principles in the United States ("U.S. GAAP") because the Company, through OptAim WFOE/Beijing WFOE, has the ability to:

- exercise effective control over OptAim VIE whereby having the power to direct OptAim VIE's activities that most significantly drive the economic results of OptAim VIE;
- receive substantially all of the economic benefits and residual returns, and absorb substantially all the risks and expected losses from OptAim VIE as if it was their sole shareholder; and
- have an exclusive option to purchase all of the equity interests in OptAim VIE.

As of December 31, 2021 and 2022, the total assets of OptAim VIE (excluding amounts due from subsidiaries of the Group) were US\$10,506 and US\$7,110, respectively, mainly comprising cash and cash equivalents, accounts receivable, prepaid media costs, property and equipment, intangible assets, right-of-use assets, other long-term investment and other assets. As of December 31, 2021 and 2022, the total liabilities of OptAim VIE (excluding amounts due to subsidiaries of the Group) were US\$6,741 and US\$5,188 respectively, mainly comprising accounts payable, deferred revenue, lease liabilities, bank borrowings, income tax payable, accrued liabilities and other current liabilities, and deferred tax liabilities.

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iCLICK INTERACTIVE ASIA GROUP LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(b) Consolidated VIE and VIE's subsidiaries (Continued)

In accordance with the aforementioned agreements, the Company has the power to direct activities of OptAim VIE, and can have assets transferred out of OptAim VIE. Therefore the Company considers that there is no asset in OptAim VIE that can be used only to settle obligations of OptAim VIE, except for registered capital and PRC statutory reserves of OptAim VIE amounting to US\$2,081 and US\$2,081, respectively, as of December 31, 2021 and 2022. As Beijing OptAim and its subsidiaries were incorporated as limited liability companies under the PRC Company Law, the creditors do not have recourse to the general credit of the Company for all the liabilities of OptAim VIE. Currently there is no contractual arrangement that could require the Company to provide additional financial support to OptAim VIE.

As the Company is conducting its PRC online advertising services business through OptAim VIE, the Company will, if needed, provide such support on a discretion basis in the future, which could expose the Company to a loss.

There is no VIE where the Company has variable interest but is not the primary beneficiary.

In the opinion of the Company's management, the contractual arrangements among its subsidiary, the VIE and the nominee shareholder are in compliance with current PRC laws and are legally binding and enforceable. However, uncertainties in the interpretation and enforcement of the PRC laws, regulations and policies could limit the Company's ability to enforce these contractual arrangements. In addition, the nominee shareholder of the VIE is Mr Jian Tang, the chairman of our board of directors and our chief executive officer, who controls around 30% of the Company in terms of voting power. Therefore, the enforceability of the contractual agreements between the Company's subsidiary, the VIE and its nominee shareholder depends on whether the shareholder will fulfil these contractual agreements. As a result, the Company may be unable to consolidate the VIE and VIE's subsidiaries in the consolidated financial statements.

The Company's ability to control OptAim VIE also depends on the power of attorney and the effect of the share pledge under the Pledge Agreement and OptAim WFOE/Beijing WFOE has to vote on all matters requiring shareholder approval in OptAim VIE. As noted above, the Company believes this power of attorney is legally enforceable but may not be as effective as direct equity ownership.

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ICLICK INTERACTIVE ASIA GROUP LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

1 Organization and principal activities (Continued)

(c) Share offerings in 2020

(i) Private investment in public equity offering ("PIPE")

The Company completed a PIPE offering on June 22, 2020 and issued a total of 2,107,400 Class A ordinary shares. The net proceeds received by the Company, after deducting offering expenses of US\$3,469, amounted to US\$18,531.

(ii) Follow-on offering

The Company completed a follow-on offering of 8,500,001 American Depositary Shares ("ADSs") (equivalent to 4,250,001 Class A ordinary shares) at a public offering price of US\$8.50 per ADS on September 8, 2020. Each ADS represents 0.5 common share. Of the ADSs sold in the follow-on offering, 6,877,214 ADSs (equivalent to 3,438,607 Class A ordinary shares) were newly issued and sold by the Company and 1,622,787ADSs (equivalent to 811,394 Class A ordinary shares) were sold by an existing shareholder. The net proceeds received by the Company, after deducting offering expenses of US\$5,070, amounted to US\$53,386.

(d) Issuance of shares to a new investor in 2021

Pursuant to a share subscription agreement entered into between the Company and a new investor Baozun Inc. ("Baozun") in January 2021, the Company has issued a total of 649,349 Class B ordinary shares to Baozun for net cash proceeds received by the Company, after deducting an incremental cost of US\$213, of US\$17,010.

Cash proceeds received by the Company from the issuance of Class B ordinary shares to Baozun were calculated at US\$26.52 per share, which was at discount as compared to the fair value of US\$28.88 as determined based on the closing stock price as of the date of share issuance. The total discount of this share issuance amounting to US\$1,530 represented an incentive to Baozun to enter into the strategic cooperation framework agreement with the Company, which was recognized as share-based compensation expenses in the consolidated during the year ended December 31, 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies

(a) Basis of presentation

The consolidated financial statements have been prepared in accordance with the U.S. GAAP. Significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements are summarized below.

Effective from November 14, 2022, the Company changed the ratio of the ADS representing its Class A ordinary shares from one ADS representing one-half of one Class A ordinary share to one ADS representing five Class A ordinary shares.

(b) Use of estimates

The preparation of the Group's consolidated financial statements in conformity with U.S. 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 Group believes that revenue recognition in determining whether the Company is the principal or an agent to the arrangements with merchants, impairment assessment of goodwill and long-lived assets, fair value determination related to the accounting for business combinations, impairment assessment of investments in equity securities without readily determinable fair value, determination of share-based compensation and valuation of convertible notes 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 VIE and a VIE's subsidiaries for which the Company or its subsidiary is the primary beneficiary. All transactions and balances among the Company, its subsidiaries, its VIE and a VIE's subsidiaries have been eliminated upon consolidation.

A subsidiary is an entity in which the Company, directly or indirectly, controls more than one half of the voting 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 VIE's economic performance, and also the Group's obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. Beijing WFOE and ultimately the Company hold all the variable interests of the VIE and its subsidiaries, and has been determined to be the primary beneficiary of the VIE.

Non-controlling interests are recognized to reflect the portion of their equity that is not attributable, directly or indirectly, to the Company as the controlling shareholder. Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of comprehensive loss, statement of changes in equity and balance sheet, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(d) Foreign currency translation

The reporting currency of the Company is the United States dollars ("US\$"). The Company is a holding company engaged in capital raising and financing activities denominated in US\$. As such, the Company's functional currency has been determined to be the US\$. The functional currency of the Company's subsidiaries is the local currency of the country in which they are domiciled.

Monetary assets and liabilities denominated in currencies other than the functional currency are translated into the functional currency at the rates of exchange existing at the balance sheet date. Transactions in currencies other than the functional currency during the year are converted into the functional currency at the applicable rates of exchange prevailing at the transaction date. Transaction gains and losses are recognized in "other gains/(losses), net". Assets and liabilities denominated in foreign currencies are translated at the exchange rates at the balance sheet date. Equity accounts are translated at historical exchange rates and revenues, expenses, gains and losses are translated using the average rate for the year. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of other comprehensive loss in the consolidated statements of changes in shareholders' equity and comprehensive loss.

(e) Fair value of financial instruments

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. When available, the Company uses quoted market prices to determine the fair value of an asset or liability. If quoted market prices are not available, the Group will measure fair value using valuation techniques that use, when possible, current market-based or independently sourced market parameters, such as interest rates and currency rates. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs.

Fair value measurements are based on a fair value hierarchy, based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value which are the following:

Level 1 — Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, such as quoted market prices for similar assets and liabilities; quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets); or model-derived valuations in which significant inputs are observable or can be derived principally from, or corroborated by, observable market data.

Level 3 — Unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

(i) Fair value measurement on a recurring basis

Observable inputs are based on market data obtained from independent sources. The Company uses a combination of valuation methodologies, including market and income approaches based on the Company's best estimate, which is determined by using information including but not limited to the pricing of recent rounds of financing of the investees, future cash flow forecasts, liquidity factors and multiples of a selection of comparable companies. The Company's contingent consideration (Note 4 (b)), derivative liabilities and convertible notes (Note 18), and debt investments (Note 2(k)) are measured using unobservable inputs that require a high level of judgment to determine fair value, and thus classified as Level 3 (Note 3(c)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(e) Fair value of financial instruments (Continued)

The Company values its investments in wealth management products issued by banks classified as short-term investments in the consolidated balance sheets (Note 2(k)) using quoted subscription or redemption prices published by the banks and financial institution. Accordingly, the Company classifies the valuation techniques that use these inputs as Level 2.

The carrying amounts of cash and cash equivalents, time deposits, restricted cash, accounts receivable, amount due from an equity investee, rebates receivable, accounts payable, other financial assets and liabilities approximate their fair values due to the short-term nature of these instruments. Based on the borrowing rates currently available to the Group for debt with similar terms, the carrying amounts of the short-term bank borrowings approximate their fair values (using Level 2 inputs).

The Group values its listed equity securities using quoted prices for the underlying securities in active markets. Accordingly, the Group classifies the valuation techniques that use these inputs as Level 1.

(ii) Fair value measurement on a non-recurring basis

The Group measures an equity investment accounted for using the equity method at fair value on a non-recurring basis only if an impairment charge were to be recognized. For the years ended December 31, 2020, 2021 and 2022, no impairments were recorded on the investment in an equity investee which would require fair value measurement on a non-recurring basis.

Equity investments accounted for using the net asset value per share as a practical expedient (Note 2(k)(i)) and measurement alternative (Note 2(m)) are generally not categorized in the fair value hierarchy. However, if equity investments without readily determinable fair values accounted for using the measurement alternative were remeasured during the year, they would be classified within Level 3 in the fair value hierarchy because the Group estimated the value of the investments based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs. See Note 2(m) for details.

(f) Cash, cash equivalents and restricted cash

Cash and cash equivalents include cash on hand, cash in bank and time deposits placed with banks or other financial institutions, which have original maturities of three months or less and are readily convertible to known amounts of cash.

Restricted cash represented bank deposits in accounts that are restricted as to withdrawal or usage. For restriction which is expected to be released within one year of the balance sheet date, the respective restricted cash balance is classified as current. As of December 31, 2021 and 2022, the Group's restricted cash mainly represents balance held in restricted bank accounts as required by certain loan agreements and escrow amount deposited for a business acquisition.

(g) Time deposits

Time deposits represent demand deposits placed with banks with original maturities of more than three months but less than one year. Interest income is recognized using the effective interest method in the consolidated statements of comprehensive loss during the periods. Time deposits are valued based on the prevailing interest rates in the market.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(h) Accounts receivable, net

Accounts receivable are presented net of allowance for credit losses. The Group evaluates its accounts receivable for expected credit losses on a regular basis. The Group maintains an estimated allowance for credit losses which reflects its best estimate of amounts that potentially will not be collected. The Group uses various credit quality indicators including but not limited to historical collection experience and credit-worthiness of the customers as well as the age of the receivables balance to monitor the Group's receivables within the scope of expected credit losses model and use these as a basis to develop the Group's expected loss estimates. Additionally, the Group makes specific allowance in the period based on any specific knowledge the Group has acquired that might indicate that an individual account is uncollectible. The facts and circumstances of each account may require the Group to use judgment in assessing its collectability. See Note 2(j) for current expected credit losses upon adoption of ASU No. 2016-13, "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASC 326").

(i) Rebates receivable

Rebates receivable represent sales rebates that have already been earned but not received from third party publishers. The Group earns its rebates from purchasing advertising spaces from these website publishers.

(j) Current expected credit losses upon adoption of ASC 326

In 2016, the FASB issued ASC 326, which amends previously issued guidance regarding the impairment of financial instruments by creating an impairment model that is based on expected losses rather than incurred losses. Subsequently, the FASB issued ASU No. 2018-19, Codification Improvements to Topic 326, to clarify that receivables arising from operating leases are within the scope of lease accounting standards. Further, the FASB issued ASU No. 2019-04, ASU No. 2019-05, ASU 2019-10, ASU 2019-11, ASU 2020-02 and ASU 2020-03 to provide additional guidance on the credit losses standard. The Group adopted ASC 326 and several associated ASUs on January 1, 2020 using a modified retrospective approach, resulting in a net adjustment of US\$3,972 to the opening balance of accumulated losses with a corresponding credit loss provision over accounts receivable being recognized in the consolidated balance sheet as of January 1, 2020. As of December 31, 2021 and 2022, the credit loss provision for accounts receivable and loans and interest receivable being recognized in the consolidated balance sheets amounted to US\$23,075 and US\$41,258, respectively.

The Group's cash and cash equivalents, time deposits, restricted cash, accounts receivable, amount due from an equity investee, rebates receivable, other current assets and other assets are within the scope of ASC 326. The Group has identified the relevant risk characteristics of its customers and the related receivables and other current assets which include size, type of the services the Group provides, or a combination of these characteristics. Receivables with similar risk characteristics have been grouped into pools for collective evaluation. Receivables that do not share similar risk characteristics are evaluated on an individual basis. Receivables evaluated individually are not included in the collective evaluation. For each pool for collective evaluation, the Group considers the historical credit loss experience, current economic conditions, supportable forecasts of future economic conditions, and any recoveries in assessing the lifetime expected credit losses. Other key factors that influence the expected credit loss analysis include customer demographics, payment terms offered in the normal course of business to customers, and industry-specific factors that could impact the Group's receivables. Additionally, external data and macroeconomic factors are also considered. This is assessed at each quarter based on the Group's specific facts and circumstances.

Management applies ASC 326 in estimating the allowance for credit losses on loans and interest receivable as included in other current assets on the consolidated balance sheets not sharing similar risk characteristics on an individual basis. The key factors considered when determining the above allowances for credit losses include the estimated loan collection schedule under different scenarios and their corresponding probability of occurrence, discount rate, financial condition and performance data of the borrowers and their cash flow forecasts considering current and future economic conditions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(j) Current expected credit losses upon adoption of ASC 326 (Continued)

The following table presents the movement in the allowance for credit losses for the years ended December 31, 2021 and 2022.

	Accounts receivable (Note) For the years ended December 31, 2021 2022		Loans and interest receivable	
			For the year Decembe	
			2021	2022
Balance at the beginning of year	11,749	22,786		289
Provision for the year	12,424	18,542	289	3,661
Accounts receivable written off	(1,669)	(1,978)	_	_
Exchange differences	282	(2,135)	_	93
Balance at the end of year	22,786	37,215	289	4,043

Note:

Accounts receivable relating to debtors with known financial difficulties or significant doubt on collection of receivables are assessed individually for specific provision for impairment allowance. As of December 31, 2021 and 2022, the balance of specific provision for credit losses in respect of these individually assessed receivables was US\$13,243 and US\$20,233, respectively.

Allowance for credit losses over accounts receivable are also estimated by grouping the remaining receivables based on shared credit risk characteristics and collectively assessed for the risk of default, taking into account the nature of the debtor, its geographical location and its ageing category, and applying the expected credit loss rates to the respective gross carrying amounts of accounts receivable. The expected credit loss rates are determined based on historical credit losses and are adjusted to reflect current and forward-looking information such as macroeconomic factors affecting the ability of the debtors to settle the receivables. In 2022, the increase in allowance for credit losses over accounts receivable assessed on a collective basis is mainly related to debtors, particularly those in Mainland China, which were adversely affected by the worsened macroeconomy due to the outbreak of COVID throughout the year 2022 whereby the historical loss rates over receivables from these debtors increased.

(k) Investments

	As of Dece	
Short-term investments under current assets	2021	2022
Fund investments (Note (i))	3,647	3,665
Listed equity securities (Note (ii))	_	1,609
Wealth management products (Note (iii))	1,574	1,737
Available-for-sale debt investments (Note (iv))	2,550	_
	7,771	7,011
Other long-term investments under non-current assets		
Available-for-sale debt investments (Note (iv))	_	3,000
Equity investments (Note 2(m))	12,114	2,970
	12,114	5,970

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(k) Investments (Continued)

(i) Fund investments

Fund investments over which the Group does not have the ability to exercise significant influence, are required to be measured at fair value under ASC 321 "Investments—Equity Securities" ("ASC 321"). The Group has adopted the practical expedient in ASC 820 "Fair Value Measurements and Disclosures" ("ASC 820") to estimate fair value using the net asset value per share (or its equivalent) of these investments which were without readily determinable fair value. Fund investments included in the consolidated balance sheet as short-term investments as of December 31, 2021 and 2022 amounted to US\$3,647 and US\$3,665 respectively and the change in fair value recorded in consolidated statement of comprehensive loss. Fair value change of US\$187, US\$452 and US\$17 were recognized under "other gains/(losses), net" for the years ended December 31, 2020, 2021 and 2022 respectively.

(ii) Listed equity securities

Investments in listed equity securities are reported at fair value in the consolidated balance sheets and the unrealized gains and losses are recorded in the consolidated statements of comprehensive loss under ASU 2016-01. Listed equity securities recorded in the consolidated balance sheet as short-term investments as of December 31, 2021 and 2022 amounted to US\$nil and US\$1,609, respectively, and the change in fair value recorded in the consolidated statement of comprehensive loss under "other gains/(losses), net" for the years ended December 31, 2020, 2021 and 2022 amounted to US\$1,157, US\$127 and US\$100, respectively.

(iii) Wealth management products

Wealth management products are issued by banks in the PRC which are redeemable by the Group at any time. They 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 Group measures these investments at fair value using the quoted subscription or redemption prices published by the bank. Wealth management products recorded in the consolidated balance sheet as short-term investments as of December 31, 2021 and 2022 amounted to US\$1,574 and US\$1,737 respectively and the change in fair values recorded in the consolidated statement of comprehensive loss under "other gains/(losses), net" amounted to US\$52, US\$9 and US\$65 for the years ended December 31, 2020, 2021 and 2022, respectively.

(iv) Available-for-sale debt investments

Available-for-sale debt investments of the Group include investments in convertible notes issued by two private companies as accounted for under the fair value option, for which the total fair values as of December 31, 2021 and 2022 were US\$2,550 and US\$3,000, respectively. Interest income and all other changes in the carrying amount of this debt investment are recognized in earnings. The Company recorded fair value losses on debt investments of US\$2,550 (2021: US\$nil) for the year ended December 31, 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(l) Investment in an equity investee

Investment in an equity investee represents the Group's investment in a privately held company. The Group applies the equity method to account for an equity investment in common stock or in-substance common stock, according to Accounting Standards Codification ("ASC") 323 "Investment — Equity Method and Joint Ventures," over which it has significant influence but does not own a majority equity interest or otherwise control.

Under the equity method, the Group initially records the investments at cost and the difference between the cost of the equity investee and the fair value of the underlying net assets of the equity investee is recognized as equity method goodwill and intangible assets acquired, which is included in the equity method investments on the consolidated balance sheets. The Group subsequently adjusts the carrying amount of the investments to recognize its (i) proportionate share of each equity investee's post-acquisition net income or loss into earnings, (ii) share of post-acquisition movements in accumulated other comprehensive income into other comprehensive income, and (iii) cash distributions from investees, after the date of investment. When the Group's share of loss in the equity investee equals or exceeds its interest in the equity investee, the Group does not recognize further loss, unless the Group has incurred obligations or made payments or guarantees on behalf of the equity investee.

