## **OVERVIEW**

We provide audiovisual cloud service in China and our revenue accounted for 1.5% of the entire audiovisual cloud service market in 2023, according to iResearch. We are the third largest audiovisual PaaS provider in China in terms of revenue in 2023, with a market share of 5.8%, and the second largest audiovisual APaaS provider in China in terms of revenue generated from APaaS in 2023 with a market share of 14.1%, according to iResearch. According to iResearch, the cloud service market in China reached RMB513.7 billion in 2023. The cloud service market in China can be divided into audiovisual and non-audiovisual cloud services market by type of content or data managed. Audiovisual cloud services refers to the producing, storing, processing, distributing, analyzing, auditing, retrieving, and recommending unstructured audiovisual content in multi-media formats, whereas non-audiovisual cloud services refer to other cloud services such as governmental cloud, retail and catering cloud and industrial cloud. Audiovisual cloud service market reached RMB91.5 billion and accounted for 17.8% of the total cloud service market in China in 2023, whereas PaaS market and APaaS market accounted for 25.0% and 2.2% of the entire audiovisual cloud service market in 2023, respectively.

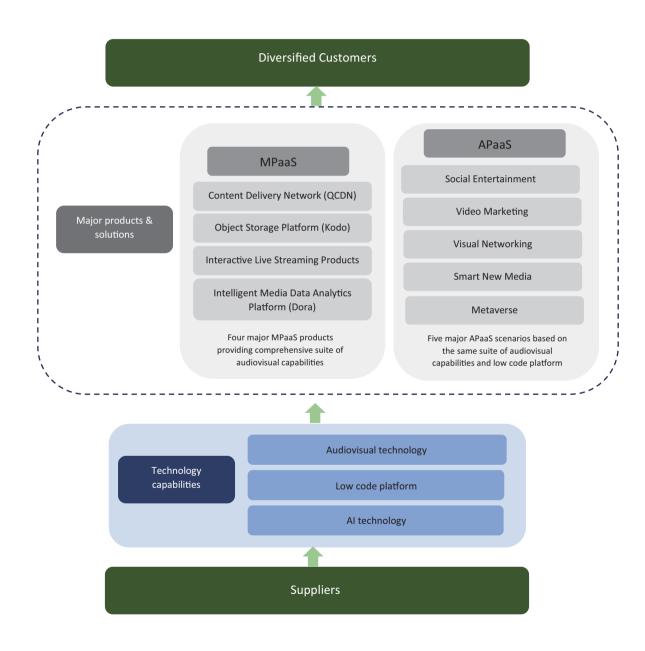
PaaS is a computing service model by which cloud service providers offer a suite of hardware and software resources to their users via a platform, enabling the users to focus on writing codes, configuring the service metrics and monitoring of applications without the need to divert time and resources to the development and maintenance of the infrastructure underlying the platform, including maintenance of hardware, updates of operating system, data backup and recovery, internet security, disaster recovery, etc. Our MPaaS platform is a PaaS platform which has a primary focus on providing cloud services in connection with audiovisual content (primarily consisting of images, audio and video contents), encompassing object storage, content distribution, data processing and real-time interactive live streaming and covering the full cycle of audiovisual data collection, storage, processing, distribution and consumption. We are one of the few companies that have developed comprehensive and high-performance MPaaS products and possessed technology capabilities that are integrated and cover all aspects of the audiovisual business.

APaaS is a computing service model by which cloud service providers offer a one-stop platform for users to develop, run and manage applications. Leveraging our MPaaS technologies, we further developed a proprietary low-code platform which achieves vertical integration from the underlying technology to high-level scenario-based functions. In short, by accessing our low code platform, our customers can choose the specific solution they want to develop, followed by simple and intuitive steps to configure the audiovisual functions embedded in the application, after which a packaged and ready-to-use solution will be available for immediate deployment, thus reducing the difficulty in the use and access to audiovisual products. Our APaaS solutions currently cover five major application scenarios, including (i) social entertainment, (ii) video marketing, (iii) visual networking, (iv) smart new media and (v) metaverse, which allow for quick deployment and easy expansion, which in turn significantly improves our customers' agility for scenario-based innovation and addresses the challenges posed by personalization of audiovisual content, multiple scenarios, and timeliness requirements.

We aim to cultivate user habits in using our products and services and expand our customer base. The number of our active users increased from 541,578 in 2021 to 600,245 in 2022, and further increased to 654,179 in 2023 and from 600,605 for the three months ended March 31, 2023 to 643,857 for the three months ended March 31, 2024. The number of MPaaS paying customers increased from 68,808 in 2021 to 83,970 in 2022, and further increased to 92,480 in 2023 and from 62,311 for the three months ended March 31, 2023 to 62,563 for the three months ended March 31, 2024. The number of APaaS paying customers increased from 1,319 in 2021 to 1,967 in 2022, and further increased to 2,597 in 2023 and from 1,867 for the three months ended March 31, 2023 to 2,303 for the three months ended March 31, 2024. The total number of paying customers increased from 70,672 in 2021 to 86,451 in 2022, and further increased to 95,848 in 2023 and from 64,918 for the three months ended March 31, 2023 to 65,080 for the three months ended March 31, 2024.

#### **OUR PRODUCTS AND SERVICES**

Our major products and services include (1) MPaaS products encompassing a range of audiovisual solutions, including proprietary content delivery network which accelerates content delivery ("QCDN"), object storage platform which stores content ("Kodo"), interactive live streaming products and intelligent media data analytics platform ("Dora"), primarily aimed to serve customers with strong development capabilities and high flexibility requirements; and (2) APaaS solutions which are scenario-based audiovisual solutions based on our MPaaS capabilities and leveraging our low-code platform, primarily aimed to enable customers to gain quick access to different functionalities with simple steps of deployment to achieve their business aim. The following diagram illustrates our business model:



Our diversified customers: Our customers encompass a wide array of enterprises (such as application developing companies and SaaS companies) as well as individual developers. We have a strong customer coverage in terms of operating scales, from industry leaders to large-sized corporations, SMEs and individuals. Our products cater to different customer needs, from business enterprises with scenario-based demands and limited technical capabilities (which typically require our APaaS solutions) to sophisticated application developers with limited access to infrastructure resources (which typically require our MPaaS products).