The Group evaluates its equity method investment for impairment under ASC 323-10. An impairment loss on the equity method investment is recognized in the consolidated statement of comprehensive loss when the decline in value is determined to be other-than-temporary. No impairment loss has been recorded during the years ended December 31, 2020, 2021 and 2022.

(m) Other long-term equity investments

The Group's other long-term equity investments as of December 31, 2021 and 2022 consist of equity securities without readily determinable fair value.

In accordance with ASC 321 "Investments—Equity Securities", the Group is required to measure its equity investments at fair value and any changes in fair value are recognized in earnings. For equity investments without readily determinable fair value and does not qualify for the existing practical expedient in ASC 820 to estimate fair value using the net asset value per share (or its equivalent) of the investments, the Group has elected to use the measurement alternative to measure its equity investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. Significant judgments are required to determine (i) whether observable price changes are orderly transactions and identical or similar to an investment held by the Company; and (ii) the selection of appropriate valuation methodologies and underlying assumptions, including expected volatility and the probability of exit events as it relates to liquidation and redemption features used to measure the price adjustments for the difference in rights and obligations between instruments.

Management makes a qualitative assessment as to whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, management estimates the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, the Company recognizes an impairment loss in net loss equal to the difference between the carrying value and fair value. Management applied judgment in (i) determining whether the investment is impaired, (ii) estimating the impairment amount if an impairment exists, and (iii) determining valuation methods and key valuation assumptions and data used in estimating the impairment amounts. These judgments consider various factors and events including a) adverse performance of investees; b) adverse industry developments affecting investees; and c) adverse regulatory, social, economic or other developments affecting investees. These judgments include the selection of valuation methods in estimating fair value and the determination of key valuation assumptions used, comprising selection of comparable companies and multiples, and discount for lack of marketability. The Company recognized impairment losses of US\$4,038 and US\$10,805 for the years ended December 31, 2021 and 2022 respectively. There was no impairment loss recognized for the year ended December 31, 2020.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(n) 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 $2-5$ years
Furniture and fixtures	2 – 5 years
Office equipment	3 – 5 years
Motor Vehicles	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 statement of comprehensive loss.

(o) Acquisitions

(i) Business combinations

The Group accounts for acquisitions of entities that include inputs and processes and have the ability to create outputs as business combinations. The Group accounts for its business combinations using the acquisition method of accounting in accordance with ASC 805 "Business Combinations" ("ASC 805"). The cost of an acquisition is measured as the aggregate of the fair values at the date of exchange of the assets given, liabilities incurred, and equity instruments issued as well as the contingent considerations as of the acquisition date. Transaction costs directly attributable to the acquisition are expensed as incurred. Identifiable assets and liabilities acquired or assumed are measured separately at their fair values as of the acquisition date, irrespective of the extent of any non-controlling interests. The excess of (i) the total costs of acquisition, fair value of the non-controlling interests and acquisition date fair value of any previously held equity interest in the acquiree over (ii) the fair value of the identifiable net assets of the acquiree is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the consolidated statements of comprehensive loss as gain on bargain purchase. During the measurement period, which can be up to one year from the acquisition date, the Group may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of comprehensive loss.

(ii) Assets acquisition

ASC 805-10-55-5A, which sets forth a screen test, provides that if substantially all of the fair value of the assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets, the assets acquired are not considered to be a business. The acquisition should be accounted for by the Company as an asset acquisition in accordance with ASC 805-50, rather than as a business combination. Under an asset acquisition, the cost to acquire the group of assets is allocated to the individual assets acquired or liabilities assumed based on their relative fair values.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(p) Intangible assets, net

Intangible assets mainly consist of computer software licenses purchased from external parties and computer software and systems, developed technologies, customer relationship, brand name, contract backlog and advertising contract acquired through the acquisitions of subsidiaries. Identifiable intangible assets are carried at acquisition cost less accumulated amortization and impairment loss, if any. Amortization of finite lived intangible assets is computed using the straight-line method over the following estimated useful lives, which are as follows:

Computer software and systems	2 – 5 years
Developed technologies	5 years
Customer relationship	4 – 5 years
Brand name	4 years
Contract backlog	3 years
Advertising contract	30 years

(q) Impairment of goodwill

Goodwill represents the excess of the purchase consideration over the fair value of assets and liabilities of businesses acquired. Goodwill is not subject to regular periodic amortization. Instead, management conducts a goodwill impairment test at the reporting unit level annually in the fourth quarter, or more frequently when events or circumstances occur indicating that the recorded goodwill may be impaired.

A reporting unit is an operating segment or a component of an operating segment which is a business and for which discrete financial information is available and reviewed by a segment manager. The Group's reporting units include (i) the Marketing Solutions and (ii) the Enterprise Solutions.

In accordance with the guidance from ASU No. 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment, for the purpose of the goodwill impairment test, the Group first assesses qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. If an initial qualitative assessment identifies that it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value, an additional quantitative evaluation is performed. Alternatively, the Group may elect to proceed directly to the quantitative goodwill impairment test. As part of the quantitative goodwill impairment test, the Group compares the fair value of each reporting unit to its carrying value, with an impairment charge recorded for the amount by which the carrying amount exceeds the reporting unit's fair value up to a maximum amount of the goodwill balance for the reporting unit.

For evaluation of reporting units using a quantitative assessment, the Group determines the fair values of the Marketing Solutions reporting unit and the Enterprise Solutions reporting unit as of December 31, 2021 based on a market approach and an income approach, respectively. During the year ended December 31, 2022, due to the Company's plan to strategically downsize the Marketing Solutions reporting unit, the Company considered the identification of companies comparable to the downsized Marketing Solutions reporting unit under a market approach using the guideline public company method to be not practical whereby the use of an income approach to estimate the fair value of Marketing Solutions reporting unit as of December 31, 2022 is considered to be more appropriate. Therefore, the Group determines the fair values of both the Marketing Solutions reporting unit and the Enterprise Solutions reporting unit as of December 31, 2022 based on an income approach.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(q) Impairment of goodwill (Continued)

Under the market approach, the Group estimates the fair value of the Marketing Solutions reporting unit based on market multiples of current year revenue for the reporting unit. Under the income approach, the Group estimates the fair value of the reporting units based on discounted cash flow method derived from the reporting unit's long-term forecasts which included a five-year future cash flow projection and an estimated terminal value. The cash flow projection is based on management's most recent view of the long-term outlook for the reporting units in order to come up with revenue growth rates, gross margin, the estimated terminal value using a terminal year long-term future growth rate, discount rates, and other assumptions deemed reasonable by management.

Application of a goodwill impairment test requires significant management judgment, including the identification of reporting units, assigning assets and liabilities to reporting units, assigning goodwill to reporting units, and estimating the fair value of each reporting unit. Estimating fair value of individual reporting units requires the exercise of significant management judgment, including judgment in an income approach about appropriate revenue growth rates, gross margin, an estimated terminal value using a terminal year long-term future growth rate and a discount rate for the reporting units. Changes in these estimates and assumptions could materially affect the estimation of fair value for each reporting unit.

As of December 31, 2021, based on the assessment performed by management, the fair values of Marketing Solutions reporting unit and Enterprise Solutions reporting unit exceeded their carrying values by around 41% and 113%, respectively. Therefore, no impairment for goodwill was recognized for the year ended December 31, 2021.

As of December 31, 2022, the Group determined that there were sufficient indicators to trigger a quantitative goodwill impairment analysis. The indicators included, among others: (1) the underperformance against plan of the Group's reporting units due to the negative impact of the COVID-19 outbreak to the macroeconomy of the PRC, (2) a revision of the Group's forecasted future earnings due to intensified industry competition, and (3) a decline in the Company's market capitalization in 2022. The Group's annual quantitative goodwill impairment analysis as of December 31, 2022 indicated that both Marketing Solutions and Enterprise Solutions reporting units were fully impaired. Accordingly, the Group recognized an impairment charge of US\$53,024 and US\$27,113 for the Marketing Solutions reporting unit and the Enterprise Solutions reporting unit, respectively, for the year ended December 31, 2022.

(r) Impairment of long-lived assets

Long-lived assets of the Group including property and equipment, intangible assets (other than goodwill) and right-of-use-assets which are held and used are reviewed for impairment when events or changes in the circumstances indicate that the carrying value of an asset or asset group may no longer be recoverable. For an asset or asset group that is held and used, the asset or asset group represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or asset groups. Factors considered by the Group in its impairment assessments of long-lived assets that are held and used include, but are not limited to, significant underperformance relative to historical or projected operating results; significant changes in the manner of use of the acquired assets or asset groups or the strategy for the overall business; and significant negative industry or economic trends. When the carrying value of a long-lived asset or asset group that is held and use may not be recoverable based upon the existence of one or more of the above indicators of impairment, the Group estimates the future undiscounted cash flows expected to result from the use of the asset or asset group and its eventual disposition. If the sum of the expected future undiscounted cash flows and eventual disposition is less than the carrying amount of the asset or asset group, the Group recognizes an impairment loss. An impairment loss is reflected as the amount by which the carrying amount of the asset or asset group exceeds the fair value of the asset or asset group, based on the fair value if available, or discounted cash flows, if fair value is not available. The discounted cash flow model on which the fair value of the asset or asset group as part of the Group's impairment tests is based includes significant assumptions relating to revenue growth rates, gross margin, and other controllable expenses.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(r) Impairment of long-lived assets (Continued)

The Group has identified certain long-lived asset groups which are held and used that are subject to indicators (which are similar to the indicators for goodwill impairment as explained in Note 2(r)) to trigger quantitative impairment assessments. Based on the Group's impairment assessments on those long-lived asset groups as of December 31, 2022, the Group recorded impairment of long-lived assets of US\$53,349 during the year ended December 31, 2022, out of which US\$49,778, US\$1,206 and US\$2,365 were related to intangible assets (other than goodwill), property and equipment, and right-of-use assets, respectively. Out of the total impairment charges of US\$53,349, US\$48,946 and US\$4,403 were recorded in cost of revenues and operating expenses, respectively.

No impairments related to long-lived assets were recorded during the years ended December 31, 2020 and 2021.

(s) Lease accounting

The Company determines if an arrangement is a lease or contains a lease at lease inception. For operating leases, the Company recognizes right-of-use assets ("ROU assets") and lease liabilities based on the present value of the lease payments over the lease term on the consolidated balance sheets at commencement date. The Company estimates its incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The incremental borrowing rate is estimated to approximate the interest rate on a collateralized basis with similar terms and payments, and in economic environments where the leased asset is located.

The Group records rent expense for operating leases, including leases of office premises, on a straight-line basis over the lease term. The Group begins recognition of rent expense on the commencement date, which is generally the date that the asset is made available for use. The lease liability is included in lease liabilities, current and lease liabilities, non-current within the consolidated balance sheets, which are reduced as lease related payments are made. The ROU asset is amortized on a periodic basis over the expected term of the lease. See Note 14 for additional information.

(t) Deferred revenue

The Group receives prepayments for services in advance of service performance from certain customers. The amounts received in advance are recorded as deferred revenue and recognized as revenue in the period which the corresponding services are performed.

(u) Derivative financial instrument

ASC 815, "Accounting for Derivative Instruments and Hedging Activities" ("ASC 815") requires every derivative financial instrument (including certain derivative financial instruments embedded in other contracts) to be recorded on the balance sheet at fair value as either an asset or a liability. ASC 815 also requires that changes in the fair value of recorded derivatives be recognized currently in earnings unless specific hedge accounting criteria are met. The Group's derivative financial instrument included the call option written to the investor to purchase the convertible notes issued in July 2020 classifies as "derivative liabilities" (the "Call Option"). For the year ended December 31, 2020, the Group recognized fair value losses of US\$11,466 on the derivative liabilities. The Call Option was exercised by the investor on July 30, 2020. There was no derivative financial instrument as of December 31, 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(v) Convertible notes

The Group determines the appropriate accounting treatment of its convertible notes in accordance with the terms in relation to the conversion feature, call and put option, and beneficial conversion feature ("BCF"). After considering the impact of such features, the Group may account for such instrument as a liability in its entirety, or separate the instrument into debt and equity components following the respective guidance described under ASC 815 and ASC 470 "Debt".

The conversion features of the convertible notes of the Group meets the definition of a derivative whereby no BCF shall be separately accounted for. Moreover, the Group has elected the fair value option for convertible notes accounted for as a liability in its entirety whereby the conversion features that meet the definition of a derivative are not bifurcated given that the entire debt instrument is legally a single contract therefore not to be separated into parts for purposes of applying the fair value option. Such fair value option permits the irrevocable election on an instrument-by-instrument basis at initial recognition of an asset or liability or upon an event, that gives rise to a new basis of accounting for that instrument. The convertible notes accounted for under the fair value option are carried at fair value with realized or unrealized gains and losses recorded in the consolidated statements of comprehensive loss.

Convertible notes are classified as current liabilities if they are convertible or redeemable on demand or if their due date is or will be within one year from the balance sheet date. There were no convertible notes as of December 31, 2021 and 2022.

(w) Treasury shares

The Company accounted for those shares repurchased as treasury shares at cost in accordance with ASC 505-30, and the treasury shares acquired are shown separately in shareholders' equity as the Company has not yet decided on the ultimate disposition of those shares. If and when the Company cancels the treasury shares, the difference between the original issuance price and the repurchase price will be debited into additional paid-in capital.

(x) Revenue recognition and cost of revenues

The following table presents our revenue recognized from contracts with customers disaggregated by the four types of pricing models:

	For the y	For the years ended December 31,		
	2020	2021	2022	
Recognized over time				
- Sales agent	5,834	4,195	2,549	
- Cost-plus	26,738	26,062	8,909	
- SaaS products and services	28,545	57,756	62,207	
	61,117	88,013	73,665	
Recognized at point in time				
- Specified actions	193,280	212,353	94,498	
- SaaS products and services	348_	7,336	917	
	193,628	219,689	95,415	
Total	254,745	307,702	169,080	

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(x) Revenue recognition and cost of revenues (Continued)

The Group's Marketing Solutions service offerings are the provisions of online advertising services. The Group utilizes a combination of pricing models and revenue is recognized when the related services are delivered based on the specific terms of the contract, which are commonly based on (i) agreed incentive to be earned for being a sales agent of a publisher, (ii) cost-plus or (iii) specified actions (e.g. cost per impression ("CPM") and cost per click ("CPC")) and related campaign budgets, depending on the customers' preferences and their campaigns launched. The Group also offers the Enterprise Solutions via the offering of SaaS products and services.

The Group recognizes revenue when the Group satisfies a performance obligation by transferring a promised service to a customer. The Group considers the following when determining if a contract exists under which the performance obligations have been satisfied: (i) contract approval by all parties, (ii) identification of each party's rights regarding the goods or services to be transferred, (iii) specified payment terms, (iv) commercial substance of the contract, and (v) collectability of substantially all of the consideration is probable. Collectability is assessed based on a number of factors, including the creditworthiness of a customer, the size and nature of a customer's business and transaction history. Revenues are recorded net of value-added taxes.

The Group follows the guidance provided in ASC 606, Revenue from Contracts with Customers, for determining whether the Group is the principal or an agent in arrangements with customers that involve another party that contributes to providing a specified service to a customer. In these instances, the Group determines whether it has promised to provide the specified service itself (as principal) or to arrange for the specified service to be provided by another party (as an agent). This determination depends on the facts and circumstances of each arrangement and, in some instances, involves significant judgment. The Group recognizes revenue from sales agent and cost-plus arrangement amounting to US\$32,572, US\$30,257, and US\$11,458 for the years ended December 31, 2020, 2021 and 2022, respectively, on a net basis as the Group is not primarily responsible for the fulfillment considering the Company only acts as an intermediary in executing transactions between the publishers and the customers, does not have control of the promised service as the Company only places orders based on specification set out by the customers, and does not have full discretion in establishing prices and therefore is the agent in the arrangement with customers. All other revenue of US\$222,173, US\$277,445 and US\$157,622 for the years ended December 31, 2020, 2021 and 2022, respectively, are reported on a gross basis, as the Group has determined it is the principal in the arrangement.

Sales agent

In the arrangement with a particular publisher, the Group acts as a sales agent for this publisher in selling marketing spaces to marketing clients. In return, the Group earns incentives from this publisher based on contractually stipulated amounts when certain spending thresholds are achieved. The Group considers this particular publisher as a customer and record such incentives as net revenues. Incentives from this publisher are calculated on both a quarterly and an annual basis in accordance with the terms as set out in the arrangement.

Revenue under this arrangement is recognized over time given the Group considers this particular publisher simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs. In other words, when the Group purchases marketing spaces on behalf of the marketing clients throughout the marketing campaigns as requested by them, this particular publisher simultaneously receives and consumes the benefit of the marketing spaces being purchased and therefore the Group is entitled to incentive payment from this publisher.

The Group grants rebates to marketing clients under the sales agent arrangement. The majority of marketing clients under this arrangement are not customers under either the cost-plus arrangement or specified actions arrangement. The Group records rebates granted to such marketing clients as reduction of revenue.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(x) Revenue recognition and cost of revenues (Continued)

Cost-plus

For cost-plus advertisement campaigns, sales are recognized at the fair value of the amount received. Discounts granted to marketing clients under cost-plus marketing campaigns are recorded as a reduction of revenue. The determination of whether revenue should be reported on a gross or net basis is based on an assessment of whether the Group is acting as the principal or an agent in the transactions. In the normal course of business, the Group acts as an intermediary in executing transactions between website publishers and marketing clients. The specified service in the cost-plus arrangement is the provision of marketing space, which is controlled by the website publishers, rather than the Group. The Group assists the marketing clients to place orders with specific website publishers based on specification set out the marketing clients. The Group does not have the ability to direct the use of marketing space and does not have any inventory risk. Pricing is generally based on the actual advertising spending incurred by the marketing clients plus a margin. Accordingly, the Group concludes that it is not the principal in these arrangements and reports revenue earned and costs incurred related to these transactions on a net basis.

Revenue under this arrangement is recognized over time as the Group considers its customers simultaneously receive and consume the benefits provided by the Group's performance. At the time the Group purchases marketing spaces during the contract term for its customers, the customers' advertisements could be placed throughout the marketing campaign. Revenue recognition under this arrangement is not based on an occurrence of significant act or milestone method.

Throughout the various services delivered to clients under the cost-plus arrangements, the Group earns rebates from publishers and grant rebates to marketing clients. The rebates that the Group grants to marketing clients under cost-plus arrangement are recorded as reduction of revenue, based on the spending amount the marketing clients would actually incur to earn the corresponding level of rebates. The rebates that the Group receives from publishers under the cost-plus arrangements are recorded as revenue. These rebates are recognized when a particular milestone is achieved (i.e. applying the relevant rebates based on the level of spending threshold actually achieved) and spending has actually occurred.