*Our MPaaS products:* We mainly provide MPaaS products to our customers by way of discrete APIs<sup>(1)</sup> and SDKs<sup>(2)</sup>. Leveraging our MPaaS products, our customers are only required to write codes to connect to our platform through which they can deploy specific audiovisual capabilities via discrete APIs/SDKs. The complexity of the codes would depend on the extent of audiovisual capabilities required. After customizing these parameters, our customers can have these audiovisual capabilities embedded in their applications and they will only need to manage their applications without the need to maintain the underlying infrastructure. Our MPaaS products are therefore suitable for customers with stronger technological capabilities while requiring higher flexibility.

Our APaaS solutions: We mainly provide APaaS solutions to our customers in the form of scenario-based solutions (which are typically a combination of APIs/SDKs). We combine our MPaaS capabilities with the scenario-based knowhow relevant to our customers and, in conjunction with our low code platform, package the APIs/SDKs (corresponding to the underlying audiovisual capabilities) into easy-to-access and high-customized APaaS solutions which our customers can deploy directly. Our APaaS solutions share the same suite of audiovisual capabilities (including but not limited to collection, storage, processing, distribution, analytics) as our MPaaS products. Our APaaS solutions allow our customers to customize and develop their applications through an intuitive step-by-step approach, which further reduce the technical barriers. Therefore, our APaaS solutions are suitable for customers with relatively limited technological capabilities while and clearly delineated business scenarios requiring rapid verification of their business models.

Our technology capabilities: Our years of experience has enabled us to independently develop the key technologies to support our one-stop scenario-based audiovisual solutions. Some of our key technologies include: (i) audiovisual technology, such as audiovisual encoding and decoding capabilities, which reduce storage space and improve the image quality of secondary encoding at lower bandwidth costs, and multi-dimensional integrated intelligent scheduling management system which reduces system risk and cost risk due to unexpected customer traffic; (ii) low code platform which provides a development environment used to create application software generally through a readily accessible user interface, thereby improving their accessibility to our audiovisual capabilities; and (iii) AI technology, which combines audiovisual processing technology and deep learning models which can help assess image quality and aesthetics of images and videos, producing multi-dimensional objective quality indicators to guide and position specific quality issues.

Our suppliers: In order to provide audiovisual cloud services to our customers, we rely on infrastructure and services provided by our suppliers, most notably, (i) network and bandwidth resources, (ii) hardware (such as servers and storage devices) and software (such as operating system and application services) resources and (iii) computing resources (primarily CPU and GPU). We also procure licenses of audiovisual services from our ecosystem partners engaged in audiovisual related value-added services, such as video conferencing system and audiovisual editing tools, and integrate these features into our platform for easy access to our customers based on their specific business needs.

Our pricing model: We adopt different pricing models depending on the specific products/solutions, and whether the products/solutions are deployed via public cloud or private cloud. The pricing of APaaS solutions has taken into account the value brought by the additional features of APaaS solutions (including low code platform), therefore the unit prices of the APaaS solutions are generally higher than those of the MPaaS products under similar circumstances.

Notes:

- (1) APIs, or application programming interfaces, are used by software developers to execute specific development actions based on their development needs, for example, by introducing live streaming functions to the underlying applications. APIs are typically deployed individually, or embedded in SDKs.
- (2) SDKs, or software development toolkits, generally consist of a collection of APIs, documents, instructions and tools which can be accessed in various formats and used by software developers to achieve specific software functionality.

### **Competitiveness of Our Products**

We are one of the few companies that have developed comprehensive and high-performance MPaaS products and possessed technology capabilities that are integrated and cover various aspects of the audiovisual business. Our MPaaS products leverage a range of audiovisual technologies, including RTC, VoD, live streaming, storage and content delivery, as well as a range of AI technologies, including intelligent vision, intelligent voice, intelligent editing, industry algorithms, content security and business security. Our technologies form the cornerstone of the competitive advantages of our MPaaS products. For example, our OCDN product has achieved extensive network coverage, comprehensive node monitoring and real-time intelligent allocation, providing our customers with low-latency cloud services. For the three months ended March 31, 2024, our MPaaS platform provided an average of over 4.6 billion minutes of audiovisual playback per day, which is at the high end of industry average level, according to iResearch. Our Kodo product support both centralized and edge storage as well as multi-cloud deployment, which enable our customers to conveniently store and manage large volume of data. According to iResearch, Kodo is able to achieve high data reliability with a redundancy rate of 1.14 on our public cloud and 1.10 on our private cloud, both of which are better than industry average levels. Our interactive live streaming products offer end-to-end real-time communication solution for our customers with low latency, high stability and high availability. Finally, our Dora product offers a wide array of data processing and analytics capabilities, enabling our users to process massive volume of audiovisual content on a daily basis. For details, please refer to the section headed "Business - Key Operating Metrics" in this document. Our MPaaS business was our largest revenue contributor during the Track Record Period.

Building upon our MPaaS technologies, we further developed a proprietary low-code platform which consolidates different scenario-based functionalities into customized solutions for our customers through simple and intuitive setup, reducing the difficulty in the use and access to audiovisual products. Our APaaS solutions allow for quick deployment and easy extension, which significantly improves our customers' agility for scenario-based innovation and addresses the challenges posed by personalization of audiovisual content, multiple scenarios, and timeliness requirements. According to iResearch, the audiovisual APaaS market in China started to commercialize in scale in 2021 and has been experiencing rapid growth. After we decided to officially launch our APaaS business in line with industry development and market demand in 2021, the number of our APaaS paying customers increased from 1,319 in 2021 to 1,967 in 2022, and further increased to 2,597 in 2023. After merely one year of ramp-up, we ranked second in the audiovisual APaaS market in China in terms of revenue in 2022 with a market share of 11.9%, according to iResearch. Our market share further increased to 14.1% in 2023, consolidating our position as the second largest audiovisual APaaS service provider in China. APaaS provides platform-based services based on application scenarios by packaging corresponding tools and functions. According to iResearch, the audiovisual APaaS market size in China was RMB2.0 billion in 2023. The audiovisual APaaS market size is expected to reach RMB14.4 billion in 2028, with a CAGR of 48.6%.

#### **OUR COMPETITIVE STRENGTHS**

We believe that the following competitive advantages have contributed to our success and will drive our future growth:

## China's third largest audiovisual PaaS provider and second largest audiovisual APaaS provider

According to iResearch, we are the third largest audiovisual PaaS provider in China in terms of revenue in 2023 with a market share of 5.8%. As an independent audiovisual PaaS provider, we can cooperate with various IaaS providers while avoiding direct competition with IaaS providers and high capital expenditure. In addition, we have the flexibility to deploy resources, effectively control costs, empower our customers to choose products and services according to their needs, and improve user experience. We aim to cultivate user habits in using our products and services and expand our customer base. As of March 31, 2024, we had over 1,500,000 registered users, most of which were developers or teams of developers of various companies. In 2023 and for the three months ended March 31, 2024, we had 95,848 and 65,080 paying customers, respectively.

Our leading market position partly stems from our ability to quickly adapt to the new industry development. Founded in 2011, we established one of the earliest platforms that provides audiovisual cloud services in China, and have been in the audiovisual industry for over ten years. We have developed comprehensive and high-performance MPaaS products and possessed technology capabilities that are integrated and cover various aspects of the audiovisual business. Our MPaaS business was our largest revenue contributor during the Track Record Period. For the three months ended March 31, 2024, our MPaaS platform provided an average of over 4.6 billion minutes of audiovisual playback. As of March 31, 2024, our MPaaS platform had a data storage scale at EB level. With the growing popularity of audiovisual applications including pan-entertainment, e-commerce, and metaverse, the customer demand is increasing and rapidly changing, requiring more integrated and scalable audiovisual cloud service. As a result, APaaS products emerged to cater to the needs of fast development and innovations in different scenarios. According to iResearch, in 2021, the audiovisual APaaS market in China started to commercialize in scale and has been experiencing rapid growth. Closely following market trends and adapting to new industry development, we officially launched our APaaS business in September 2021. After merely one year of ramp-up, we ranked second in the audiovisual APaaS market in China in terms of revenue in 2022 with a market share of 11.9%, according to iResearch. Our market share further increased to 14.1% in 2023, consolidating our position as the second largest audiovisual APaaS service provider in China.

Our APaaS solutions allow for quick deployment and easy expansion using low-code technologies. Our customers are empowered with quick access to different functionalities with simple steps of deployment to achieve their business aim. We empower companies to be agile for scenario-based innovation and assist them in addressing the challenges posed by personalization of audiovisual content, multiple scenarios, and timeliness requirements.

Our market leadership and outstanding performance have been recognized through numerous awards and honors. For example, we were recognized by the China Academy of Information and Communications Technology as the Best Practice of Trusted Cloud Technology for 2020-2021, awarded the Most Watched Startup of the Year by Sina in 2021, and selected as one of the Top 100 Software and Information Technology Service Providers in Shanghai by Shanghai Municipal Commission of Economy and Informatization in 2022 and 2023.

# One-stop scenario-based audiovisual solutions with comprehensive capabilities and strong scalability

As a market leader providing one-stop scenario-based audiovisual solutions, we attribute our success and leadership in the market to several key factors:

- Comprehensive capabilities of MPaaS With over a decade of experience in the audiovisual industry, as of March 31, 2024, we had accumulated 1,303 APIs and a large customer base providing us with understanding of market demands. Our basic audiovisual capabilities cover various scenario-settings, comprehensive capabilities, and broad connections. Audiovisual content is collected mainly through mobile phone cameras, monitor cameras and computer cameras. The main forms of interaction include live streaming, on-demand and real-time interaction. We have independently developed relevant products in the areas of audiovisual capture and interaction, thereby achieving wide coverage of scenario-settings. We have also mastered encoding and decoding, storage, distribution and video AI processing involved in audiovisual interaction, including auditing, labeling, enhancement and other capabilities, thereby achieving full capabilities. In addition, we have accumulated experience in tuning and troubleshooting under complex circumstances involving multiple terminals in cross-regions, thereby achieving broad connections.
- Ability to expand and scalable business operation With over a decade of cultivation in the audiovisual industry and co-operation with major participants in the audiovisual industry, we have gained diversified knowledge in audiovisual scenarios and are able to promptly identify demands from different customers for various scenarios. Operators of 15 of the top 20 audiovisual apps in China in 2023 in terms of the number of downloads are our customers, which demonstrates our market leadership. In exploring a new scenario, we usually start by working with a representative company in an industry or a scenario, obtaining an understanding of its needs and developing a new scenario-based audiovisual solution. Subsequently, we would replicate and expand the new solution to serve other potential customers rapidly, thereby achieving scalability. For example, in the interactive video marketing scenario, working with one of the largest local TV stations in China well-known for its entertainment shows, we provided a scenario-based solution in which fans could watch shows with celebrities and interact through an app, achieving real-time marketing and real-time interaction among celebrities and between celebrities and fans. The solution we provided successfully supported the interactive marketing activities for a number of popular shows of this TV station. By working with this TV station, we accumulated the know-how of live chatting and turned multiple audiovisual functionalities into low-code modules. We subsequently replicated this solution to serve several other video marketing customers with similar needs.