Specified actions

The Group also generates revenue from performing specified actions (e.g a CPM and CPC basis). Revenue is recognized on a CPM or CPC basis as impressions or clicks are delivered while revenue is recognized once agreed actions are performed. For the specified actions advertisement campaigns, the Group is the principal as it has the obligation to deliver successful actions requested by marketing clients. Also, the Group will only be paid if successful actions can be delivered and is exposed to risk of loss. In terms of pricing, the Group has complete latitude in establishing the selling prices of each of the CPM and CPC pricing model. The Group's margin may vary as the costs incurred to deliver successful actions may vary and is therefore exposed to risk of loss whereby validating its degree of responsibility to its customers. Although the inventory risk under specified actions arrangement is considered to be low, the Group concludes that it is the principal in such arrangement as it is the principal ultimately responsible for delivering successful actions and in charge of establishing the price per action. Accordingly, the Group reports revenue earned and costs incurred related to these transactions on a gross basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(x) Revenue recognition and cost of revenues (Continued)

Specified actions (Continued)

Revenues under this arrangement is recognized at point-in-time when the Group is able to deliver the specified actions as requested by the customers. Upon the occurrence of the specified actions, the customers take control of the specified actions and this is when the Group recognizes the corresponding revenue. Unlike the cost-plus arrangement, when the Group purchases marketing spaces in order to deliver the specified actions, the customers do not receive and consume the benefit as the benefit to be received by the customers is the occurrence of the specified actions. Also, the Group does not create or enhance an asset that the customers control as the marketing spaces ultimately belong to the publishers. The Group does not have any right to payment for simply purchasing the marketing spaces and would only be compensated upon delivery of the specified actions.

The Group also grants rebates to marketing clients under the specified actions arrangement. Same as the treatment under costplus arrangement, the rebates that the Group grants to marketing clients under cost-plus arrangement are recorded as reduction of revenue and are recorded based on the amount the marketing clients would actually incur to earn the corresponding level of rebates. The rebates that the Group receives from publishers under the specified actions arrangement are recorded as a reduction of cost of revenues. These rebates are recognized when a particular milestone is achieved (i.e. applying the relevant rebates based on the level of spending threshold actually achieved) and spending has actually occurred.

Cost of revenues consists of the costs to purchase space for the online advertising operations, amortization expenses related to the Group's computer software and systems, salaries and benefits of relevant operations and support personnel and depreciation of relevant property and equipment and impairment on relevant intangible assets. The Group becomes obligated to make payments related to website publishers in the period the marketing impressions and click-through occur. Such expenses are classified as cost of revenues in the consolidated statements of comprehensive loss as incurred. Cost of revenues also includes rebates received from website publishers which are recorded as a reduction of cost of revenues when the Group is acting as a principal in a transaction.

SaaS products and services

Under this arrangement, the Group offers SaaS products and services through provision of software and data analytical tool licenses, customer relationship management ("CRM") solutions and digitalized operational solutions services. Revenues under this arrangement primarily consist of fees for (i) licensing to provide customers with access to one or more of the existing cloud applications for e-commerce, marketing and customer management, (ii) the development of new cloud applications customized for individual customer, (iii) licenses for on-premises software, and (iv) various combinations of software and data analytical tool licenses, CRM solutions, and digitalized operational solutions services provided by the Group. Contracts with customers under this arrangement are generally with a term of 1 to 24 months.

Revenues from licensing of existing cloud applications are generally recognized ratably over time over the contract term beginning on the date that the licensing service is made available to the customer, whereby the Group considers that its customers simultaneously receive and consume the benefits provided by the use of existing cloud applications. The Group does not have other right to consideration in exchange for goods or service that the Group has transferred to a customer when that right is conditional on something other than the passage of time.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(x) Revenue recognition and cost of revenues (Continued)

SaaS products and services (Continued)

Revenues from developing new cloud applications exclusively customized for customers and licenses for on-premises software is recognized at point-in-time when the Group is able to deliver the cloud applications to customers or when the Group provides customers with right to use the on-premises software. The Group considers the transfer of control of new cloud applications/software to customer, which represents a distinct performance obligation, to be completed when such cloud applications/software are on-premise and fully functional such that the customer can use and benefit from the cloud applications/software on its own.

Besides, the Group also provides certain additional services along with the above arrangements of cloud application development and software licensing, such as technical support, bug fixes, CMR solutions and digitalized operational solutions. These additional services are considered to be a series of distinct services that are substantially the same and have the same duration and measure of progress; therefore, the Group concludes that they represent a separate combined performance obligation. Revenues from such additional services are recognized ratably over-time over the contract period.

The respective stand-alone selling prices of each of these performance obligations are determined based upon observable prices in stand-alone transactions and contractually stated price whereby no allocation of selling prices among individual performance obligations are required.

Cost of revenues for SaaS products and services primarily comprises amortization expenses related to the Group's computer software and systems, salaries and benefits of relevant operations and support personnel, depreciation of relevant property and equipment and other direct service costs.

Contract balances

Timing of revenue recognition may differ from the timing of invoicing to customers. Accounts receivable represent amounts invoiced and revenue recognized prior to invoicing when the Group has satisfied its performance obligations and has the unconditional right to payment. The Group normally does not have contract assets, which are primarily unbilled accounts receivable that are conditional on something other than the passage of time.

Deferred revenue represents contract liabilities which related to unsatisfied performance obligations at the end of the period. Due to the generally short-term duration of the contracts, the majority of the performance obligations are satisfied in the following reporting period. Revenue recognized during the years ended December 31, 2021 and 2022, respectively, relating to deferred revenue as of January 1, 2021 and 2022 was US\$18,795 and US\$13,108, respectively. For the amount remained as deferred revenue as of January 1, 2021 and 2022, respectively, but not recognized as revenue during the years ended December 31, 2021 and 2022, respectively, there is still a contractual obligation for the Group to provide service whereby the Group is not obliged to make any refund of the amount received from customers. Such amount will be recognized as revenue when all of the revenue recognition criteria are met.

Revenue recognized in the current period from performance obligations related to prior periods was not material.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(x) Revenue recognition and cost of revenues (Continued)

Practical Expedients

The Group has used the following practical expedients as allowed under ASC 606:

- (i) The transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, has not been disclosed as substantially all of the Group's contracts have a duration of one year or less.
- (ii) Payment terms and conditions vary by contract type, although terms generally include a requirement of prepayment or payment within one year or less. In instances where the timing of revenue recognition differs from the timing of invoicing, the Group has determined that its contracts generally do not include a significant financing component.
- (iii) The Group generally expenses sales commissions when incurred because the amortization period would be one year or less. These costs are recorded within sales and marketing expenses.

(y) Prepaid media costs

Prepaid media costs represent prepayments for online space paid by the Group to third party publishers of websites. Upon utilization, media costs are recognized in cost of revenues when the Group is determined as acting as the principal. However, when the Group is determined as acting as the agent, those costs are recognized as deduction to revenue by the Group. These prepayments are classified as current considering the corresponding online spaces are expected to be purchased and utilized within twelve months from the date of payments.

(z) Research and development expenses

Research and development expenses consist primarily of (i) salary and welfare for research and development personnel, (ii) leases expenses and (iii) 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 Group 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.

The Group incurred development costs in connection with an internal-use enterprise resource planning ("ERP") software to further enhance management to monitor the business. While internal and external costs incurred during the preliminary project stage are expensed as incurred, costs relating to activities during the application development stages have been capitalized. For the years ended December 31, 2020, 2021 and 2022, the Group has capitalized development costs related to ERP software of US\$156, US\$111 and US\$nil, respectively, as intangible assets. In addition, the Group incurred other research and development costs in relation to other internal use software used to support its operations. Any development costs qualified for capitalization were immaterial for the periods presented. For the years ended December 31, 2020, 2021 and 2022, the Group has not capitalized any other costs related to internal use software other than the ERP software.

(aa) Sales and marketing expenses

Sales and marketing expenses consist primarily of (i) advertising and marketing expenses, and (ii) salary and welfare for sales and marketing personnel. Advertising expenses are recorded as sales and marketing expenses when incurred, and totaled US\$8,658, US\$10,458 and US\$6,769 for the years ended December 31, 2020, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(ab) General and administrative expenses

General and administrative expenses consist primarily of (i) salary and welfare for general and administrative personnel, (ii) professional service fees, and (iii) allowance for credit losses.

(ac) 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.

The Group also makes payments to other defined contribution plans for employees employed by subsidiaries outside the PRC. The Company and subsidiaries incorporated in Hong Kong are required to make contributions to Mandatory Provident Funds under the Hong Kong Mandatory Provident Fund Schemes Ordinance. Such contributions are recognized as an expense in profit or loss as incurred.

(ad) Non-controlling interests

The non-controlling interests are presented in the consolidated balance sheets, separately from equity attributable to the shareholders of the Company. Non-controlling interests are presented on the face of the consolidated statement of comprehensive loss as an allocation of the total income or loss for the year between non-controlling interests holders and the shareholders of the Company.

(ae) 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(ae) Income taxes (Continued)

Uncertain tax positions

The guidance on accounting for uncertainties in income taxes prescribes a more likely than not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Guidance was also provided on derecognition of income tax assets and liabilities, classification of current and deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, accounting for income taxes in interim periods, and income tax disclosures. Significant judgment is required in evaluating the Group's uncertain tax positions and determining its provision for income taxes. The Group recognizes interests and penalties, if any, under accrued expenses and other current liabilities on its consolidated balance sheets and under other expenses in its statements of comprehensive loss. The Group did not recognize any significant interest and penalties associated with uncertain tax positions for the years ended December 31, 2020, 2021 and 2022. As of December 31, 2021 and 2022, the Group did not have any significant unrecognized uncertain tax positions.

(af) Share-based compensation

The Company grants stock-based awards, including share options, restricted share units and warrants of the Company, to eligible employees, officers, directors, and non-employee consultants. The Company accounts for share-based awards granted to employees in accordance with ASC 718, "Compensation - Stock Compensation" and share-based awards granted to non-employees in accordance with ASC subtopic, 505-50 ("ASC 505-50"), "Equity-Based Payments to Non-Employees". ASC 505. On January 1, 2019, the Group adopted ASU 2018-07, Compensation—Stock Compensation (Topic 718): Improvement to Nonemployee Share-based Payment Accounting to amend the accounting for share-based payment awards issued to non-employees. Under ASU 2018-07, the accounting for awards to non-employees are similar to the model for employee awards.

Option and RSUs granted to employees

Under the fair value recognition provisions of ASC 718-10, share-based compensation costs are measured at the grant date. The share-based compensation expenses have been categorized as either general and administrative expenses, sales and marketing expenses or research and development expenses, depending on the job functions of the grantees. For the options and RSUs granted to employees, the compensation expense is recognized using the graded-vesting attribution approach over the requisite service period, which is generally the vesting 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. The fair value of RSUs is determined with reference to the fair value of the underlying shares.

Option modification

According to ASC 718, a change in any of the terms or conditions of equity based awards shall be accounted for as a modification of the award. Therefore, the Group calculates incremental compensation cost of a modification as the excess of the fair value of the modified option over the fair value of the original option immediately before its terms are modified. For vested options, the Group would recognize incremental compensation costs on the date of modification and for unvested options, the Group would recognize, prospectively and over the remaining requisite service period, the sum of the incremental compensation costs and the remaining unrecognized compensation costs for the original award.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(af) Share-based compensation (Continued)

Option, RSUs and warrants granted to non-employees

Pursuant to ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07"), stock-based awards granted to consultants and non-employees are accounted for in the same manner as awards granted to employees as described above.

Options and warrants of the Company issued to non-employees are measured based on fair value of the options and warrants which are determined by using the binomial option pricing model and RSUs of the Company issued to non-employees are measured based on fair value of the RSUs which are determined with reference to the fair value of the underlying shares.

(ag) Government subsidies

The Group receives subsidies from Hong Kong and the local PRC government for general use. General-use subsidies which are not subject to any conditions or specific use requirements are recorded as subsidy income in the consolidated statements of comprehensive loss.

(ah) Statutory reserves

The Company's subsidiaries, a consolidated VIE and 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(ai) 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.

(aj) Dividends

Dividends are recognized when declared. No dividends were declared for the years ended December 31, 2020, 2021 and 2022, 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.

(ak) 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. The Group uses the two-class method to calculate net loss per share though both classes share the same rights in dividends. Therefore, basic and diluted loss per share are the same for both classes of ordinary shares. Using the two class method, net loss is allocated between ordinary 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 in connection with the Group's convertible notes and ordinary shares issuable upon the conversion of the stock options and warrants and vesting of RSUs, using the treasury stock method.

(al) Comprehensive income/loss

Comprehensive income/loss is defined as the change in shareholders' equity of the Group during a period arising from transactions and other events and circumstances excluding transactions resulting from investments by shareholders and distributions to shareholders.

Comprehensive income/loss is reported in the consolidated statements of comprehensive loss. Accumulated other comprehensive income/losses of the Group include the foreign currency translation adjustments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(am) Segment reporting

Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker ("CODM"), or decision making group, in deciding how to allocate resources and in assessing performance. The CODM is comprised of certain members of the Company's management team.

The Group's organizational structure is based on a number of factors that the CODM uses to evaluate, view and run its business operations which include, but are not limited to, customer base, homogeneity of products and technology. The Group's operating segments are based on this organizational structure and information reviewed by the Group's CODM to evaluate the operating segment results.

The Group reports two operating segments: 1) Marketing Solutions, and 2) Enterprise Solutions. This segment reporting aligns with the manner in which the Group's CODM currently receives and uses financial information to allocate resources and evaluate the performance of reporting segments.

(an) Recently issued accounting pronouncements

In August 2020, the FASB issued ASU No. 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity, which simplifies accounting for convertible instruments by removing major separation models required under current GAAP. The ASU removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exception and it also simplifies the diluted earnings per share calculation in certain areas. The ASU is effective for public in fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. The Group did not early adopt and is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which clarifies the accounting for acquired revenue contracts with customers in a business combination by addressing diversity in practice and inconsistency regarding (i) the recognition of an acquired contract liability; and (ii) payment terms and their effect on subsequent revenue recognized by the acquirer. The amendments in this update are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption of the amendments is permitted. The Group did not early adopt the amendments. The Group is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

In March 2022, the FASB issued ASU No. 2022-02, Financial Instruments—Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures, which eliminates the accounting guidance for troubled debt restructurings by creditors in Subtopic 310-40, Receivables—Troubled Debt Restructurings by Creditors, while enhancing disclosure requirements for certain loan refinancing and restructurings by creditors when a borrower is experiencing financial difficulty and requires that an entity disclose current-period gross write-offs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, Financial Instruments—Credit Losses—Measured at Amortized Cost. For entities that have adopted ASU 2016-13, the amendments in this update are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption of the amendments is permitted if ASU 2016-13 has already been adopted. The Group did not early adopt and is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

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ICLICK INTERACTIVE ASIA GROUP LIMITED

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

2 Principal accounting policies (Continued)

(an) Recently issued accounting pronouncements (Continued)

In June 2022, the FASB issued ASU No. 2022-03, Fair Value Measurement (Topic 820)—Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions, which clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value and an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. The amendments in this update are effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption of the amendments is permitted. The Group did not early adopt and is currently evaluating the impact of adopting this ASU on its consolidated financial statements.

3 Certain risks and concentration

(a) PRC regulations

The China market in which the Group operates poses certain macro-economic and regulatory risks and uncertainties. These uncertainties extend to the ability of the Group to engage in online advertising businesses through contractual arrangements in the PRC since the internet and marketing services industries remain regulated. The Group conducts certain of its operations in the PRC through its variable interest entity, which it consolidates as a result of a series contractual arrangements enacted. Though the PRC has, since 1978, implemented a wide range of market-oriented economic reforms, continued reforms and progress towards a full market-oriented economy are uncertain. In addition, the telecommunication, information, and media industries remain highly regulated. Restrictions are currently in place and are unclear with respect to which segments of these industries foreign owned entities, like the Group, may operate. The Chinese government may issue from time to time new laws or new interpretations on existing laws to regulate areas such as telecommunication, information and media. Regulatory risk also encompasses the interpretation by the tax authorities of current tax laws, and the Group's legal structure and scope of operations in the PRC, which could be subject to further restrictions resulting in limitations on the Group's ability to conduct business in the PRC.

There are uncertainties regarding the interpretation and application of current and future PRC laws, rules and regulations, including but not limited to the laws, rules and regulations governing the validity and enforcement of the contractual arrangements with consolidated VIE. The Group believes that the structure for operating its business in the PRC (including the ownership structure and the contractual arrangements with the consolidated VIE is in compliance with all applicable existing PRC laws, rules and regulations, and does not violate, breach, contravene or otherwise conflict with any applicable PRC laws, rules or regulations. However, the Group cannot assure that the PRC regulatory authorities will not adopt any new regulation to restrict or prohibit foreign investments in the online advertising business through contractual arrangements in the future or that it will not determine that the ownership structure and contractual arrangements violate PRC laws, rules or regulations.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(a) PRC regulations (Continued)

If the Company and its consolidated VIE are found to be in violation of any existing or future PRC laws or regulations, or fail to obtain or maintain any of the required permits or approvals, the relevant PRC regulatory authorities would have broad discretion in dealing with such violations, including:

- revoking the business licenses of such entities;
- discontinuing or restricting the conduct of any transactions between the Company's PRC subsidiaries and OptAim VIE;
- imposing fines, confiscating the income of OptAim VIE or the Company's PRC subsidiaries, or imposing other requirements with which the Company or its PRC subsidiaries and OptAim VIE may not be able to comply;
- requiring the Company to restructure its ownership structure or operations, including terminating the contractual arrangements with OptAim VIE and deregistering the equity pledges of OptAim VIE, which in turn would affect its ability to consolidate, derive economic interests from, or exert effective control over OptAim VIE; or
- restricting or prohibiting its use of the proceeds of any offering to finance its business and operations in the PRC.

If the imposition of any of these penalties precludes the Group from operating its business, it would no longer be in a position to generate revenue or cash from it. If the imposition of any of these penalties causes the Company to lose its rights to direct the activities of its consolidated VIE or its rights to receive its economic benefits, the Company would no longer be able to consolidate these entities, and its financial statements would no longer reflect the results of operations from the business conducted by VIE except to the extent that the Company receives payments from VIE under the contractual arrangements. Either of these results, or any other significant penalties that might be imposed on the Company in this event, would have a material adverse effect on its financial condition and results of operations.

On January 19, 2015, the Ministry of Commerce ("MOFCOM"), released for public comment a proposed PRC law, the Draft Foreign Investment Law, that appeared to include VIEs within the scope of entities that could be considered to be foreign investment enterprises ("FIEs"), that would be subject to restrictions under existing PRC law on foreign investment in certain categories of industry. The National People's Congress approved the Foreign Investment Law on March 15, 2019, effective on January 1, 2020. The Foreign Investment Law removes all references to the terms of "de facto control" or "contractual control" as defined in the draft published in 2015. However, the Foreign Investment Law has a catch-all provision under the definition of "foreign investment" which includes investments made by foreign investors in China through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. In the event that the State Council in the future promulgates laws and regulations that deem investments made by foreign investors through contractual arrangements as "foreign investment" the Group's ability to use the contractual arrangements with its VIE and the Group's ability to conduct business through the VIE could be severely limited.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(a) PRC regulations (Continued)

Furthermore, on December 19, 2020, the NDRC and MOFCOM promulgated the Foreign Investment Security Review Measures, which took effect on January 18, 2021. Under the Foreign Investment Security Review Measures, investments in military, national defense-related areas or in locations in proximity to military facilities, or investments that would result in acquiring the actual control of assets in certain key sectors, such as critical agricultural products, energy and resources, equipment manufacturing, infrastructure, transport, cultural products and services, IT, Internet products and services, financial services and technology sectors, are required to be approved by designated governmental authorities in advance. Although the term "investment through other means" is not clearly defined under the Foreign Investment Security Review Measures, the Company cannot rule out the possibility that control through contractual arrangement may be regarded as a form of actual control and therefore require approval from the competent governmental authority. As the Foreign Investment Security Review Measures were recently promulgated, there are great uncertainties with respect to its interpretation and implementation. Accordingly, there are substantial uncertainties as to whether the Group's VIE structure may be deemed as a method of foreign investment in the future. If the VIE structure were to be deemed as a method of foreign investment under any future laws, regulations and rules, and if any of the Group's business operations were to fall under the "negative list" for foreign investment, we would need to take further actions in order to comply with these laws, regulations and rules, which may materially and adversely affect our current corporate structure, business, financial condition and results of operations.

The Company's ability to control the VIE also depends on the powers of attorney the founders have to vote on all matters requiring shareholder approval in the VIE. As noted above, these powers of attorney are believed to be legally enforceable but may not be as effective as direct equity ownership.

OptAim VIE holds assets that are important to the operation of the Group's business, including patents for proprietary technology and trademarks. If OptAim VIE falls into bankruptcy and all or part of its assets become subject to liens or rights of third-party creditors, the Group may be unable to conduct major part of its business activities in the PRC, which could have a material adverse effect on the Group's future financial position, results of operations or cash flows. However, the Group believes this is a normal business risk many companies face. The Group will continue to closely monitor the financial conditions of OptAim VIE.

OptAim VIE's assets comprise both recognized and unrecognized revenue-producing assets. The recognized revenue-producing assets include leasehold improvements, computers and network equipment and computer software 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 OptAim VIE as it did not meet the recognition criteria set in ASC 350-30-25.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(a) PRC regulations (Continued)

The following table sets forth the financial data for the VIE and VIE's subsidiaries on an aggregated basis. For purposes of this presentation, activities within and between the VIE and VIE subsidiaries have been eliminated, but transactions with other entities within the consolidated group have been included without elimination.

		As of December 31,		
		2021	2022	
Assets				
Cash and cash equivalents		2,681	1,497	
Accounts receivable, net		3,586	2,625	
Prepaid media costs		1,151	99	
Amounts due from subsidiaries of the Group		5,879	8,374	
Other current assets		1,266	1,142	
Property and equipment, net		65	_	
Intangible assets		140	_	
Right-of-use assets		384	_	
Short-term investment		_	1,737	
Other long-term investment		1,233	_	
Other non-current assets		_	10	
Total assets		16,385	15,484	
Liabilities				
Accounts payable		2,262	2,008	
Deferred revenue		88	29	
Lease liabilities		384	135	
Bank borrowings		1,889	1,590	
Income tax payable		575	501	
Amounts due to subsidiaries of the Group		2,120	1,060	
Accrued liabilities and other current liabilities		1,444	861	
Deferred tax liabilities		99	64	
Total liabilities		8,861	6,248	
		ears ended Decemb		
	2020	2021	2022	
Net revenues				
From subsidiaries of the Group (Note)	4,761	1,028	601	
From third parties	17,341	22,837	21,462	
	22,102	23,865	22,063	
Net loss (Note)	(1,755)	(900)	(1,367)	

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(a) PRC regulations (Continued)

	For the y	For the years ended December 31,	
	2020	2021	2022
Net cash provided by/(used in) operating activities			
From subsidiaries of the Group	2,141	772	153
From third parties	(2,110)	(2,453)	(1,127)
	31	(1,681)	(974)
Net cash used in investing activities	(29)	(14)	_
Net cash provided by/(used in) financing activities			
Receipts of advances Group companies	_	1,588	124
Repayments for advances from Group companies	_	(554)	
Other financing activities	457	1,161	(214)
	457	2,195	(90)

Note:

Services from VIE and VIE's subsidiaries to other group companies

The VIE and VIE's subsidiaries provide online advertising service to other group companies. For the years ended December 31, 2020, 2021 and 2022, the intercompany online advertising service revenues recognized by VIE and VIE's subsidiaries were US\$4,761, US\$911 and US\$291, respectively. These transactions are eliminated at the consolidation level.

The VIE and VIE's subsidiaries also provide other marketing services to other group companies. For the years ended December 31, 2020, 2021 and 2022, the intercompany other marketing service revenues recognized by VIE and VIE's subsidiaries were US\$nil, US\$117 and US\$310, respectively. These transactions are eliminated at the consolidation level.

Services from other group companies to VIE and VIE's subsidiaries

WFOE as primary beneficiary and other subsidiaries of the Group provide online advertising service and SaaS services to VIE and VIE's subsidiaries. For the years ended December 31, 2020, 2021 and 2022, the intercompany online advertising and SaaS service revenues from VIE and VIE's subsidiaries recognized by WFOE as primary beneficiary and other subsidiaries of the Group were US\$996, US\$49 and US\$285, respectively. These transactions are eliminated at the consolidation level.

As of December 31, 2021 and 2022, there were no balances for management fees charged to VIE and VIE's subsidiaries.

In accordance with the VIE arrangements, the Group has the power to direct activities of OptAim VIE, and can have assets transferred out of OptAim VIE. Therefore, the Group considers that there are no assets of OptAim VIE that can be used only to settle their obligations.

(b) Foreign exchange risk

Assets and liabilities of non-US\$ functional currency entities are translated into US\$ using the applicable exchange rates at the balance sheet date. Items in the statements of comprehensive loss are translated into US\$ using the average exchange rate during the period. Equity accounts were translated at their historical exchange rates. The resulting translation adjustments are accumulated as a component of accumulated other comprehensive income on the consolidated statements of shareholders' equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(b) Foreign exchange risk (Continued)

Certain of the Group's operating activities are transacted in Renminbi ("RMB"), which is not freely convertible into foreign currencies. All foreign exchange transactions take place either through the People's Bank of China or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the People's Bank of China.

The revenues and expenses of the Group's subsidiaries, VIE and VIE's subsidiaries in the PRC are generally denominated in RMB and their assets and liabilities are denominated in RMB. RMB is not freely convertible into foreign currencies, and remittances of foreign currencies into the PRC and exchange of foreign currencies into RMB require approval by foreign exchange administrative authorities and certain supporting documentation. The State Administration for Foreign Exchange, under the authority of the People's Bank of China, controls the conversion of RMB into other currencies. Approval of foreign currency payments by the People's Bank of China or other regulatory institutions requires submitting a payment application form together with suppliers' invoices and signed contracts. The value of RMB is subject to changes in central government policies and to international economic and political developments affecting supply and demand in the China Foreign Exchange Trading System market.

Certain of the Group's operating activities are transacted in Hong Kong dollars ("HK\$"). Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations. The Group considers the foreign exchange risk in relation to transactions denominated in HK\$ with respect to US\$ is not significant as HK\$ is pegged to US\$.

(c) Fair value measurement

(i) Financial assets and liabilities measured at fair value on a recurring basis

The following table sets forth, by level within the fair value hierarchy (Note 2(e)), financial assets and liabilities measured at fair value as of December 31, 2021 and 2022. As required by ASC 820, financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the respective fair value measurement.

		Fair value measurements using		
	Quoted prices in active market for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total fair value
As of December 31, 2021				
Short-term investments - wealth management products	_	1,574	_	1,574
Short-term investments - Available-for-sale debt investment	_	_	2,550	2,550
Other long-term equity investments	_	_	12,114	12,114
Contingent consideration payable	_	_	(4,507)	(4,507)
		1,574	10,157	11,731
As of December 31, 2022				
Short-term investment - wealth management		1.737		1,737
Short-term investments - listed equity securities	1,609	1,/3/	_	1,609
Other long-term investment - Available-for-sale debt investment	1,609		3,000	3,000
0	_	_		
Other long-term equity investments		4.505	2,970	2,970
	1,609	1,737	5,970	9,316

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(c) Fair value measurement (Continued)

(i) Financial assets and liabilities measured at fair value on a recurring basis (Continued)

The following table presents the changes in Level 3 financial liabilities for the years ended December 31, 2021 and 2022.

	Contingent consideration payable For the years ended December 31,	
	2021	2022
Balance at the beginning of year	7,755	4,507
Fair value changes	418	_
Settlement of contingent consideration	(3,666)	_
Transfer to accrued liabilities		(4,507)
Balance at the end of year	4,507	_

The following table presents the changes in Level 3 financial assets for the years ended December 31, 2021 and 2022.

		Available-for-sale debt investments For the years ended December 31,	
	2021	2022	
Balance at the beginning of year		2,550	
Acquisition	2,550	3,000	
Fair value changes	_	(2,550)	
Balance at the end of year	2,550	3,000	

(ii) Fair value measurement on a non-recurring basis

Equity securities without readily determinable fair value accounted for using the measurement alternative are recorded at fair value only if an impairment or observable price adjustment is recognized in the current period. These non-recurring fair value measurements use significant unobservable inputs (Level 3). The Group uses market approach based on the Group's best estimate to determine the fair value of these investments. An observable price change is usually resulting from new rounds of financing of the investees. The Group determines whether the securities offered in new rounds of financing are similar to the equity securities held by the Group by comparing the rights and obligations of the securities. When the securities offered in new rounds of financing are determined to be similar to the securities held by the Group, the Group adjusts the observable price of the similar security to determine the amount that should be recorded as an adjustment in the carrying value of the security to reflect the current fair value of the security held by the Group. There were no fair value changes related to such equity securities due to the observable price change of the investment without readily determinable fair value in the consolidated balance sheets for the years ended December 31, 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(c) Fair value measurement (Continued)

(ii) Fair value measurement on a non-recurring basis (Continued)

The Group assesses the existence of indicators for other-than-temporary impairment of the investments by considering factors as detailed in Note 2(m). The Group recognized US\$nil, US\$4,038 and US\$10,805 impairment charges to investments in equity securities without readily determinable fair value classified as other long-term investments for the years ended December 31, 2020, 2021 and 2022, respectively. In determining the fair value of one (2021: three) investment in equity securities over which the Group identified impairment indicators, market multiple method was used, with significant input including (i) a discount for lack of marketability of 20% (2021: 20)%, and (ii) price-to-sales multiples of comparable companies of 7.6 (2021: ranging from 2.4 to 6.5).

The following table presents the changes in financial assets measured using Level 3 input on a non-recurring basis for the years ended December 31, 2021 and 2022.

	Other long-term equity investments For the years ended December 31,	
	2021	2022
Balance at the beginning of year	8,651	12,114
Investments made/transferred from prepayments	7,417	3,500
Transfer to short-term investments - listed equity securities (Note)	_	(1,510)
Impairment on investments	(4,038)	(10,805)
Exchange differences	84	(329)
Balance at the end of year	12,114	2,970

Note:

The fair value hierarchy of an equity investment was transferred from level 3 to level 1 due to the public listing of the investee during the year ended December 31, 2022.

(d) Concentration risk

(i) Concentration of revenues

For the years ended December 31, 2020, 2021 and 2022, no individual customer accounted for more than 10% of the net revenues.

(ii) Concentration of accounts receivable

The Group conducts credit evaluations on its customers and generally does not require collateral or other security from such customers. The Group generally grants up to 180 days of credit term to customers and periodically evaluates the creditworthiness of the existing customers in determining an allowance for doubtful accounts primarily based upon the age of the receivables and factors surrounding the credit risk of specific customers.

As of December 31, 2021 and 2022, no individual customer accounted for more than 10% of the consolidated accounts receivable. The top 10 accounts receivable accounted for 37% and 59% of the consolidated accounts receivable as of December 31, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

3 Certain risks and concentration (Continued)

(d) Concentration risk (Continued)

(iii) Credit risk

As of December 31, 2021 and 2022, substantially all of the Group's cash and cash equivalents, time deposits and restricted cash were placed with financial institutions in Hong Kong and the PRC. Management chooses these institutions because of their reputations and track records for stability, and their known large cash reserves, and management periodically reviews these institutions' reputations, track records, and reported reserves. Management expects that any additional institutions that the Group uses for its cash and bank deposits will be chosen with similar criteria for soundness. The balances in the PRC are not insured since it is not a market practice in the PRC. Nevertheless under the PRC law, it is required that a commercial bank in the PRC that holds third party cash deposits should maintain a certain percentage of total customer deposits taken in a statutory reserve fund for protecting the depositors' rights over their interests in deposited money. PRC banks are subject to a series of risk control regulatory standards; PRC bank regulatory authorities are empowered to take over the operation and management of any PRC bank that faces a material credit crisis. The Group believes that it is not exposed to unusual risks as these financial institutions are PRC banks with high credit quality. The Group had not experienced any losses on its cash and cash equivalents, time deposits and restricted cash during the years ended December 31, 2020, 2021 and 2022 and believes that its credit risk to be minimal.

4 Acquisitions

(a) Acquisition of Optimal

In May 2020, the Company acquired 80% equity interest of Optimal, a company incorporated in the British Virgin Islands. Optimal, through its wholly-owned subsidiary, has a business cooperation agreement entered into with a global media asset owner to act as its authorized digital advertising representative in the PRC for a period of 30 years, which will be automatically renewed annually as long as the Company continues to perform related payment obligations on an annual license fee of RMB30 thousand (equivalent to US\$5). The agreement is essentially an advertising contract. The Company expects to increase its market share in the Marketing Solution segment in the PRC upon acquisition of this advertising contract.

The acquisition was determined to be an asset acquisition as Optimal did not contain outputs or a substantive process as of the date of acquisition, therefore it does not constitute a business under ASC 805.

The Company issued 3,589,744 Class A ordinary shares to the seller with a fair value of US\$31,949, determined based on the fair value for 80% equity interest of Optimal.

The following table summarizes the estimated fair values of assets acquired and liabilities assumed at the date of acquisition:

Cash	3,001
Intangible asset	53,287
Other liabilities	(3,030)
Deferred tax liabilities	(13,322)
Non-controlling interests	(7,987)
Total identifiable net assets acquired	31,949

The intangible asset represents the advertising contract, which is amortized using the straight-line method over the estimated useful life of 30 years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

4 Acquisition (Continued)

(a) Acquisition of Optimal (Continued)

In December 2020, the Company has acquired the remaining 20% equity interest of Optimal (Note 1(a)(v)).

(b) Acquisition of CMRS Group Holding Limited

In October 2020, the Group acquired 100% equity interest in CMRS Group Holding Limited ("CMRS"), a company incorporated in Hong Kong. CMRS and its underlying subsidiaries (together, "CMRS Group") are engaged in the provision of digital marketing, social media and key opinion leaders and smart content generation enterprise solution services. The Company expects to increase its market share in both Marketing and Enterprise Solutions segments with the combination of data-driven consumer experience management as well as digital content marketing and management to maximize digital marketing potential and efficiency through CMRS Group.

The total purchase consideration for CMRS Group amounted to US\$14,449. This comprised cash consideration of HK\$33,594 (equivalent to approximately US\$4,335), 182,950 Class A ordinary shares of the Company with a fair value of US\$2,440 and contingent consideration payable at a fair value of US\$7,674.

The acquisition was recorded as a business combination. The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition:

Fair value of consideration transferred:

Cash (Note (i))	4,335
Class A ordinary shares of the Company	2,440
Contingent consideration (Note (ii))	7,674
	14,449
Recognized amounts of identifiable assets acquired and liabilities assumed:	
0	
Cash	3,651
Restricted cash (Note (iii))	532
Accounts receivable	4,149
Intangible assets (Note (v))	2,194
Other assets	1,792
Deferred tax liabilities	(362)
Other liabilities	(6,216)
Total identifiable net assets acquired	5,740
Goodwill (Notes (iv), 13)	8,709

Note:

- (i) Out of the total cash consideration of US\$4,335, US\$959 was settled during the year ended December 31, 2020 and the remaining balance of US\$3,376 was settled during the year ended December 31, 2021. There is no adjustment to the cash consideration amounts.
- (ii) Contingent consideration are contingently payable upon the satisfaction of certain financial performance targets of the Company and market conditions, which are to be settled partially by cash and partially by ordinary shares of the Company. The number of ordinary shares to be issued and allotted to sellers is determined using the 10-day moving average closing price of the ADS of the Company.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

4 Acquisition (Continued)

(b) Acquisition of CMRS Group Holding Limited (Continued)

Contingent consideration is measured at fair value at the acquisition date using projected milestone dates, probabilities of success and projected financial results of the CMRS Group discounted at its fair value as of the acquisition date.

In determining the fair value of the contingent consideration, an income approach was applied by using discounted cash flows. In this approach, projected risk-adjusted contingent payments are discounted back to the current period using a discounted cash flow model. The key assumptions used to determine the fair value of the contingent consideration include projected milestone dates within 24 months after acquisition date and discount rate of 4.32%. Increase or decrease in the fair value of contingent consideration liabilities primarily result from changes in the estimated probabilities of achieving net profits after tax thresholds or market share prices milestones during the period.

During the year ended December 31, 2021, the Company has partially settled contingent consideration payable with (i) total cash of US\$2,024 and (ii) 183,740 Class A ordinary shares of the Company with a fair value of US\$2,060 on the grant date of such consideration shares. The change in fair value recorded in consolidated statement of comprehensive loss under "other gains/(losses), net" for the years ended December 31, 2020 and 2021 amounted to a loss of US\$81 and a gain of US\$418, respectively.

During the year ended December 31, 2022, the Company has agreed with the sellers of CMRS Group on the settlement of the outstanding contingent consideration payable with a total cash of HK\$100 million (equivalent to US\$12,903), out of which US\$ 7,742 has been settled during the year ended December 31, 2022, while the remaining unsettled amounts of US\$3,458 and US\$1,703, which are interest bearing at 5% per annum, are payable in the year 2023 and 2024, respectively. The fair value loss pertained to the contingent payable prior to the settlement agreement with the sellers of CMRS Group was recorded in consolidated statement of comprehensive loss under "other gains/(losses), net" for the year ended December 31, 2022 amounted to US\$8,396.