Open platform to achieve commercial value gain – By lowering the access threshold for scenarios with our low-code platform, we not only empower our customers to create codes in a short time, but also provide them with means to independently expand existing scenarios concisely and efficiently. Leveraging the scalable architecture and encapsulation of our low-code platform, we continuously upgrade our low-code platform and functional plugins which allow customers to access new scenario functions simply by selecting updated functional plugins. Using our domain-friendly, visualized, scenario-based and modularized low-code platform, we empower our customers to build and develop what they need for their own business quickly.

In addition, we have developed a solution and plug-in market which introduces third-party developers into our platform, allowing a positive feedback among our customers and third-party developers. Relying on the strong scalability of our low-code platform, we made the platform's SDKs publicly available and allowed third-party developers with audiovisual development capabilities to provide scenario-related audiovisual functional components to enrich and enhance our platform's functionalities. For example, our business partner, SenseTime, provided the beauty SDK plugin, which we integrated and encapsulated on our low-code platform in order to enable customers to use the plugin. As a result, our customers have the option to purchase the latest and preferred components on our platform. This capability is an important consideration why customers choose to use our services.

Based on the above advantages, we have successfully accumulated a large customer base. The number of MPaaS paying customers increased from 68,808 in 2021 to 83,970 in 2022, and further increased to 92,480 in 2023 and from 62,311 for the three months ended March 31, 2023 to 62,563 for the three months ended March 31, 2024. The number of APaaS paying customers increased from 1,319 in 2021 to 1,967 in 2022, and further increased to 2,597 in 2023, and from 1,867 for the three months ended March 31, 2023 to 2,303 for the three months ended March 31, 2024.

## Diverse application scenarios support our commercial potential

Since we officially launched our APaaS business in September 2021, our APaaS solutions have been applied to a variety of scenarios, creating a "1+N" commercial layout of one platform and multiple scenarios. At present, we are strategically focusing on five major scenarios, of which we have achieved sizeable revenue for social entertainment and video marketing scenarios, demonstrating our strong product commercialization capabilities. We are also rapidly developing visual networking, smart new media and metaverse scenarios.

In the social entertainment scenario, we provide one-stop solutions for mobile social entertainment that includes image processing and distribution, short video processing and on demand, long video processing and on demand, file distribution and download, live streaming of events or shows, among others. Leveraging our advantages in cloud infrastructure, intelligent processing of multimedia data and intuitive low-code platform, our APaaS solution enables our customers to quickly launch social entertainment application with just about 10 lines of code. During the Track Record Period, the apps operated by our customers of social entertainment scenario included Meipian, Tangdou and Changba.

Our video marketing scenario offers customers media content such as audiovisual for marketing. We provide solutions with broad connections in our video marketing scenario, assisting customers in reaching their target consumers at various stages of marketing. By combining enterprise live streaming marketing, interactive marketing and other solutions, we empower our customers to swiftly build their own live streaming platform to enhance user loyalty and promote conversion.

In the visual networking scenario, we provide a one-stop visual network solution that integrates audiovisual cloud management, computing engines, scenario awareness analysis, cloud encoding and decoding, storage and other services, support access to various IoT video devices through multiple protocols, provide integrated video intelligent processing services, and other functionalities such as live streaming, remote management, behavior monitoring, warning playback, intelligent operation and maintenance and reading management. Our solution is used in smart homes, visual intelligence on vehicles, intelligent industrial interconnection, remote monitoring at pre-schools, among others.

In the smart new media scenario, leveraging on our capabilities in audiovisual data processing, we developed television broadcasting related solutions including intelligent media resources management, new media filming and production covering full capabilities of the core television broadcasting work stream of filming, editing, multimodal analysis, content audit, data management and content storage. Through cooperation with leading television broadcasting media, we have developed real-time management and monitoring services for filming under the 5G environment. In addition, with strong AI recognition and analysis capabilities, we are able to complete fast editing and stream the content into the data management system in real time, providing customers with solutions with low latency and high throughput.

In the metaverse scenario, we leverage 3D visual engine technology and audiovisual communication technology to provide solutions such as virtual scenario generation, digital person virtual space, metaverse XR live streaming, allowing customers to build metaverse interaction scenes with low-code or zero-code technology. We provide cultural and tourism metaverse experience solutions for various venues such as parks, where end users can take a tour of the park, generate personalized Vlogs or meet other tourists without leaving their homes. From spatial generation, digital person placement, to intra-scenario audiovisual communication, we have achieved a closed loop of interpersonal communication in the metaverse, and helped customers continue to expand their businesses within the metaverse scenario.

With the accumulation of scenario-based experiences, we expect to further improve existing technologies and drive innovation, maintain product and service advantages, and enhance customer loyalty. Our APaaS paying customer retention rate in 2023 and the three months ended March 31, 2024 reached 87.9% and 93.7%, respectively, demonstrating the effectiveness and success of our solutions.