- (iii) The restricted cash includes an escrow amount of US\$506 deposited with a bank which has been repaid to the sellers in 2021.
- (iv) The excess of purchase price over tangible assets, identifiable intangible assets acquired and liabilities assumed was recorded as goodwill. Goodwill associated with the acquisition of CMRS Group was attributable to the expected synergy with the existing Enterprise Solutions and Marketing Solutions operations. The acquired goodwill is not deductible for tax purposes. Acquisition-related costs were immaterial and were included in general and administrative expenses for the year ended December 31, 2020.
- (v) In determining the fair value of the intangible assets, an income approach was used. In this approach, significant estimates consist of discount rate of 22.3% and a growth rate on revenue ranging from 3.0% to 6.2% over a period of 4 years. The estimated amounts recognized on the acquired identifiable intangible assets and their estimated useful lives are shown in the following table:

Intangible asset	Estimated useful life	Gross carrying amount
Brand name	4 years	1,162
Customer relationship	4 years	1,032
		2,194

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

4 Acquisitions (Continued)

(b) Acquisition of CMRS Group Holding Limited (Continued)

Unaudited pro forma net revenues and net loss of the Company for the years ended December 31, 2020 as if the acquisition of CMRS Group had occurred on January 1, 2020 were as follows.

	For the year ended December 31,
	2020
Net revenues	270,326
Net loss	(13,346)

The Company did not have any material, non-recurring pro-forma adjustments directly attributable to the business combination reflected in the reported pro-forma net revenue and net loss.

The pro forma information is not necessarily indicative of the actual results that would have been achieved had CMRS Group acquisition occurred as of January 1, 2019 or the results that may be achieved in future periods.

(c) Acquisition of Sky Gem International Limited

In April 2021, the Company acquired 51% equity interest of Sky Gem International Limited and its subsidiaries (together "Sky Gem").

Sky Gem, which is principally engaged in the business of developing and providing SaaS solution for apparel business owners across various functions including production line management, enterprise resources planning, order management system, sales channel management and customer management in the PRC, Hong Kong, Macau and Taiwan. Upon completion of the acquisition, the Group expects to increase its market share in the data-driven Enterprise Solutions segment businesses beyond digital marketing through Sky Gem.

The total purchase consideration amounted to US\$3,200 which is wholly settled in cash. The acquisition was accounted for as a business combination. The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition:

Fair value of consideration transferred:

Cash	3,200
Recognized amounts of identifiable assets acquired and liabilities assumed:	
Other assets	2,000
Other liabilities	(17)
Non-controlling interests	(3,072)
Total identifiable net assets acquired, net of non-controlling interests	(1,089)
Goodwill (Note 13)	4,289

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(US\$'000, except share data and per share data, or otherwise noted)

4 Acquisition (Continued)

(c) Acquisition of Sky Gem International Limited (Continued)

As of December 31, 2021, purchase consideration of US\$3,200 was fully settled and there is no adjustment to the purchase consideration amounts.

The excess of purchase price over total identifiable net assets acquired, net of non-controlling interests, was recorded as goodwill. Goodwill associated with the acquisition of Sky Gem was attributable to the expected synergy arising from the consolidated Enterprise Solutions business. The acquired goodwill is not deductible for tax purposes. Acquisition-related costs were immaterial and were included in general and administrative expenses for the year ended December 31, 2021.

Pro-forma results related to the acquisition in accordance ASC 805 have not been presented because the contribution of net revenue and net loss of the acquired entity is less than 1% of the Company's consolidated net revenue and net loss for the year ended December 31, 2021.

(d) Acquisition of a customer relationship management ("CRM") platform

In July 2021, the Group completed an acquisition of a PRC-based CRM platform namely Parllay which provides WeChat-based CRM, e-commerce and marketing SaaS solutions to facilitate the growth of the Company's Enterprise Solutions segment. iClick anticipates utilizing Parllay's rich expertise in SaaS technology and the assembled workforce to further enhance iClick's product and services and accelerate revenue of its Enterprise Solutions segment.

The total purchase consideration for all the assets amounted to US\$1,825, which is wholly settled in cash. The acquisition was accounted for as a business combination as it contains outputs and a substantive process that together significantly contribute to the ability to create outputs as of the date of acquisition. The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the date of acquisition:

Fair value of consideration transferred:

Cash consideration	1,825
Recognized amounts of identifiable assets acquired and liabilities assumed:	
Intangible assets	279
Deferred tax liabilities	(70)
Total identifiable net assets acquired	209
Goodwill (Note 13)	1,616

As of December 31, 2021, purchase consideration of US\$1,825 was fully settled and there is no adjustment to the purchase consideration amounts.

The excess of purchase price over total identifiable net assets acquired was recorded as goodwill. Goodwill associated with the acquisition of Parllay was attributable to the expected synergy arising from the consolidated Enterprise Solutions business. The acquired goodwill is not deductible for tax purposes. Acquisition-related costs were immaterial and were included in general and administrative expenses for the year ended December 31, 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

4 Acquisitions (Continued)

(d) Acquisition of a customer relationship management ("CRM") platform (Continued)

In determining the fair value of the intangible asset, an income approach was used. In this approach, significant estimates consist of discount rate of 22.7% and a compound annual growth rate on revenue of 32% over a period of 5 years. The estimated amounts recognized on the acquired identifiable intangible asset and its estimated useful life are shown in the following table:

Intangible asset	Estimated useful life	Gross carrying amount
Developed technology	5 years	279

Pro-forma results related to the acquisition in accordance ASC 805 have not been presented because the acquisition of Parllay is not material, where net revenue and net loss contributed by Parllay is less than 5% of the Company's consolidated net revenue and net loss for the year ended December 31, 2021.

5 Cash and cash equivalents and time deposits

Cash and cash equivalents represent cash on hand, cash held at banks, and short-term deposits placed with banks or other financial institutions, which have original maturities of three months or less.

As of December 31, 2022, the Group had time deposits of US\$10 (2021: US\$11,128) with an average original maturity of 5 months (2021: 3 months) which are denominated in US\$(2021: same).

Cash and cash equivalents and time deposits as of December 31, 2021 and 2022 primarily consist of the following currencies:

	As of December 31,			
	2021		2022	
	Amount in thousand	US\$ equivalent	Amount in thousand	US\$ equivalent
RMB	111,651	17,576	378,033	54,632
HK\$	63,787	8,231	77,960	10,059
US\$	26,077	26,077	17,323	17,323
European dollars	297	336	106	111
Singapore dollars	217	159	471	345
New Taiwan dollars	3,118	113	3,066	99
Japanese Yen	3,163	29	11,764	91
Others	67	50	133	104
		52,571		82,764

6 Restricted cash

As of December 31, 2021 and 2022, all the restricted cash represented bank balances held in restricted bank accounts pursuant to certain bank borrowings (Note 17).

Restricted cash carried fixed interest at a weighted average rate of 2.34% (2021: 0.33%) per annum, out of which US\$9,213 (2021: US\$26,111), and US\$13,330 (2021: US\$10,035) are denominated in US\$ and RMB, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

7 Equity investment

On May 31, 2019, the Company and VGI Global Media PLC ("VGI"), an online-to-offline solutions provider across advertising, payment and logistics platforms in Thailand, jointly established a new company namely V-Click Technology Company Limited ("V-Click"). VGI holds a majority stake of 51% in V-Click and the Company holds the remaining 49% stake. The investment was accounted for as an equity-method investment due to the significant influence the Company has over the operating and financial policies of V-Click.

(a) Investment in an equity investee

Movements on the Group's investment in V-Click during the years ended December 31, 2021 and 2022 were as follows:

For the years ended December 31,	
2021	2022
460	354
(107)	(75)
1	_
354	279
	2021 460 (107)

The Group recognized its share of the equity investee's loss of US\$107 and US\$75 for the years ended December 31, 2021 and 2022, respectively. There was no indicator of impairment noted for this equity-method investment as of December 31, 2021 and 2022.

(b) Amount due from an equity investee

As of December 31, 2021 and 2022, the amount was due from V-Click in relation to cash advances of US\$276 and US\$312, respectively, which was unsecured, interest-free and repayable on demand.

8 Other long-term investments

	As of December 31,	
	2021	2022
Available-for-sale debt investment (Note 2(k))	_	3,000
Investments in equity securities without readily determinable fair values	16,152	13,775
Total other long-term investments, gross	16,152	16,775
Less: Impairment of investments in equity securities without readily determinable fair		
values	(4,038)	(10,805)
	12,114	5,970

The Group's other long-term investments consist of (i) available-for-sale debt investments (see Note 2(k)), and (ii) securities without readily determinable fair value and over which the Group has neither significant influence nor control through investments in common stock or in-substance common stock.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

8 Other long-term investments (Continued)

Movement of investments in equity securities without readily determinable fair values for the years ended December 31, 2021 and 2022 is as follows:

	For the years ended	
	December 31,	
	2021	2022
Balance at the beginning of year	11,575	12,114
Investments made/transferred from prepayments	4,502	3,500
Transfer to short-term investments	_	(1,510)
Impairment	(4,038)	(10,805)
Exchange differences	75	(329)
Balance at the end of year	12,114	2,970

The Group used measurement alternative for recording equity investments without readily determinable fair values at cost, less impairment, adjusted for subsequent observable price changes. Based on ASU 2016-01, entities that elect the measurement alternative will report changes in the carrying value of the equity investments in current earnings. If measurement alternative is used, changes in the carrying value of the equity investment will be recognized whenever there are observable price changes in orderly transactions for the identical or similar investment of the same issuer, and impairment charges will be recorded when any impairment indicators are noted and the fair value is lower than the carrying value.

The Group, with the assistance of an independent valuer, assessed the fair value of certain investments as of the balance sheet date, using significant unobservable input including price-to-sales multiples of comparable companies and a discount for lack of marketability (the "DLOM"). The Group concluded that impairment was warranted for certain investments as of December 31, 2021 and 2022 and recognized impairment charges for investments without readily determinable fair value of US\$nil, US\$4,038 and US\$10,805 for the years ended December 31, 2020, 2021 and 2022, respectively, which are related to investees in sports nutrition products business, e-commerce platforms business, publishing and logistics business, information technology business, gaming business and advertising business whose financial performance was unsatisfactory with no obvious upturn or potential financing solutions in the foreseeable future.

9 Accounts receivable, net

	As of Decer	As of December 31,	
	2021	2022	
Accounts receivable, gross (Note)	210,047	101,771	
Less: allowance for credit losses (Note 2(j))	(22,786)	(37,215)	
Accounts receivable, net	187,261	64,556	

Note:

As of December 31, 2021, the balance includes bills receivable of US\$478 which represent short-term notes receivable issued by reputable financial institutions that entitle the Group to receive the full face amount from the financial institutions at maturity, which generally range from five to six months from the date of issuance.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

10 Other assets

Other assets consist of the following:

	As of De	As of December 31,	
	2021	2022	
Current			
Deposits	2,609	1,928	
Prepayments	7,520	2,917	
Loans and interest receivable, net (Notes 2(j), 10(i))	12,295	726	
Bank interest receivable	7	37	
VAT recoverable	1,275	1,411	
Others	1,251	1,028	
	24,957	8,047	
Non-current			
Rental deposits	302	522	
Loans receivable, net (Notes 2(j), 10(i))	_	6,073	
Prepayment	1,361	1,034	
	1,663	7,629	

Note:

(i) As of December 31, 2021, the loans were granted to certain equity investees of the Group at an interest rate of at 6% per annum. The loan receivables together with the related interest receivables were unsecured and due on demand or within one year from the end of the reporting period.

As of December 31, 2022, the loans were granted one equity investee of the Group at an interest rate of 6% per annum. The loan receivables together with the related interest receivables were unsecured and expected to be recovered beyond one year from the end of the reporting period.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

11 Property and equipment, net

Property and equipment consist of the following:

	As of December 31,	
	2021	2022
Cost:		
Office equipment	5,035	5,065
Leasehold improvements	2,542	2,585
Furniture and fixtures	1,327	1,494
Motor vehicles	13	13
Total cost	8,917	9,157
Less: Accumulated depreciation	(6,918)	(7,512)
Less: Accumulated impairment losses (Note 2(r))	_	(1,206)
Exchange differences	(68)	(198)
Property and equipment, net	1,931	241

Depreciation expense recognized for the years ended December 31, 2020, 2021 and 2022 are summarized as follows:

	For the years ended December 31,		
	2020	2021	2022
Cost of revenues	3	7	11
Research and development expenses	80	152	220
Sales and marketing expenses	96	171	219
General and administrative expenses	202	318	392
Total	381	648	842

12 Intangible assets, net

Intangible assets consist of the following:

	As of December 31,	
	2021	2022
Cost:		
Computer software	23,673	23,802
Developed technologies	117	117
Customer relationship	2,135	2,135
Brand name	1,162	1,162
Contract backlog	610	585
Advertising contract	53,287	53,287
Total cost	80,984	81,088
Less: Accumulated amortization	(27,336)	(30,326)
Less: Accumulated impairment losses (Note 2(r))	_	(49,778)
Exchange differences	65	7
Intangible assets, net	53,713	991

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

12 Intangible assets, net (Continued)

Amortization expense recognized for the years ended December 31, 2020, 2021 and 2022 are summarized as follows:

	For the y	For the years ended December 31,		
	2020	2021	2022	
Cost of revenues	4,187	3,070	2,783	
Sales and marketing expenses	_	12	22	
General and administrative expenses	2	156	185	
	4,189	3,238	2,990	

The estimated aggregate amortization expense for each of the next three years as of December 31, 2022 is:

	Amortization expense of intangible assets
2023	563
2024	425
2025	3
	991

13 Goodwill

Movements on goodwill during the year were as follows:

	Marketing Solutions	Enterprise Solutions	Total
Balance as of January 1, 2021	53,024	21,395	74,419
Goodwill arising from acquisitions during the year (Notes 4(c) and (d))	_	5,905	5,905
Exchange differences	_	1,350	1,350
Balance as of December 31, 2021	53,024	28,650	81,674
Impairment (Note 2(q))	(53,024)	(27,113)	(80,137)
Exchange differences	_	(1,537)	(1,537)
Balance as of December 31, 2022			

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

14 Lease accounting

The Group has operating leases primarily for office and operation space. The lease term is generally specified in lease agreements, however certain agreements provide for lease term extensions or early termination options. To determine the period for the estimated future lease payments, the Group evaluates whether it is reasonably certain that it will exercise the option at the commencement date and periodically thereafter. The lease terms of the Group's operating leases generally ranged from 12 to 36 months (2021: 12 to 36 months), and the weighted average remaining lease term as of December 31, 2022 was 22 months (2021: 21 months).

To determine the estimated future lease payments, the Group reviews each of its lease agreements to identify the various payment components. The Group includes only the actual lease components in its determination of future lease payments for all the leases. Once the estimated future lease payments are determined, the Group uses a discount rate to calculate the present value of the future lease payments. During the year ended December 31, 2022, a weighted average discount rate of 4.9% (2021: 4.3%) has been applied to the remaining lease payments to calculate the lease liabilities included within the consolidated balance sheets. This represents the incremental borrowing rate the Group would be subject to on borrowings from its available revolving debt agreements.

The right-of-use assets of the Group, net of accumulated amortization and impairment, amounted to US\$3,834 and US\$1,292 as of December 31, 2021 and 2022, respectively. The following table presents the maturity of the Group's operating lease liabilities as of December 31, 2022.

2023	2,338
2024	1,099
2025	325
Total operating lease payments (undiscounted)	3,762
Less: Imputed interest	(231)
Total operating lease liabilities (discounted)	3,531

Lease expenses for these leases are recognized on a straight-line basis over the lease term. For short-term leases over which the Group has elected not to apply the recognition requirements of ASC 842, the Group has recognized the lease payments as expenses on a straight-line basis over the lease term. For the years ended December 31, 2020, 2021 and 2022, total lease cost is comprised of the following:

Relating to the operating lease liabilities 2,155	For the years ended December 31,		
Relating to the operating lease liabilities 2,155	2021	2022	
	2,862	2,835	
Relating to short-term leases 912	1,518	894	
3,067	4,380	3,729	

Supplemental cash flow information related to operating leases is as follows:

	For the years ended December 31,		
	2020 2021 202		
Cash paid for the rentals included in the lease liabilities	2,173	2,781	2,776
Right-of-use assets obtained in exchange for operating lease liabilities	2,710	3,163	2,988

The Group recognized impairment of right-of-use assets of US\$nil, US\$nil and US\$2,365 for the years ended December 31, 2020, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

15 Deferred revenue

	As of December 31,	
	2021	2022
Deferred revenue, current	22,802	16,975

Changes in deferred revenue balance for the years ended December 31, 2021 and 2022 were as follows:

		For the years ended December 31,	
	2021	2022	
Balance at the beginning of year	28,199	22,802	
Additions to deferred revenue	135,292	72,300	
Recognition of deferred revenue as revenues	(141,156)	(77,887)	
Exchange differences	467	(240)	
Balance at the end of year	22,802	16,975	

16 Accrued liabilities and other liabilities

Accrued liabilities and other liabilities consist of the following:

	As of Dec	As of December 31,	
	2021	2022	
Current			
Rebates payable to customers	733	677	
VAT and other taxes payable	5,014	8,597	
Security deposit received from customers	418	822	
Accrued employee benefits	10,548	10,567	
Accrued professional fees	5,076	4,048	
Accrued marketing and hosting expenses	1,326	1,257	
Contingent consideration payable (Note 4(b))	4,507	_	
Consideration payable (Note 4(b))	_	3,458	
Advance from a former non-controlling interest shareholder (Note)	475	500	
Others	1,638	613	
	29,735	30,539	
			
Non-current			
Deferred other income	459	368	
Consideration payable (Note 4(b))	_	1,703	
-	459	2,071	

Note:

As of December 31, 2021, the amount represents an advance from the seller of Optimal, a former non-controlling interest of the Company, for the purpose of replenishment of working capital of certain subsidiaries of the Company, which was unsecured, interest-free, and agreed to be repaid in December 2022. However, the repayment was delayed, in which US\$500 is recorded as current liability as of 31 December 2022.

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(US\$'000, except share data and per share data, or otherwise noted)

17 Bank borrowings

	As of December 31,	
	2021	2022
1-year revolving loans denominated in RMB at interest rates of 5.22% (2021: 5.22%) per		
annum	31,912	18,411
Half-year revolving loans denominated in RMB at interest rates ranging from 3.00% to		
5.00% (2021: 3.00% to 6.25%) per annum	26,691	15,896
Revolving service trade loans denominated in HK\$ at interest rates ranging from 8.6% to		
8.64% (2021: 4.35% to 4.43%) per annum	84	4
3-month revolving loan denominated in RMB at an interest rate of 3.00% (2021: 3.00%) per		
annum	9,917	7,876
1-year term loans denominated in RMB at interest rates ranging from 3.65% to 4% (2021:		
3.85% to 4.50%) per annum	6,926	2,096
	75,530	44,283

Note:

- (i) Corporate guarantee by the Company, bank deposits of the Group of US\$22,543 (2021: US\$36,146) and accounts receivable of the Group of US\$5 (2021: US\$18,250) are provided as pledge to secure the obligations under the facilities from certain banks.
- Out of the total banking facilities of US\$213,289 and US\$165,288 available to the Group as of December 31, 2021 and 2022, respectively, US\$75,530 and US\$44,283 have been utilized by the Group as of December 31, 2021 and 2022, respectively. As of December 31, 2021 and 2022, total undrawn revolving, service trade and term loan facilities amounted to US\$97,420, US\$18,093 and US\$5,492 (2021: US\$115,338, US\$18,013 and US\$4,408) respectively. Total undrawn facilities available for draw-down as of December 31, 2021 and 2022, net of bank deposits that would need to be pledged as restricted cash upon utilization of the facilities, amounted to US\$33,326 and US\$41,235, respectively. Subsequent to December 31, 2022, available facilities from certain banks to the Group were reduced whereby total undrawn facilities available for draw-down, net of bank deposits that would need to be pledged as restricted cash upon utilization of the facilities as of February 28, 2023 dropped to US\$17,395.
- (iii) As of December 31, 2021, a financial covenant (minimum quarterly EBITDA as defined in the banking facilities agreements) as set out in one of the loan agreements has been breached. The Group has obtained waiver letter such that the bank would not demand immediate repayment from the Group. As of December 31, 2022, no financial covenants as set out in these loan agreements were breached.

The weighted average interest rate for bank borrowings outstanding as of December 31, 2021 and 2022 was 4.64% and 4.48% per annum, respectively. Other than those shown above, the Company did not have any significant capital and other commitments, long-term obligations, or guarantees as of December 31, 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

18 Convertible notes at fair value

The Company has issued certain convertible notes in September 2018 (the "2018 Notes"), November 2019 (the "November 2019 Notes"), December 2019 (the "December 2019 Notes"), January 2020 (the "January 2020 Notes") and July 2020 (the "July 2020 Notes"). The November 2019 Notes and December 2019 Notes together are referred to as the "2019 Notes". The January 2020 Notes and July 2020 Notes together are referred to as the "2020 Notes". There were no outstanding convertible notes as of December 31, 2021 and 2022.

			Principal amounts	Coupon rate
Convertible notes	Issue date	Maturity date	US\$	%
2018 Notes	September 12, 2018	September 12, 2023	30,000	0
November 2019 Notes	November 11, 2019	November 11, 2022	20,000	5
December 2019 Notes	December 16, 2019	December 16, 2022	10,000	5
January 2020 Notes	January 23, 2020	September 12, 2023	3,450	0
July 2020 Notes	July 30, 2020	September 12, 2023	13,100	0

The movement of transactions of these convertible notes during the year ended December 31, 2020 is shown in the table below.

Total
49,008
4,433
19,184
11,466
(68,895)
(15,196)

Note:

- (i) All the convertible notes together with the embedding conversion options are recognized as financial liabilities whereby the Company has elected the fair value option under ASC 825-10 to measure the entire instrument at fair value with realized or unrealized gains and losses recorded in the consolidated statements of comprehensive loss. Also, ASC 825-10-25-11 requires financial instrument that is legally a single contract not to be separated into parts for purposes of applying the fair value option.
- (ii) Issuance costs related to the convertible notes for which the fair value option is elected amounting to US\$4,556 and US\$44 for the years ended December 31, 2019 and 2020 respectively. Such costs have been recognized in earnings as incurred and not deferred in accordance with ASC 825-10-25-3.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

18 Convertible notes at fair value (Continued)

Note: (Continued)

(iii) Details of the conversion of convertible notes for the year ended December 31, 2020 are as follows.

Convertible notes	Conversion date	Principal amount converted	Number of ADSs converted	Conversion price per ADS US\$	Fair value of converted convertible notes as of the conversion date
For the year ended					
December 31, 2020					
2018 Notes	June 30, 2020	1,000	24,805	40.31	1,551
2018 Notes	July 24, 2020	1,000	23,655	42.28	1,752
2018 Notes	August 11, 2020	2,000	53,660	37.27	4,327
November 2019 Notes	February 18, 2020	20,000	512,821	39.00	20,282
December 2019 Notes	February 18, 2020	10,000	256,410	39.00	9,989
January 2020 Notes	February 3, 2020	3,450	108,887	31.68	4,346
July 2020 Notes	July 30, 2020	13,100	385,169	34.01	26,648
		50,550	1,365,407		68,895

(iv) The Company has redeemed the 2018 Notes on the following dates during the year ended December 31, 2020:

Principal amount	Consideration paid for redemption
6,900	8,004
6,200	7,192
13,100	15,196
	6,900 6,200

(v) Pursuant to an agreement entered into with an independent investor on February 17, 2020, the Company agreed to issue the July 2020 Notes with principal amounts of US\$13,100 upon receipt of total cash consideration of US\$15,196 from the investor on or before June 16, 2020. This constitutes a call option written to the investor to purchase the July 2020 Notes (the "Call Option") which is recorded as a derivative liability and measured at fair value. In June 2020, the Company has entered into an addendum with the independent investor to extend the payment due date from June 16, 2020 to July 31, 2020. The investor exercised the Call Option on July 30, 2020, upon which the Company issued the July 2020 Notes to the investor. On the same date, the investor converted the entire July 2020 Notes into 1,925,848 Class A ordinary shares of the Company.

The fair value of the Call Option recorded as derivative liabilities of US\$11,466 as of July 30, 2020 was determined using a binomial model with the key assumptions being the volatility of 13.39% and risk-free rate of 0.09%. The volatility was based on the implied historical volatility of certain comparable companies. The risk-free interest rate is equal to the yield of US Treasury Strips with a maturity life equal to the time to maturity of the July 2020 Notes.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

18 Convertible notes at fair value (Continued)

Note: (Continued)

(vi) The fair values of the 2018 Notes, January 2020 Notes and July 2020 Notes as of the dates of conversion and the end of reporting periods were determined using Monte Carlo simulation, with key assumptions summarized in the below table. The volatility was based on the implied historical volatility of certain comparable companies. The risk-free interest rate is equal to the yield, as of the respective measurement dates, of the zero-coupon U.S. Treasury bill that commensurate with the remaining period until the maturity of the convertible notes.

Measurement date	Volatility	Risk-free rate
	%	%
2018 Notes		
February 3, 2020	42.09	1.37
March 31, 2020	45.38	0.45
June 30, 2020	51.24	0.24
July 24, 2020	49.26	0.23
August 11, 2020	49.75	0.23
January 2020 Notes		
February 3, 2020	42.09	1.37
July 2020 Notes		
July 30, 2020	49.45	0.19

(vii) The fair values of the 2020 Notes were determined using a binomial model with the key assumptions summarized in the below table. The volatility was based on the implied historical volatility of certain comparable companies. The risk-free interest rate is equal to the yield, as of the respective measurement dates, of a 5% coupon U.S. Treasury bill that is commensurate with the remaining period until the maturity of the 2020 Notes. The bond yield was based on the yield of corporate bonds with comparable ratings.

Measurement date	Volatility	Risk-free rate	Bond yield
	%	%	%
November 2019 Notes			
February 18, 2020	44.02	1.40	10.67
December 2019 Notes			
February 18, 2020	43.61	1.40	10.67

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19 Ordinary shares

As of December 31, 2021 and 2022, the Company is authorized to issue 100,000,000 shares of US\$0.001 par value per ordinary share, out of which 80,000,000 shares are Class A ordinary shares and 20,000,000 shares are Class B ordinary shares. The holders of Class A ordinary shares shall have one vote in respect of each Class A ordinary share held and the holders of Class B ordinary shares shall have twenty votes in respect of each Class B ordinary share held.

On November 14, 2022, the Company changed the ratio of the American depository shares ("ADS") representing its Class A ordinary shares from one ADS representing one-half of one Class A ordinary shares to one ADS representing five Class A ordinary shares. For the ADS holders, the change in the ADS ratio will have the same effect as a one-for-ten reverse ADS split. There is no change to the Company's Class A ordinary shares.

At the time the Company adopted the 2010 Employee Share Option Plan (the "2010 Share Option Plan") and 2018 Post IPO Share Incentive Plan, the Company, together with the then shareholders, also decided to allot ordinary shares with par value of US\$0.001 to Arda Holdings Limited ("Arda"), a British Virgin Islands company owned by Sammy Hsieh, Co-founder and Director of the Company at no consideration. Arda will only hold these ordinary shares on trust for the benefit of the employees who are under the 2010 Share Option Plan and 2018 Post IPO Share Incentive Plan and the dealing of these ordinary shares is under the direction of the board of directors of the Company. The Company considered Arda to be a variable interest entity as this entity has no equity at risk. The Company further considered that it is the primary beneficiary because the purpose of Arda is to hold treasury shares on behalf of the Company and the dealings of those transactions are under the direction of the Company's board of directors. Given the structure of this arrangement, while these ordinary shares have been legally issued, they do not bear the attributes of unrestricted, issued and outstanding shares. Therefore, the ordinary shares issued to Arda are accounted for as treasury shares of the Company until these ordinary shares are earned by the Company's employees, officers, directors or consultants for service provided to the Group. The Company allotted 627,811 shares during the year the 2010 Share Option Plan was adopted. No additional shares have been allotted during the years ended December 31, 2020, 2021 and 2022 to Arda. Arda does not hold any other assets or liabilities as of December 31, 2021 and 2022, nor earn any income nor incur any expenses for the years ended December 31, 2020, 2021 and 2022.

20 Repurchase of shares

The board of directors of the Company authorized certain share repurchase programs January 2020 (the "January 2020 Share Repurchase Program"), December 2020 (the "December 2020 Share Repurchase Program") December 2021 (the "December 2021 Share Repurchase Program") and December 2022 (the "December 2022 Share Repurchase Program"), respectively, as detailed in the below table.

	Maximum value of ordinary shares or ADSs of	
Repurchase program	the Company to repurchase	Effective period
January 2020 Share Repurchase		
Program	10,000	Period from December 30, 2019 to December 29, 2020
December 2020 Share Repurchase		
Program	25,000	Period from December 30, 2020 to December 31, 2021
December 2021 Share Repurchase		
Program	20,000	Year ended December 31, 2022
December 2022 Share Repurchase		
Program	5,000	Year ending December 31, 2023

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

20 Repurchase of shares (Continued)

The share repurchases may be made on the open market at prevailing market prices, in negotiated transactions off the market, and/or in other legally permissible means from time to time as market conditions warrant in compliance with applicable requirements of Rule 10b5-1 and/or Rule 10b-18 under the U.S. Securities Exchange Act of 1934, as amended, at times and in such amounts as the Company deems appropriate.

The following table is a summary of the shares repurchased by the Company during 2020, 2021 and 2022 under the repurchase programs. All shares were purchased through publicly purchasing from the open market.

Period	Total number of ADSs purchased as part of the publicly announced plan	Average price paid per ADS
January 2020 Share Repurchase Program		
- For the year ended December 31, 2020	76,808	70.892
December 2020 Share Repurchase Program		
- For the year ended December 31, 2020	2,760	83.686
- For the year ended December 31, 2021	120,992	88.324
December 2021 Share Repurchase Program		
- For the year ended December 31, 2022	731,881	10.349

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

21 Share-based compensation

(a) Share option plan

The Company's 2010 Share Option Plan provides for the grant of incentive share options to the Company's employees, officers, directors or consultants. The Company's board of directors administers the 2010 Share Option Plan, selects the individuals to whom options will be granted, determines the number of options to be granted, and the term and exercise price of each option.

During the years ended December 31, 2020, 2021 and 2022, no share options were granted to non-employees, employees, officers and directors of the Group. The following table summarizes the share option activities for the years ended December 31, 2020, 2021 and 2022:

	Number of share options	Weighted average exercise price US\$	Weighted average grant date fair value US\$	Weighted average remaining contractual life years	Aggregate intrinsic value US\$'000
At January 1, 2020	667,867	8.16	N/A	5.27	1,807
Exercised	(235,765)	3.75	N/A	N/A	N/A
At December 31, 2020	432,102	10.56	N/A	4.28	4,578
Vested and expected to vest at December 31, 2020	430,569	5.10	14.51	5.09	5,215
Exercisable to vest at December 31, 2020	431,245	5.13	14.50	5.09	5,213
At January 1, 2021	432,102	10.56	N/A	4.28	4,578
Exercised	(117,788)	5.61	N/A	N/A	N/A
At December 31, 2021	314,314	12.41	N/A	3.31	1,601
Vested and expected to vest at December 31, 2021	312,876	4.90	15.25	3.73	1,601
Exercisable to vest at December 31, 2021	314,204	4.95	15.23	3.73	1,601
At January 1, 2022	314,314	12.41	N/A	3.31	1,601
Exercised	(25,341)	2.69	N/A	N/A	N/A
Forfeited	(14,143)	19.95	N/A	N/A	N/A
At December 31, 2022	274,830	12.92	N/A	2.69	17
Vested and expected to vest at December 31, 2022	273,392	4.33	15.37	2.69	17
Exercisable to vest at December 31, 2022	274,720	4.39	15.35	2.69	17

The aggregate intrinsic value in the table above represents the difference between the estimated fair values of the Company's ordinary shares as of December 31, 2021 and 2022 and the exercise price.

All share-based payments to employees are measured based on their grant-date fair values. Compensation expense is recognized based on the vesting schedule over the requisite service period. Total fair values of options vested and recognized as expenses for the years ended December 31, 2020, 2021 and 2022 were US\$107, US\$4 and US\$nil, respectively.

As of December 31, 2020, there was US\$4 of unrecognized share-based compensation expenses related to share options, which were expected to be recognized over a weighted-average vesting period of 0.25 years. As of December 31, 2021 and 2022, there were no unrecognized share-based compensation expenses related to share options. 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. There were no grant or modification of share options during the years ended December 31, 2020, 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

21 Share-based compensation (Continued)

(b) Post-IPO share incentive plan

The Company's post-IPO share incentive plan provides for the grant of incentive share options and RSUs to the Company's employees, officers, directors or consultants. The Company's board of directors administers the post-IPO share incentive plan, selects the individuals to whom options and RSUs will be granted, determines the number of options and RSUs to be granted, and the term and exercise price of each option and RSU.

During the years ended December 31, 2020, 2021 and 2022, the Company granted RSUs to non-employees, employees, officers and directors of the Group. The following table summarizes the activity of the service-based RSUs for the year ended December 31, 2020, 2021 and 2022:

X47-1-1-4- J

	Number of RSUs	Weighted average grant date fair value
At January 1, 2020	463,546	5.52
Granted (with a vesting period of 0 to 4 years)	1,180,295	7.83
Vested	(962,606)	6.55
Forfeited/expired (Note (ii))	(46,730)	7.26
At December 31, 2020	634,505	8.11
Expected to vest at December 31, 2020	620,245	8.83
At January 1, 2021	634,505	8.11
Granted (with a vesting period of 0 to 4 years)	716,265	15.73
Vested	(1,049,007)	11.32
Forfeited/expired (Note (ii))	(74,186)	12.73
At December 31, 2021	227,577	17.65
Expected to vest at December 31, 2021	209,878	19.07
At January 1, 2022	227,577	17.65
Granted (with a vesting period of 0 to 4 years)	301,850	5.62
Vested	(414,314)	8.78
Forfeited/expired (Note (ii))	(4,650)	12.53
At December 31, 2022	110,463	18.26
Expected to vest at December 31, 2022	92,900	17.91

Note:

- (i) All share-based payments to employees are measured based on their grant-date fair values. Compensation expense is recognized based on the vesting schedule over the requisite service period. Total fair values and intrinsic value of RSUs vested and recognized as expenses for the years ended December 31, 2020, 2021 and 2022 were US\$6,142, US\$11,965 and US\$3,794 respectively.
- (ii) Forfeitures are estimated at the time of grant. If necessary, forfeitures are revised in subsequent periods if actual forfeitures differ from those estimates. Based upon the Company's expected forfeitures for RSUs granted, the directors of the Company estimated that its future forfeiture rate would be 1% for employees and 0% for non-employees in 2020, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

21 Share-based compensation (Continued)

(b) Post-IPO share incentive plan (Continued)

Note: (Continued)

(iii) During the years ended December 31, 2019 and 2020, the Company has granted RSUs which are subject to certain market conditions based on achievement of stock prices of the Company. The Company determines the fair value of these RSUs as of the date of grant or modification using the Monte Carlo simulation model which utilizes multiple input variables to determine the stock-based compensation expense with the following assumptions: historical volatility ranging from 37.36% to 62.89%, 0% dividend yield, and risk-free interest rates ranging from 0.1%% to 1.67%. The historical volatility was based on the average volatility of the comparable companies for the most recent 1-year period as of the date of grant or modification. The stock price projection for the Company assumes a 0% dividend yield. This is mathematically equivalent to reinvesting dividends in the issuing entity over the performance period. The risk-free interest rate is equal to the yield, as of the measurement date, of the zero-coupon U.S. Treasury bill that is commensurate with the remaining performance measurement period.

(c) Issuance of warrants to an external consultant

In 2019, pursuant to the agreement executed between the Company and an external consultant ("Warrant Agreement"), the Company shall issue warrants to purchase up to 4,651,162 ADSs ("Warrants") to the external consultant in exchange for its financial advisory services which the Warrants shall be vested upon the completion of raising a minimum of US\$20,000 by the Company through issuing convertible notes or any equivalent financial instruments. In 2022, as a result of the change in the ADS conversion ratio from one ADS representing one-half of Class A ordinary share to one ADS representing five Class A ordinary shares, the number of ADSs that can be purchased upon exercise of the warrants was changed from 4,651,162 ADSs to 11,627,905 ADSs.

On December 9, 2019, the Company, based on the Warrant Agreement, issued the Warrants to the external consultant as the Company was able to successfully issue the November 2019 Notes. The exercise period of the Warrants commenced on December 16, 2020 at an exercise price of US\$4.30 per ADS and was expired on December 16, 2022. In accordance with ASC 718, the measurement date for the vested warrants was December 9, 2019. The warrants issued to the consultant are classified as equity awards and measured based on the measurement date fair value of US\$0.709 per warrant. During the years ended December 31, 2020, 2021 and 2022, no warrants were exercised.

Since all of the warrants granted were immediately vested, compensation expense of US\$3,298 was immediately recognized with a corresponding credit to additional paid-in capital during the year ended December 31, 2019.

The fair value of the warrants granted on December 9, 2019 was estimated by using the binomial option pricing model with the following assumptions:

Volatility	42.1 %
Risk-free interest rate	1.6 %
Expected dividend yield	0.0 %
Expected warrant life	3.0 years
Expected forfeiture rate	0.0 %

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

21 Share-based compensation (Continued)

(d) Issuance of shares to Baozun

Pursuant to the share subscription agreement entered into between Baozun Inc. and iClick (Note 1(d)), Baozun has subscribed for 649,349 newly issued Class B ordinary shares. The Class B ordinary shares were issued to Baozun at US\$26.52 per share, which was at discount as compared to the fair value of US\$28.88 (i.e. based on the closing stock price as of the date of share issuance). The discount of US\$1,530 represented an incentive to Baozun to enter into the strategic cooperation framework agreement with the Company, which was recognized as share-based compensation expense in the consolidated statements of comprehensive loss during the year ended December 31, 2021.