### Strong integrated audiovisual technology and low-code platform development capabilities

Our core advantage lies in our strong integrated MPaaS technology, which helps customers deal with issues including large resource investment in servers and storage systems, stringent technical requirements for data transmission and processing, and poor user experience such as live streaming delay. Our technology capabilities allow us to offer a cost-effective and efficient solution for our customers, who benefit from our expertise in addressing the technical complexities of audiovisual solutions. Our years of experience has enabled us to independently develop the key technologies to support our one-stop scenario-based audiovisual solutions. Some of our key technologies include:

#### AI technology

- Comprehensive intelligent multimedia technology Based on audiovisual processing technology and deep learning models, our comprehensive intelligent multimedia technology utilizes convolutional neural networks and gate recurrent unit (GRU) to learn video content features and timing information on a large-scale expert annotated sample set. By combining multitasking learning, we are able to assess image quality and aesthetics of images and videos, producing multi-dimensional objective quality indicators to guide and position specific quality issues.
- Intelligent AI services with high business efficacy With high-performance cloud servers and large-scale storage resources, we have developed a deep learning platform that can utilize large language models, such as BERT, GPT, Transformer, LLaMA and PaLM. By using large language models, we have the capability to cultivate content generation capabilities such as audiovisual generation and text generation. In addition, we can process multiple structures or types of data by combining multimodal large language models, and continue to contribute to the improvement of large language models through reinforcement learning from human feedback. Our interaction with and repeated utilization of the large language models will enable them to further adapt to our business scenarios improving the controllability and accuracy of our results. We involve business partners in the industry to build an open platform, and provide customers with more comprehensive services in various scenarios.

#### Audiovisual technology

- Audiovisual encoding and decoding capabilities Our proprietary Avsmart module has
  embedded scenario adaptive enhancement algorithm and noise reduction detail enhancement
  algorithm, as well as the high-performance h264 and h265 compression technology, which
  reduce storage space and improve the image quality of secondary encoding at lower
  bandwidth costs. The performance of our encoding and decoding technologies is advanced in
  the audiovisual cloud service industry.
- Multi-dimensional integrated intelligent scheduling management system monitors traffic, costs and malfunctions. As a mainstream audiovisual service provider, we are able to achieve nearly 100% real-time accurate and controllable dispatch, reducing system risk and cost risk due to unexpected customer traffic, with low system failure rate.

### Low-code platform

• We have leveraged our MPaaS technologies to develop a low-code platform that is designed to empower customers by improving their accessibility. Our platform focuses on ease of use, scalability and openness to ensure that our customers can easily access the features they need. We aim to lower the barrier of entry for customers by providing user-friendly, visualized, scenario-based and modularized plugins.

In addition to possessing advanced technology, we are committed to promoting the development of a strong developer ecology. We operate a number of developer-oriented communities, advocate technology sharing and initiate various activities for technology dissemination. As of March 31, 2024, we had over 1,500,000 registered users, most of which were developers or teams of developers from various companies. By consolidating the experiences of the developers, we are able to continually improve the efficiency of our platform and empower developers. The developers are also our potential customers, providing us with more business opportunities.

## Experienced and insightful management team and innovative R&D team

We are led by an experienced and insightful senior management team with abundant industry and management experience, a keen understanding of market trends, and a track record of effective execution and innovative ideas.

Our founder and chief executive officer, Mr. Xu Shiwei, brings over 20 years of industry and management experience to our Company. Mr. Xu founded our Company in May 2011 and has since been leading the strategic development of our Group. He previously served as technical director at Kingsoft Corporation Limited, where he designed the overall structure of the Kingsoft WPS Office 2005, for which he received the State Scientific and Technological Progress Award (Second Class) by the State Council. Mr. Xu is also the creator of the programming language Go+, which has the characteristics of low-code, de-complexity and catering to young people, attracting a wide range of developers.

Our chief operating officer, Ms. Chen Yiling, has over 17 years of professional experience in the Internet and related fields. She joined our Group in October 2014 and made contributions to various aspects of our Company's development including operation, human resource and marketing. Our chief financial officer, Mr. Han Bin, has over 20 years of professional experience in financing and legal industries. Mr. Han had worked at the Stock Exchange as the representative of eastern China. In addition, other members of our senior management team and key employees have experience in globally renowned technology companies.

Our employees are valuable assets to us. In particular, we have a strong R&D team. As of March 31, 2024, our R&D team consisted of 168 members, accounting for 43.3% of our total employees, most of whom have relevant backgrounds and experience in the industry.

We are confident that our experienced management team and exceptional R&D team will enable us to capture opportunities in the audiovisual industry in China and globally, driving us to achieve rapid and sustainable growth.

#### **OUR DEVELOPMENT STRATEGIES**

We plan to implement the following strategies to further develop our business:

# Develop and expand our customer base by continuing to penetrate and deepen our presence in major scenarios

According to iResearch, the market size of audiovisual PaaS and SaaS market in China was RMB38.1 billion in 2023 and is expected to reach RMB118.3 billion in 2028, representing a CAGR of 25.4%. Leveraging our years of experience and proprietary technologies, we are committed to optimizing the audiovisual interaction experience and further penetrate our presence in the five major scenarios of APaaS market. We also plan to extend our APaaS solutions to other customers in these scenarios to further expand our business.

To that end, we plan to strengthen our understanding of representative companies in different industries or scenarios, accumulate scenario know-how and experience and expand our business. Specifically, we plan to create more solutions in five major scenarios. In the smart new media scenario, we plan to enhance the design and management of intelligent filming, intelligent media resources, intelligent editing and provide other solutions for television broadcasting media, and increase our television broadcasting customers. In the visual networking scenario, we plan to develop a solution for the agricultural setting, which includes connecting camera directly on cloud and AI processing of gathered data, thereby improving the digitization in agriculture and improving efficiency. In the metaverse scenario, we plan to create digital persons for marketing purpose. We plan to design 2D and 3D digital person, that closely resemble humans in appearances, expressions and interactions. These digital persons can showcase their marketing functions through live streaming. Further, through the use of deep learning technology, customers' marketing can be enhanced using user feedback on these digital persons' performance. We believe that the metaverse scenario, which bridges the physical world and the virtual world, may have potential to bring new social and entertainment experiences. We plan to combine AIGC's creativity with 3D content generation technology. For example, digital persons may be generated and enhanced by AI. In addition, we plan to use AI to enhance spatial generation in the metaverse, enabling replication of the physical world to the virtual world.