(e) Total share-based compensation costs

Total share-based compensation costs recognized for the years ended December 31, 2020, 2021 and 2022 are as follows:

	For the years ended December 31,		
	2020	2021	2022
Cost of revenues	5	12	18
Research and development	92	221	337
Sales and marketing	2,707	9,991	1,743
General and administrative	3,445	3,275	1,696
Total	6,249	13,499	3,794

22 Other gains/(losses), net

	For the year	For the years ended December 31,		
	2020	2021	2022	
Net exchange (loss)/gain	(421)	622	(3,183)	
Forfeiture of advances from customers (Note (i))	1,245	1,654	1,552	
Government subsidy income (Note (ii))	3,063	3,281	4,458	
ADR reimbursement from depositary bank	251	410	(169)	
Fair value gains/(losses) on short-term investments	1,404	(316)	(2,368)	
Impairment on long-term investments	_	(4,038)	(10,805)	
Fair value change in contingent consideration payable	(81)	418	(8,396)	
Others	391	172	(254)	
Total	5,852	2,203	(19,165)	

Note:

- (i) The forfeited advances from customers are recognized as other gains when the contractual obligation of the Company to provide the agreed services no longer existed legally due to passage of time.
- (ii) Government subsidy income mainly includes the wage subsidy from the Hong Kong government in 2022 and an additional 10% VAT super-credit subsidy from the PRC government to offset against VAT payable for the period from April 1, 2019 to December 31, 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

23 Income tax

(a) Cayman Islands and British Virgin Islands

Under the current tax laws of Cayman Islands, the Company and its subsidiaries are not subject to tax on income or capital gains. Besides, upon payment of dividends by the Company to its shareholders, no Cayman Islands withholding tax will be imposed.

The Company's subsidiaries incorporated in the British Virgin Islands are not subject to income or capital gains taxes, estate duty, inheritance tax or gift tax. In addition, payment of dividends to the shareholders of the Company's subsidiaries in the British Virgin Islands are not subject to withholding tax in the British Virgin Islands.

(b) Hong Kong profits tax

Entities incorporated in Hong Kong are subject to Hong Kong profits tax. Under the two-tiered profits tax rates regime, the first HK\$2 million assessable profits of the qualifying group company are subject to Hong Kong profits tax at a rate of 8.25% and the remaining profits are subject at a rate of 16.5% on the estimated assessable profits. The profits of group entities not qualifying for the two-tiered profits tax rates regime will continue to be taxed at a flat rate of 16.5%.

(c) PRC Enterprise Income Tax ("EIT")

The Company's subsidiaries, VIE and VIE's subsidiaries in the PRC are governed by the Enterprise Income Tax Law ("EIT Law"). Pursuant to the EIT Law and its implementation rules, enterprises in the PRC are generally subjected to tax at a statutory rate of 25%.

High and new technology enterprises ("HNTE") will enjoy a preferential enterprise income tax rate of 15% under the EIT Law. Some of the Company's subsidiaries and a VIE's subsidiary in the PRC are qualified as a HNTE under the EIT Law which are eligible for a preferential enterprise income tax rate of 15% for a period of three years so long as these entities obtain approval from relevant tax authority if they are profitable during the period.

In addition, according to the EIT Law and its implementation rules, foreign enterprises, which have no establishment or place in the PRC but derive dividends, interest, rents, royalties and other income (including capital gains) from sources in the PRC shall be subject to PRC withholding tax ("WHT") at 10% (a further reduced WHT rate may be available according to the applicable double tax treaty or arrangement). The 10% WHT is applicable to any dividends to be distributed from the Group's PRC subsidiaries to the Group's overseas companies unless otherwise exempted pursuant to applicable tax treaties or tax arrangements between the PRC government and the government of other jurisdiction which the WHT is reduced to 5%.

Although there are undistributed earnings of the Company's subsidiaries in the PRC that are available for distribution to the Company, the undistributed earnings of the Company's subsidiaries located in the PRC are considered to be indefinitely reinvested, because the Company does not have any present plan to pay any cash dividends on its ordinary shares in the foreseeable future and intends to retain most of its available funds and any future earnings for use in the operation and expansion of its business. Accordingly, no deferred tax liability has been accrued for the PRC dividend withholding taxes that would be payable upon the distribution of those amounts to the Company as of December 31, 2021 and 2022. The undistributed earnings from the Company's subsidiaries in the PRC as of December 31, 2021 and 2022 of US\$1,324 and US\$1,087 would be due if these earnings were remitted as dividends as of December 31, 2021 and 2022. An estimated foreign withholding taxes of US\$66 and US\$54 would be due if these earnings were remitted as dividends as of December 31, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

23 Income tax (Continued)

(d) Composition of income tax expense

The current and deferred portions of income tax expense included in the consolidated statements of comprehensive loss are as follows:

	For the years ended December 31,		
	2020	2021	2022
Current income tax expense	2,784	3,445	375
Deferred tax benefits	(1,151)	(905)	(11,557)
Income tax expense/(credit)	1,633	2,540	(11,182)

(e) Deferred tax assets and liabilities

Deferred taxes were measured using the enacted tax rates for the periods in which they are expected to be reversed. The tax effects of temporary differences that give rise to the deferred tax asset and deferred tax liability balances as of December 31, 2021 and 2022 are as follows:

	As of December 31,	
	2021	2022
Deferred tax assets		
Tax losses carried forward (Note (i))	4,410	9,438
Share-based payments	931	720
Temporary difference on deferred income	254	_
Less: Valuation allowance (Note (ii))	(4,410)	(9,438)
	1,185	720
Deferred tax liabilities		
Acquired intangible assets	(12,993)	(158)
Outside basis difference (Note (iii))	(356)	(1,140)
Others	(29)	(28)
	(13,378)	(1,326)

Note:

(i) Tax loss carried forward

As of December 31, 2022, the Group had tax loss carryforwards of approximately US\$47,071, which can be carried forward to offset future taxable income. The net operating tax loss carryforwards will begin to expire as follows:

2023	167
2024	751
2025	4,854
2026	8,183
2027	21,857
Tax loss with no expiry	11,259
	47,071

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

23 Income tax (Continued)

(e) Deferred tax assets and liabilities (Continued)

Note: (Continued)

(i) Tax loss carried forward (Continued)

In accordance with PRC Tax Administration Law on the Levying and Collection of Taxes, the PRC tax authorities generally have up to five years to claw back underpaid tax plus penalties and interest for PRC entities' tax filings. In the case of tax evasion, which is not clearly defined in the law, there is no limitation on the tax years open for investigation. Accordingly, the PRC entities' tax years from 2018 to 2022 remain subject to examination by the tax authorities. There were no ongoing examinations by tax authorities as of December 31, 2021 and 2022.

(ii) Valuation allowance

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 carryforwards. Valuation allowance was provided for net operating loss carryforwards because it was more likely than not that such deferred tax assets will not be realized based on the Group's estimate of its future taxable income. If events occur in the future that allow the Group to realize more of its deferred income tax than the presently recorded amounts, an adjustment to the valuation allowances will result in a decrease in tax expense when those events occur.

Movement of valuation allowance is as follows:

For the yea	For the years ended December 31,		
2020	2021	2022	
5,923	4,365	4,410	
1,144	2,768	6,105	
(2,702)	(2,723)	(1,077)	
4,365	4,410	9,438	
	5,923 1,144 (2,702)	2020 2021 5,923 4,365 1,144 2,768 (2,702) (2,723)	

Note:

The reversals comprise tax loss carryforwards which have been utilized to offset taxable income during the years ended December 31, 2020, 2021 and 2022, respectively, and tax loss carryforwards which were expired in 2020, 2021 and 2022

(iii) Outside basis difference

The deferred tax liabilities are recorded for the undistributed earnings in the Group's VIE and its subsidiaries in the PRC of US\$1,422 and US\$4,558 as of December 31, 2021 and 2022, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

23 Income tax (Continued)

(f) Income tax reconciliation

Reconciliation between the expense of income taxes computed by applying the statutory tax rates to loss before income taxes and the actual provision for income taxes is as follows:

	For the ye	ars ended Decemb	er 31,
	2020	2021	2022
Tax benefit calculated at statutory tax rates (Note i)	(3,291)	(3,488)	(53,491)
Effect of differences between statutory tax rates and foreign effective			
tax rates	4,513	1,746	7,759
Non-taxable other income	(627)	(348)	(249)
Non-deductible expenses (Note ii)	3,202	4,783	29,167
Valuation allowance	(1,558)	44	5,028
Outside basis difference (Note iii)	(400)	(186)	783
Additional deduction of research and development expenses (Note iv)	(270)	(125)	(465)
Others	64	114	286
Income tax expense/(credit)	1,633	2,540	(11,182)

Note:

- (i) The Group's major operation was conducted out of the PRC. Accordingly, the Group prepared its tax rate reconciliation starting with the PRC statutory tax rate during the years ended December 31, 2020, 2021 and 2022.
- (ii) Non-deductible expenses were mainly related to allowance for credit losses, share-based compensation expenses, fair value losses on derivative liabilities, convertible notes, impairment on long-term investments, impairment on goodwill and long-lived assets.
- (iii) Outside basis difference is related to undistributed earnings in the Group's VIE and its subsidiaries in the PRC (Note 23(e)(iii)).
- (iv) According to a policy promulgated by the State Tax Bureau of the PRC and effective from 2008 onwards, companies engaged in research and development activities are entitled to claim ranging from 150% to 175% of the research and development expenses so incurred in a period as tax deductible expenses in determining its tax assessable profits for that period. Certain PRC subsidiaries of the Company have applied such additional deduction for the year ended December 31, 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

24 Basic and diluted net loss per share

Basic and diluted net loss per share for the years ended December 31, 2020, 2021 and 2022 are calculated as follows:

	For the y	ears ended Decen	iber 31,
	2020	2021	2022
Numerator:			
Net loss attributable to ordinary shareholders of the Company	(12,618)	(13,631)	(200,875)
Numerator for basic and diluted net loss per share	(12,618)	(13,631)	(200,875)
Denominator:			
Denominator for basic and diluted net loss per share - weighted average			
shares outstanding	39,368,436	48,187,235	50,420,225
Basic net loss per share	(0.32)	(0.28)	(3.98)
Diluted net loss per share	(0.32)	(0.28)	(3.98)

The share options, RSUs, warrants and convertible notes were excluded from the computation of diluted net loss per ordinary share for the years presented because including them would have had an anti-dilutive effect.

The following ordinary share equivalents were excluded from the computation of diluted net loss per ordinary share for the years presented because including them would have had an anti-dilutive effect:

	As	of December 31,	
	2020	2021	2022
Share options, RSUs and warrants – weighted average (thousands)	2,998	2,613	385

25 Related party transactions

Save as disclosed elsewhere in these consolidated financial statements, there were no transactions nor balances with related parties as of and for the years ended December 31, 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

26 Segments

During the periods presented in these consolidated financial statements, the Group reports two operating segments: 1) Marketing Solutions, and 2) Enterprise Solutions. The Enterprise Solutions segment primarily reflects the results of the Group's SaaS products and services the Group named its pre-existing online advertising service business as Marketing Solution business.

The table below provides a summary of the Group's breakdown of net revenues by type of goods or services and operating segment results for the years ended December 31, 2020, 2021 and 2022. The Group does not allocate any operating costs or assets to its business segments as the Group's CODM does not use this information to measure the performance of the operating segments. There was no significant transaction between reportable segments for the years ended December 31, 2020, 2021 and 2022.

Marketing Solutions 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 193,280 212,353 94,498 225,852 242,610 105,956 Enterprise Solutions 28,893 65,092 63,124 5 asa S products and services 28,893 65,092 63,124 4 strength 254,745 307,702 169,080 Cost of revenues: Marketing Solutions (172,917) (194,912) (138,140 Enterprise Solutions (8,565) (23,637) (35,072 Enterprise Solutions (8,565) (23,637) (35,072 (181,482) (218,549) (173,212 Cross profit/(loss): Marketing Solutions - Sales agent 5,834 4,195 2,549 - Sales agent 5,834 4,195 2,549 - Specified actions 26,738 26,062 8,909 - Specified actions 52,935 47,698 (32,184 Enterprise Solutions - SaaS products and service		For	he ye	ears ended Dec	ember 31,
Marketing Solutions 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 193,280 212,353 94,498 225,852 242,610 105,956 Enterprise Solutions 28,893 65,092 63,124 5 asa S products and services 28,893 65,092 63,124 4 strength 254,745 307,702 169,080 Cost of revenues: Marketing Solutions (172,917) (194,912) (138,140 Enterprise Solutions (8,565) (23,637) (35,072 Enterprise Solutions (8,565) (23,637) (35,072 (181,482) (218,549) (173,212 Cross profit/(loss): Marketing Solutions - Sales agent 5,834 4,195 2,549 - Sales agent 5,834 4,195 2,549 - Specified actions 26,738 26,062 8,909 - Specified actions 52,935 47,698 (32,184 Enterprise Solutions - SaaS products and service		202	0	2021	2022
- Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 193,280 212,353 94,498 225,852 242,610 105,956 Enterprise Solutions 28,893 65,092 63,124 - SaaS products and services 28,893 65,092 63,124 Marketing Solutions (172,917) (194,912) (138,140 Enterprise Solutions (8,565) (23,637) (35,072 Enterprise Solutions (8,565) (23,637) (35,072 Gross profit/(loss): (8,565) (23,637) (35,072 Marketing Solutions 5,834 4,195 2,549 - Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642 Enterprise Solutions 52,935 47,698 (32,184 Enterprise Solutions 20,328 41,455 28,052	Net revenues:				
- Cost-plus 26,738 26,062 8,909 - Specified actions 193,280 212,353 94,498 225,852 242,610 105,956 Enterprise Solutions 28,893 65,092 63,124 254,745 307,702 169,080 Cost of revenues: Marketing Solutions (172,917) (194,912) (138,140) Enterprise Solutions (8,565) (23,637) (35,072) Enterprise Solutions (181,482) (218,549) (173,212) Gross profit/(loss): (181,482) (218,549) (173,212) Marketing Solutions 5,834 4,195 2,549 - Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642) Enterprise Solutions 52,935 47,698 (32,184) Enterprise Solutions 20,328 41,455 28,052	Marketing Solutions				
Specified actions 193,280 212,353 94,498 225,852 242,610 105,956 205,855 242,610 105,956 205,855 242,610 105,956 205,855 205,9	- Sales agent	5,8	334	4,195	2,549
Enterprise Solutions - SaaS products and services - Specified actions - Specified actions - SaaS products and services - SaaS profit/(loss): - SaaS agent - Cost-plus - SaeS agent - SaeS age	- Cost-plus	26,	738	26,062	8,909
Enterprise Solutions - SaaS products and services - SaaS products and services - SaaS products and services Cost of revenues: Marketing Solutions - Specified actions Enterprise Solutions - SaaS products and services - SaaS products and services Gross profit/(loss): Marketing Solutions - Sales agent - Cost-plus - Specified actions - Specified actions - Sabs agent - Sabs agent - Specified actions - Specified actions - Sabs agent - Sabs agent - Specified actions - SaaS products and services	- Specified actions	_193,2	280	212,353	94,498
- SaaS products and services 28,893 65,092 63,124 254,745 307,702 169,080 Cost of revenues: Marketing Solutions - Specified actions (172,917) (194,912) (138,140) Enterprise Solutions - SaaS products and services (8,565) (23,637) (35,072) Gross profit/(loss): - Sales agent - Sales agent - SaaS products and services - Specified actions - Sp		225,8	352	242,610	105,956
Cost of revenues:	Enterprise Solutions				
Cost of revenues: Marketing Solutions 4 (172,917) (194,912) (138,140) Enterprise Solutions 5 (8,565) (23,637) (35,072) - SaaS products and services (8,565) (23,637) (35,072) Gross profit/(loss): Marketing Solutions - Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642) Enterprise Solutions - SaaS products and services 20,328 41,455 28,052	- SaaS products and services	28,8	393	65,092	63,124
Marketing Solutions (172,917) (194,912) (138,140) Enterprise Solutions (8,565) (23,637) (35,072) - SaaS products and services (181,482) (218,549) (173,212) Gross profit/(loss): Marketing Solutions 5,834 4,195 2,549 - Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642) Enterprise Solutions 20,328 47,698 (32,184) - SaaS products and services 20,328 41,455 28,052	·	254,	745	307,702	169,080
- Specified actions (172,917) (194,912) (138,140 (194,912) (138,140 (194,912) (138,140 (194,912) (138,140 (194,912)	Cost of revenues:				
- Specified actions (172,917) (194,912) (138,140 (194,912) (138,140 (194,912) (138,140 (194,912) (138,140 (194,912)	Marketing Solutions				
- SaaS products and services (8,565) (23,637) (35,072 (181,482) (218,549) (173,212 (181,482) (18	- Specified actions	(172,9	917)	(194,912)	(138,140)
Gross profit/(loss): (181,482) (218,549) (173,212) Marketing Solutions Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642) Enterprise Solutions 52,935 47,698 (32,184) - SaaS products and services 20,328 41,455 28,052	Enterprise Solutions				
Gross profit/(loss): Marketing Solutions 5,834 4,195 2,549 - Sales agent 26,738 26,062 8,909 - Ost-plus 20,363 17,441 (43,642 - Specified actions 52,935 47,698 (32,184 Enterprise Solutions - SaaS products and services 20,328 41,455 28,052	- SaaS products and services	2,8)	65)	(23,637)	(35,072)
Marketing Solutions 5,834 4,195 2,549 - Sales agent 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642 Enterprise Solutions 52,935 47,698 (32,184 - SaaS products and services 20,328 41,455 28,052		(181,4	182)	(218,549)	(173,212)
- Sales agent 5,834 4,195 2,549 - Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642 - Enterprise Solutions - SaaS products and services 20,328 41,455 28,052	Gross profit/(loss):				
- Cost-plus 26,738 26,062 8,909 - Specified actions 20,363 17,441 (43,642 52,935 47,698 (32,184 Enterprise Solutions - SaaS products and services 20,328 41,455 28,052	Marketing Solutions				
- Specified actions 20,363 17,441 (43,642 52,935 47,698 (32,184 52,935 52,935 47,698 52,935 5	- Sales agent	5,8	334	4,195	2,549
52,935 47,698 (32,184) Enterprise Solutions - SaaS products and services 20,328 41,455 28,052	- Cost-plus	26,7	738	26,062	8,909
52,935 47,698 (32,184 18 18 18 18 18 18 18	- Specified actions	20,3	363	17,441	(43,642)
Enterprise Solutions - SaaS products and services 20,328 41,455 28,052		52,9	935	47,698	(32,184)
- SaaS products and services 20,328 41,455 28,052	Enterprise Solutions				
	-	20,3	328	41,455	28,052
		73,2	263	89,153	(4,132)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

26 Segments (Continued)

The Group currently does not allocate assets to all of its segments, as its CODM does not use such information to allocate resources or evaluate the performance of the operating segments.

Revenue generated for the respective countries are summarized as follows:

	For the y	ears ended Decem	ber 31,
	2020	2021	2022
PRC	214,444	254,874	140,211
Hong Kong	40,197	52,599	28,661
Others	104	229	208
	254,745	307,702	169,080

The Group's long-lived assets are located in the following countries:

	As of 1	December 31,
	2021	2022
PRC	1,23	<u> </u>
Hong Kong	70	1 241
	1,93	1 241

27 Commitments and contingencies

(a) Litigation

In the ordinary course of the business, the Group is subject to periodic legal or administrative proceedings. As of December 31, 2022 the Group is not a party to any legal or administrative proceedings which will have a material adverse effect on the Group's business, financial position, results of operations and cash flows.