In addition, we intend to strengthen our business and cooperate with leading companies in various industries and attract more SMEs in the industries by building and maintaining our reputation in serving leading companies, accelerating the expansion of our business with SMEs and creating a virtuous cycle of accumulating experience, resources and reputation. To further expand our customer base, we plan to strengthen our marketing activities and raise our brand awareness, including organizing industry events, holding seminars and conferences, and visiting leading companies in various industries. We also plan to expand our sales team by recruiting personnel with industry knowledge to strengthen our business network.

## Accelerate overseas business expansion to create new business growth points

In addition to the booming development of the audiovisual cloud service market in China, the global audiovisual cloud service market is also expected to experience significant growth in the coming years.

During the Track Record Period, we mainly assisted audiovisual social and e-commerce companies in China in their overseas expansion efforts. Going forward, in addition to assisting Chinese companies in the overseas expansion, we plan to grasp the immense opportunities presented by the overseas market. We currently have subsidiaries in Hong Kong and Singapore where we have conducted business and generated some revenue. According to iResearch, the penetration rate of the audiovisual cloud service market in Southeast Asia and the Middle East are generally low, and the audiovisual cloud service market is at an early development phase presenting significant growth potential. We plan to replicate our success in China in the overseas markets. As a first step, we plan to build PaaS infrastructures to establish a solid technological foundation for providing one-stop scenario-based audiovisual solutions abroad. We also plan to build local sales and technical teams, work with local partners to localize products and services, establish long-term business relationships with corporate customers, and expand our customer base abroad.

In addition, we have also established a subsidiary in Vietnam and plan to expand our presence in this market. In addition, we plan to further develop overseas markets and have conducted feasibility studies for audiovisual cloud markets in Indonesia, Malaysia and Saudi Arabia.

# Continuously strengthen R&D investment, build AIGC capabilities and iterate and improve our low-code platform

Our technological capabilities are the core foundation of our success. We plan to maintain our leading position in the audiovisual cloud service market by continuing to invest in R&D and building a technological barrier.

According to iResearch, since 2023, companies have begun to integrate AIGC technology into audiovisual APaaS solutions to enhance product functionalities and improve efficiency. "AIGC + audiovisual APaaS" is expected to become a new form of audiovisual APaaS in the future. Users may be able to automatically write code and assemble a complete audiovisual application by simple demand input, and personalize the application through simple code writing or drag-and-drop. We intend to use multiple generation models, including image generation, emotional voice generation, music sound effect generation, video generation, 3D generation, character animation generation, scene animation generation and code generation, then integrate the results that can be exported to multiple content channels through our audiovisual and RTC.

To build AIGC capabilities, we plan to increase investment in a 3D content generation platform to further improve the accessibility and content generation efficiency of the platform. We also plan to use more AI technology in 3D creation and rendering. Particularly, we plan to optimize 3D generated models and low-precision models that can be used for different scenes. Additionally, we plan to leverage image generation capabilities to generate virtual scene maps. After laying out and segmenting of 3D scenes, we will split small tasks to use basic modeling capabilities and model markets to complete scene construction, thereby overcoming the current shortcomings of 3D model generation. Character animation is also an important part of virtual content. We plan to utilize AI to learn from a large number of videos, extract expressions, movements and animations of persons, animals, game characters, and integrate skeleton-bound animation technology to generate natural character animations that fit seamlessly with the scenes.

Our low-code platform is also our R&D focus. We plan to continue to improve three aspects of our low-code platform, namely ease of use, scalability and openness. We also plan to continue to consolidate and optimize our technologies in audiovisual data transmission, compression and rendering. We intend to improve our low-code content generation platform to enable low-code or zero-code content creation, and to enhance the interactions of audiovisual content.

Furthermore, to attract and retain professional talents for innovation, we plan to continue investing in and expanding our R&D team, and recruiting more talent in various fields.

#### Seek strategic investments and acquisitions

We plan to continue to selectively seek strategic investments and acquisitions aimed at creating synergies with our APaaS solutions, strengthening our technology and scenario capabilities, and expanding our customer base. Accordingly, we plan to identify potential targets in areas related to our five major scenarios or relevant fundamental audiovisual technology. Potential targets include businesses with leading audiovisual or AI technologies complementary to our technology stack and businesses with successful PaaS or SaaS products to broaden our customer base, among others. As of the Latest Practicable Date, we had not identified any investment or acquisition targets.

#### OUR PRODUCTS AND SOLUTIONS

#### Our business model

We primarily operate under the brand of "Qiniu Cloud". Our major products and services are broadly categorized into, MPaaS<sup>(1)</sup> (or Media Platform as a Service) products and APaaS (or Application Platform as a Service) solutions. PaaS is a computing service model by which cloud service providers offer a suite of hardware and software resources to their users via a platform, enabling the users to focus on writing codes, configuring the service metrics and monitoring of applications without the need to divert time and resources to the development and maintenance of the infrastructure underlying the platform, including maintenance of hardware, updates of operating system, data backup and recovery, internet security, disaster recovery, etc. Our MPaaS platform is a PaaS platform which has a primary focus on providing cloud services in connection with audiovisual content (primarily consisting of images, audio and video contents), encompassing object storage, content distribution, data processing and real-time interactive live streaming and covering the full cycle of audiovisual data collection, storage, processing, distribution and consumption. We are one of the few companies that have developed comprehensive and high-performance MPaaS products and possessed technology capabilities that are integrated and cover all aspects of the audiovisual business.

Note:

<sup>(1) &</sup>quot;MPaaS", or Media Platform as a Service as defined by the Company, refers to audiovisual platform as a service, while "APaaS" refers to audiovisual application platform as a service, according to iResearch, in industry terms.