(b) Capital commitments

As of December 31, 2022 and 2021, the Group had no capital commitments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

28 Restricted net assets

Relevant PRC laws and regulations permit payments of dividends by the Group's subsidiaries, VIE and its subsidiaries 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 subsidiaries and the VIE in the PRC are required to annually appropriate 10% of their net after-tax income to the statutory general reserve fund prior to payment of any dividends, unless such reserve funds have reached 50% of their respective registered capital. As a result of these and other restrictions under PRC laws and regulations, the Group's subsidiaries, VIE and its subsidiaries 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 U.S. GAAP and PRC accounting standards in connection with the reported net assets of the legally owned subsidiaries in the PRC and the VIE. Even though the Company currently does not require any such dividends, loans or advances from the PRC entities for working capital and other funding purposes, the Company may in the future require additional cash resources from them due to changes in business conditions, to fund future acquisitions and development, or merely to declare and pay dividends or distributions to our shareholders. Except for the above, there is no other restriction on use of proceeds generated by the Group's subsidiaries, VIE and its subsidiaries to satisfy any obligations of the Company.

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 at the time of requesting such conversion 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.

As of December 31, 2021 and 2022, the total restricted net assets of the Company's subsidiaries and OptAim VIE incorporated in the PRC and subjected to restriction amounted to approximately US\$69,749 and US\$32,239, respectively. Except for the above there is no other restriction on the use of proceeds generated by the Company's subsidiaries, VIE and VIE's subsidiaries to satisfy any obligations of the Company.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(US\$'000, except share data and per share data, or otherwise noted)

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 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 Company have been prepared using the same accounting policies as set out in the Company's consolidated financial statements except that the Company used the equity method to account for its investment in its subsidiaries, VIE and VIE's subsidiaries. Such investment is presented on the separate condensed balance sheets of the Company as "Investment in subsidiaries, VIE and VIE's subsidiaries" and "Accumulated losses in excess of investment in subsidiaries, VIE and VIE's subsidiaries, VIE and VIE's subsidiaries were included in the consolidated financial statements whereby the intercompany balances and transactions were eliminated upon consolidation. The Company's share of income from its subsidiaries, VIE and VIE's subsidiaries is reported as share of income from subsidiaries, VIE and VIE's subsidiaries in the condensed financial statements.

The 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 and 2022, 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.

Inter-company charges, share-based compensation and other miscellaneous expenses for the years ended December 31, 2020, 2021 and 2022, which were previously recognized at the parent company level, had been pushed down to the WFOE/VIE level given the majority of services were provided to the WFOE/VIE entities.

The condensed financial statements of the parent company should be read in conjunction with the Company's consolidated financial statements and the accompanying notes thereto. For purposes of these condensed financial statements, the Company's wholly owned and majority owned subsidiaries are recorded based upon its proportionate share of the subsidiaries' net assets (similar to presenting them on the equity method).

CONDENSED BALANCE SHEETS AS OF DECEMBER 31, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

820 820 Assets Current assets 3,657 — Other short-term investments — 1,020 Other current assets 549 161 Total current assets 4,995 2,828 Non-current assets 254 — Signature of the same state of the		As of Decen	nber 31,
Current assets 789 1,100 Castricted cash equivalents 3,657 — Other short-term investments — 1,021 Other current assets 549 161 Total current assets 4,995 2,282 Non-current assets 54 — Deferred tax assets 254 80,015 Other long-term investments 354 27 Other long-term investments 351 — Other long-term investments 286,942 80,015 Other long-term investments 286,942 80,294 Total non-current assets 291,937 82,576 Total assets 291,937 82,576 Liabilities and shareholders' equity 7,126 5,575 Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Total current liability 459 2,071 Other liabilities 459 2,071 Total liabilities 45 2,07 Total liabilities <th></th> <th></th> <th>2022</th>			2022
Cash and cash equivalents 789 1,100 Restricted cash 3,657 — Other short-term investments — 1,021 Other current assets 549 161 Total current assets — 2,028 Nor-current assets 25 — Deferred tax assets 254 4,01 Investments in subsidiaries, VIE and VIE's subsidiaries 510 — Investments in subsidiaries, VIE and VIE's subsidiaries 510 — Investment in an equity investee 354 27.9 Total non-current assets 280,942 80,945 Total assets 291,937 82,576 Liabilities and shareholders' equity 7,126 5,575 Total current liability 7,126 5,575 Non-current liabilities 7,126 5,575 Non-current liabilities 459 2,071 Total non-current liabilities 459 2,071 Total liabilities 7,585 7,64 Commitments and contingencies — —			
Restricted cash 3,657 — Other short-term investments 549 161 Other current assets 4,995 2,828 Non-current assets 254 — Investments in subsidiaries, VIE and VIE's subsidiaries 285,824 80,015 Other long-term investments 510 — Investment in an equity investee 334 279 Total non-current assets 286,942 80,294 Total assets 281,937 82,576 Total sasets 291,937 82,576 Liabilities and shareholders'equity 7,126 5,575 Total current liability 7,126 5,575 Total current liability 7,126 5,575 Total current liability 7,126 5,575 Total inon-current liability 459 2,071 Other liabilities 7,585 7,646 Total inon-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies - - Tota			
Other short-term investments — 1,021 Other current assets 549 161 Total current assets 4,995 2,282 Non-current assets 254 — Deferred tax assets 258,824 80,015 Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Total assets 291,937 82,576 Total assets 7,126 5,575 Total current liabilities 7,126 5,575 Total current liabilities and other current liabilities 7,126 5,575 Total current liabilities 459 2,071 Total liabilities 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies 5 7,646 Commitments and contingencies 5 7,646 Ordinary shares 48 4,947 Other shareholders' equity	•		1,100
Other current assets 549 161 Total current assets 4,995 2,282 Non-current assets 254 – Differed tax assets 285,824 80,015 Cher long-term investments 510 – Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Total current liabilities 7,126 5,575 Total current liabilities and other current liabilities 7,126 5,575 Total current liabilities 7,126 5,575 Total current liabilities 459 2,071 Total non-current liabilities 459 2,071 Total lon-current liabilities 459 2,071 Total lon-current liabilities 7,585 7,646 Commitments and contingencies 5 7,646 Commitments and contingencies 4 4 Total liabilities 4 4 Ordinary shares 4 4 Total current		3,657	
Total current assets 4,995 2,282 Non-current assets 254 — Deferred tax assets 255,824 80,015 Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity Vernerel liability 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 7,126 5,575 Total non-current liability 459 2,071 Total long-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies 5 7,646 Chareholders' equity 48 49 Treasury shares 48 49 Treasury shares 48 49 Other shareholders' equity 305,212 103,338 Total shareholders' equity 305,212 103,338		-	
Non-current assets 254 — Deferred tax assets 254 — Investments in subsidiaries, VIE and VIE's subsidiaries 285,824 80,015 Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity Total current liability 7,126 5,575 Total current liability 7,126 5,575 Non-current liabilities 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies 5 7,646 Chareholders' equity 48 49 Ordinary shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930			
Deferred tax assets 254 — Investments in subsidiaries, VIE and VIE's subsidiaries 285,824 80,015 Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Current liabilities and shareholders' equity V 5,575 Current liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies ————————————————————————————————————	Total current assets	4,995	2,282
Investments in subsidiaries, VIE and VIE's subsidiaries 285,824 80,015 Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity — — Current liability 7,126 5,575 Total current liability 7,126 5,575 Non-current liabilities 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Shareholders' equity 48 49 Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930			
Other long-term investments 510 — Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity *** *** Current liability 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies - - Commitments and contingencies 48 49 Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Deferred tax assets	254	_
Investment in an equity investee 354 279 Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity Verent liability Verent liability Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies 7 7,646 Commitments and contingencies 48 49 Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Investments in subsidiaries, VIE and VIE's subsidiaries	285,824	80,015
Total non-current assets 286,942 80,294 Total assets 291,937 82,576 Liabilities and shareholders' equity Varent liability Current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies 7 - Commitments and contingencies 48 49 Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Other long-term investments		_
Total assets 291,937 82,576 Liabilities and shareholders' equity Current liability Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies - - Commitments and contingencies - - Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Investment in an equity investee	354	279
Liabilities and shareholders' equity Current liability Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies - - Commitments and contingencies - - Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Total non-current assets	286,942	80,294
Current liability Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Commitments and contingencies — — Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Total assets	291,937	82,576
Accrued liabilities and other current liabilities 7,126 5,575 Total current liability 7,126 5,575 Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Liabilities and shareholders' equity		
Total current liability 7,126 5,575 Non-current liability 459 2,071 Other liabilities 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Current liability		
Non-current liability 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies - - Shareholders' equity 48 49 Treasury shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Accrued liabilities and other current liabilities	7,126	5,575
Other liabilities 459 2,071 Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Shareholders' equity 500 48 49 Treasury shares (20,908) (28,457) (20,908) (20,908) (20,908) (20,908) (20,908) (20,908) (20,908) (20,908)	Total current liability	7,126	5,575
Total non-current liability 459 2,071 Total liabilities 7,585 7,646 Commitments and contingencies — — Shareholders' equity Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Non-current liability		
Total liabilities 7,585 7,646 Commitments and contingencies - - Shareholders' equity 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Other liabilities	459	2,071
Commitments and contingencies — — Shareholders' equity — — — Ordinary shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Total non-current liability	459	2,071
Shareholders' equity Ordinary shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Total liabilities	7,585	7,646
Ordinary shares 48 49 Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Commitments and contingencies		_
Treasury shares (20,908) (28,457) Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Shareholders' equity		
Other shareholders' equity 305,212 103,338 Total shareholders' equity 284,352 74,930	Ordinary shares	48	49
Total shareholders' equity 284,352 74,930	Treasury shares	(20,908)	(28,457)
Total shareholders equity	Other shareholders' equity	305,212	103,338
Total liabilities and shareholders' equity 291,937 82,576	Total shareholders' equity	284,352	74,930
	Total liabilities and shareholders' equity	291,937	82,576

CONDENSED STATEMENTS OF COMPREHENSIVE LOSS FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	For the ye	ears ended Decen	nber 31,
	2020	2021	2022
Operating expenses			
General and administrative expenses	(13,598)	(17,574)	(7,160)
Total operating expenses	(13,598)	(17,574)	(7,160)
Operating loss	(13,598)	(17,574)	(7,160)
Other losses, net	(409)	(242)	(7,925)
Fair value losses on derivative liabilities	(11,466)	_	_
Fair value losses on convertible notes	(4,433)	_	_
Share of profits/(losses) from subsidiaries, VIE and VIE' subsidiaries	17,477	4,406	(185,431)
Loss before share of losses from an equity investee and income tax expense	(12,429)	(13,410)	(200,516)
Share of losses from an equity investee	(111)	(107)	(75)
Income tax expense	(78)	(114)	(284)
Net loss attributable to iClick Interactive Asia Group Limited's ordinary shareholders	(12,618)	(13,631)	(200,875)
Net loss attributable to iClick Interactive Asia Group Limited	(12,618)	(13,631)	(200,875)
Other comprehensive loss:			
Foreign currency translation adjustment, net of tax	5,001	3,340	(4,946)
Comprehensive loss attributable to iClick Interactive Asia Group Limited	(7,617)	(10,291)	(205,821)

CONDENSED STATEMENTS OF CASH FLOWS FOR THE YEARS ENDED DECEMBER 31, 2020, 2021 AND 2022

(US\$'000, except share data and per share data, or otherwise noted)

	For the ye	ars ended Decem	
	2020	2021	2022
Cash flows from operating activities			
Net cash used in operating activities	(3,461)	(3,217)	(7,754)
Cash flows from investing activities			
Purchase of other long-term investments	(19)	_	_
Investment in an equity investee	(412)	_	
Redemption of time deposits	255	46	_
Capital contribution to subsidiaries	(77,655)	(53)	
Amount due from subsidiaries	_	_	19,656
Acquisition of subsidiaries	(959)	(4,982)	(7,742)
Net cash (used in)/provided by investing activities	(78,790)	(4,989)	11,914
Cash flows from financing activities			
Proceeds from issuance of shares upon private placements and follow on offering	71,917	_	
Proceeds from exercise of share options	1,305	661	68
Proceeds from issuance of convertible notes, net of transaction expenses	19,184	_	
Redemption of convertible notes	(15,196)	_	_
Repurchase of ordinary shares	(5,677)	(10,687)	(7,574)
Purchase of interests in subsidiaries from non-controlling interests	(7,003)	_	
Net proceeds from issuance of ordinary shares upon subscription from Baozun Inc.	_	17,010	
Net cash provided by/(used in) financing activities	64,530	6,984	(7,506)
Net decrease in cash and cash equivalents and restricted cash	(17,721)	(1,222)	(3,346)

List of Subsidiaries of iClick Interactive Asia Group Limited

Name	Subsidiaries	Place of Incorporation
Optimix Media Asia Limited	100%	Hong Kong
iClick Interactive Asia Limited	100%	Hong Kong
Digital Marketing Group Limited	100%	Hong Kong
Tetris Media Limited	100%	Hong Kong
iClick Interactive (Singapore) Pte. Ltd.	100%	Singapore
Performance Media Group Limited	100%	Hong Kong
iClick Data Technology (Beijing) Limited	100%	People's Republic of China
Tetris Information Technology (Shanghai) Co., Ltd	100%	People's Republic of China
Diablo Holdings Corporation	100%	British Virgin Islands
Harmattan Capital Holdings Corporation	100%	British Virgin Islands
China Search (Asia) Limited	100%	Hong Kong
Search Asia Technology (Shenzhen) Co., Ltd.	100%	People's Republic of China
CMRS Group Holding Limited	100%	Hong Kong
Beyond Digital Solutions Limited	100%	Hong Kong
CMRS Digital Solutions Limited	100%	Hong Kong
CruiSo Digital Solutions Limited	100%	Hong Kong
CruiSo Directions Limited	100%	Hong Kong
SociaLink Consultancy Limited	100%	Hong Kong
Guangzhou Kushu Information Technology Co., Ltd.	100%	People's Republic of China
Optimal Power Limited	100%	British Virgin Islands
Dragon Force Global Limited	100%	British Virgin Islands
Full Lucky International Limited	100%	Hong Kong
Turbo Summit Holdings Limited	80%	Hong Kong
HBV Changyi Company Limited	100%	British Virgin Islands
RC Changyi Company Limited	100%	British Virgin Islands
MCZ Holdings Limited	100%	British Virgin Islands
YYDCY Limited	100%	Hong Kong
Tetris (Shanghai) Data Technology Co., Ltd	100%	People's Republic of China
OptAim Ltd.	100%	Cayman Islands
OptAim (HK) Limited	100%	Hong Kong
OptAim (Beijing) Information Technology Co., Ltd.	100%	People's Republic of China
Anhui Zhiyunzhong Information Technology Co., Ltd.	100%	People's Republic of China
Beijing OptAim Network Technology Co., Ltd.	100%(1)	People's Republic of China
Zhiyunzhong (Shanghai) Technology Co., Ltd.	100%	People's Republic of China
Shanghai Myhayo Technology Co., Ltd.	37%(2)	People's Republic of China
Anhui Myhayo Technology Co., Ltd.	37%(2)	People's Republic of China
Changyi (Shanghai) Information Technology Ltd.	100%	People's Republic of China
Xi'an Changzhan Information Technology Ltd.	100%	People's Republic of China

⁽¹⁾ VIE.(2) VIE's subsidiary.

Certification by the Principal Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Jian Tang, certify that:

- 1. I have reviewed this annual report on Form 20-F of iClick Interactive Asia Group Limited;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.
- 5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: May 11, 2023

By: /s/ Jian Tang

Name: Jian Tang

Title: Chief Executive Officer

Certification by the Principal Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, David Zhang, certify that:

- 1. I have reviewed this annual report on Form 20-F of iClick Interactive Asia Group Limited;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.
- 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 11, 2023

By: /s/ David Zhang

Name: David Zhang

Title: Chief Financial Officer

Certification by the Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act Of 2002

In connection with the annual report of iClick Interactive Asia Group Limited (the "Company") on Form 20-F for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jian Tang, Chief Executive Officer of the Company, hereby 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 11, 2023

By: /s/ Jian Tang

Name: Jian Tang

Title: Chief Executive Officer

Certification by the Principal Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act Of 2002

In connection with the annual report of iClick Interactive Asia Group Limited (the "Company") on Form 20-F for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Zhang, Chief Financial Officer of the Company, hereby 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 11, 2023

By: /s/ David Zhang

Name: David Zhang

Title: Chief Financial Officer



Office: +852 2801 6066 Mobile: +852 9718 8740 Email: rthorp@tta.lawyer

iClick Interactive Asia Group Limited 15/F Prosperity Millennia Plaza 663 King's Road Quarry Bay Hong Kong S.A.R.

11 May 2023

Dear Sirs

iClick Interactive Asia Group Limited

We have acted as legal advisers as to the laws of the Cayman Islands to iClick Interactive Asia Group Limited, a Cayman Islands exempted company incorporated with limited liability (the "Company"), in connection with the filing by the Company with the United States Securities and Exchange Commission (the "SEC") of an annual report on Form 20-F for the year ended 31 December 2022 ("Form 20-F").

We hereby consent to the reference of our name under the headings, "Item 10. Additional Information— E.Taxation—Cayman Islands Taxation" in the Form 20-F, and further consent to the incorporation by reference of the summaries of our opinions under these captions into iClick Interactive Asia Group Limited's registration statement on Form S-8 (File No. 333-225568) that was filed on 12 June 2018, Form S-8 (File No. 333-227747) that was filed on 9 October 2018 and Form S-8 (File No. 333-253596) that was filed on 26 February 2021.

Yours faithfully

/s/ Travers Thorp Alberga TRAVERS THORP ALBERGA

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競天公誠津師事務所 JINGTIAN & GONGCHENG

77 3 34 010 5809 1000 010 5809 1000 100025

May 11, 2023

iClick Interactive Asia Group Limited 15/F, Prosperity Millennia Plaza 663 King's Road, Quarry Bay Hong Kong S.A.R., People's Republic of China

Dear Sir/Madam:

We hereby consent to the references to our firm's name under the headings "Item 3. Key Information— Implications of Being a Foreign Private Issuer and a China-based Company," "Item 3. Key Information—D. Risk Factors—Risks Related to Our Corporate Structure," Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China," "Item 4. Information on the Company—B. Business Overview—Regulation" and "Item 4. Information on the Company—C. Organizational Structure" in the annual report of iClick Interactive Asia Group Limited on Form 20-F for the year ended December 31, 2022 (the "Annual Report"), which is filed with the Securities and Exchange Commission in the month of May 11, 2023. We also consent to the filing of this consent letter with the SEC as an exhibit to the Annual Report.

In giving such consent, we do not hereby 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/ Jingtian & Gongcheng	
Jingtian & Gongcheng	

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-225568, No. 333-227747, and No. 333-253596) of iClick Interactive Asia Group Limited of our report dated May 11, 2023 relating to the consolidated financial statements, which appears in this Form 20-F.

/s/ PricewaterhouseCoopers Hong Kong May 11, 2023