Our customers encompass a wide array of enterprises (such as application developing companies and SaaS companies) as well as individual developers. We have a strong customer coverage in terms of operating scales, from industry leaders to large-sized corporations, SMEs and individuals. Our products cater to different customer needs, from business enterprises with scenario-based demands and limited technical capabilities (which typically require our APaaS solutions) to sophisticated application developers with limited access to infrastructure resources (which typically require our MPaaS products).

APaaS is a computing service model by which cloud service providers offer a one-stop platform for users to develop, run and manage applications. Leveraging our MPaaS technologies, we further developed a proprietary low-code platform which achieves vertical integration from the underlying technology to high-level scenario-based functions. In short, by accessing our low code platform, our customers can choose the specific solution they want to develop, followed by simple and intuitive steps to configure the audiovisual functions embedded in the application, after which a packaged and ready-to-use solution will be available for immediate deployment, thus reducing the difficulty in the use and access to audiovisual products. Our APaaS solutions currently cover five major application scenarios, including (i) social entertainment, (ii) video marketing, (iii) visual networking, (iv) smart new media and (v) metaverse, which in turn allow for quick deployment and easy expansion, which significantly improves our customers' agility for scenario-based innovation and addresses the challenges posed by personalization of audiovisual content, multiple scenarios, and timeliness requirements.

We provide MPaaS products by way of APIs and SDKs, and APaaS solutions in the form of scenario-based solutions to our customers. Leveraging our MPaaS products, our customers can write codes to connect to the audiovisual capabilities through our platform via discrete APIs and SDKs and customize the parameters based on their business needs. Our APaaS solutions package the APIs and SDKs (corresponding to the underlying audiovisual capabilities) into readily accessible solutions and enable our customers to write minimal codes using our low-code platform with clearly defined configurations and functional plugins to deploy audiovisual capabilities based on their particular business scenarios.

While our MPaaS products leverage the audiovisual capabilities that we have accumulated under our technology platform over the years, our APaaS solutions deploy the same suite of audiovisual capabilities underlying such platform while packaging such capabilities into scenario-based solutions based on the specific business needs of our APaaS customers delivered through our proprietary low code platform which provides for easy access and intuitive application development. In other words, our MPaaS capabilities coupled with our proprietary low-code platform and scenario-based knowhow constituted the core competitiveness of our APaaS business.

Our customers can use either one or both MPaaS and APaaS solutions depending on their business needs. Typically, new customers who need to quickly validate their business models will prioritize using APaaS for scenario-based business verification. Once the business model is validated and the customer desires more autonomy and the ability to incorporate their specific requirements, they often choose to partially refactor their business using MPaaS products to acquire complete control over the underlying codes and the pace of iteration. For example, enterprise customers with multiple project teams may simultaneously utilize MPaaS products and APaaS solutions based on their specific business needs – project teams which have sufficient technical resources and knowhow and high demand for flexibility would normally choose MPaaS products which allow them to adjust the usage of storage, CDN and other products according to their business needs, while project teams which have limited technical resources and focus on validation of business would typically choose APaaS solutions which have lower development threshold and meet their business needs while having the ability to make quick adjustments.

We adopt different pricing models depending on the specific products/solutions. In addition, we charge differently depending on whether the products/solutions are deployed via public cloud or private cloud. For example, if deployed on the public cloud, MPaaS products are typically charged by actual usage while APaaS solutions are typically charged by actual usage or service packages. In general, we set different unit prices for API calls based on their complexity. In addition, the pricing of APaaS solutions has taken into account the value brought by the additional features of APaaS solutions (including low code platform), therefore the unit prices of the APaaS solutions are generally higher than those of the MPaaS products under similar circumstances. For details of our pricing model, please refer to the section headed "Business – Pricing" in this document.

As of December 31, 2021, 2022 and 2023 and March 31, 2024, the number of our registered users reached 1,217,596, 1,350,001, 1,497,516 and 1,516,411, respectively. The following table sets forth a breakdown of our revenue during the Track Record Period.

				ror the
				three
				months
				ended
	For the yea	ar ended Decen	iber 31,	March 31,
	2021	2022	2023	2024
	RMB'000	RMB'000	RMB'000	RMB'000
MPaaS	1,369,641	874,997	974,507	249,442
APaaS	24,901	194,013	281,359	83,238
Others	76,468	78,280	78,125	9,693
	1,471,010	1,147,290	1,333,991	342,373

For the

The following table sets forth a breakdown of our revenue in terms of deployment on public cloud and private cloud in absolute amounts and as a percentage of our revenue for the periods indicated:

						For the thr	ee months	
		ended	March 31,					
	2021		2022		2023		2024	
		% of		% of		% of		% of
		total		total		total		total
	Revenue	revenue	Revenue	revenue	Revenue	revenue	Revenue	revenue
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000	%
Public cloud	976,770	66.4	924,123	80.5	1,034,862	77.6	271,655	79.3
Private cloud	494,240	33.6	223,167	19.5	299,129	22.4	70,718	20.7

Notes:

(1) Revenue from public cloud business consists of revenue from MPaaS products and APaaS solutions offered over the public internet. Revenue from private cloud business consists of revenue from all-in-one server, software and related maintenance and internet data hosting services.

#### Our MPaaS products

Our MPaaS products leverage a range of audiovisual related technologies, including audiovisual technologies associated with RTC, VoD, live streaming, storage and content delivery, as well as a range of AI technologies, including intelligent vision, intelligent voice, intelligent editing, industry algorithms, content security and business security. Through our technologies, we have achieved extensive network coverage, comprehensive node monitoring and real-time intelligent allocation, providing our customers with high-quality and low-latency cloud services. Our MPaaS products include (i) QCDN, our proprietary content delivery network; (ii) Kodo, our object storage platform; (iii) interactive live streaming products; and (iv) Dora, our intelligent media data analytics platform.

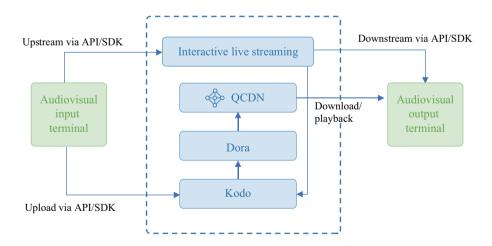
The main features of our MPaaS products are as follows:

- Comprehensive Our MPaaS solutions are embedded with comprehensive functions to satisfy various needs of customers in use cases of image, audio and video processing and analytics.
- Cost-effective Our comprehensive solutions enable our customers to easily and quickly
  design, develop and launch their products. Additionally, our pricing model allows our
  customers to try out new products with no significant upfront cost and reduce their
  development cost.
- Stable and reliable We offer multi-region disaster recovery capability to reduce operation risks from failures in any single data center. Our MPaaS products are also equipped with various security protections against isolated incidents and security failures. We process tens of millions of requests on a daily basis with an average availability of 99.9%.

- Scalable and compatible The high scalability of our MPaaS product enables customers to conduct secondary development based on their needs and various use cases. We offer a large number of compatible and easy to embed APIs and SDKs, which can be easily integrated to help customers reduce development and maintenance work. As of March 31, 2024, we had accumulated 1,303 APIs, demonstrating our full-scenario MPaaS capability.
- Intelligent We have built a portfolio of intelligent audiovisual processing capabilities based on large models and deep learning. We possess multimodal processing capabilities through analyzing audiovisual data, enabling functions such as intelligent audiovisual evaluation, intelligent identification and intelligent review in an end-to-end audiovisual setting. We have independently developed the core algorithms based on our over one decade of industry experience and technological iteration, which empower us to meet customer needs on processing accuracy and efficiency.

For the three months ended March 31, 2024, our MPaaS platform provided an average of over 4.6 billion minutes of audiovisual playback per day. As of March 31, 2024, our MPaaS platform had a data storage scale at EB level. Our diverse MPaaS products provide customers with a one-stop integrated service. Many customers purchase and use our multiple products simultaneously to meet their needs. For example, customers may use Kodo to store their media data, which can be edited, transcoded or otherwise processed by Dora, and delivered to their users via our interactive live streaming products and QCDN based on developers' needs. Our MPaaS products serve as a building block for customers to embed various functions in their applications and provide underlying cloud services to support their operations. In particular, QCDN and Kodo are the major MPaaS products in terms of functional importance and revenue contribution. The seamless integration of storage and distribution functionalities empowered by QCDN and Kodo, respectively, forms the backbone of our MPaaS business and provides underlying support for all MPaaS capabilities.

The following diagram illustrates the interaction between our different MPaaS products in providing service to our customers.



The above diagram illustrates three major use cases involving the interaction of MPaaS products:

- Video on demand: The video content originated from the audiovisual input terminal is uploaded to Kodo via the upload API/SDK, which is then processed by Dora and distributed through QCDN. The user can access the video by downloading or playing back via the audiovisual output terminal.
- Live streaming: The video content originated from the audiovisual input terminal is upstreamed via API/SDK to our interactive live streaming products, which is then downstreamed via API/SDK to the audiovisual output terminal for playback on the user's device.
- Live streaming playback: This is a combination of the two use cases above. Instead of being transmitted to the user's device via the downstream API/SDK after being upstreamed to the interactive live streaming products, the video content is first uploaded to Kodo for storage, and then distributed to the user device through QCDN.

Apart from the above use cases, each of our MPaaS products can be deployed separately by the users via discrete APIs/SDKs depending on their business needs.

As our MPaaS products cover the full cycle of audiovisual data collection, storage, processing, distribution and consumption and can be conveniently deployed in a single platform, our MPaaS customers typically utilize more than one MPaaS product at one time. For the three months ended March 31, 2024, over 50% of our MPaaS customers simultaneously purchased two or more of our MPaaS products.

The following table sets forth a breakdown of our revenue from MPaaS products by product types in absolute amounts and as a percentage of our revenue from MPaaS products for the periods indicated.

For the three months

							For the thr	ee months	
		ended Ma	arch 31,						
	202	21	202	22	202	23	202	2024	
		% of		% of		% of			
		total		total		total			
		MPaaS		MPaaS		MPaaS		MPaaS	
	Revenue	revenue	Revenue	revenue	Revenue	revenue	Revenue	revenue	
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000	%	
QCDN	585,513	42.7	488,932	55.9	628,371	64.5	176,779	70.9	
Kodo	650,764	47.5	320,359	36.6	297,791	30.5	63,958	25.6	
Interactive live streaming									
products	87,067	6.4	50,526	5.8	17,175	1.8	3,571	1.4	
Dora	46,297	3.4	15,180	1.7	31,170	3.2	5,134	2.1	
Total	1,369,641	100.0	874,997	100.0	974,507	100.0	249,442	100.0	

The following table sets forth the number of MPaaS paying customers and their average revenue contribution during the periods indicated. For detailed discussion on the retention rates and expansion rates of MPaaS paying customers, please refer to the section headed "Business — Key Operating Metrics" in this document.

				For the three	e months	
	For the year	ended Dece	mber 31,	ended March 31,		
	2021	2022	2023	2023	2024	
Number of MPaaS paying customers	68,808	83,970	92,480	62,311	62,563	
– QCDN	54,892	56,800	61,868	41,586	41,210	
– Kodo	39,122	55,370	61,456	41,248	42,177	
<ul> <li>Interactive live streaming</li> </ul>	2,193	1,906	1,850	967	890	
– Dora	4,183	3,917	3,763	2,294	2,235	
Average revenue contribution of MPaaS paying						
customers (RMB)	19,905	10,420	10,537	2,991	3,987	

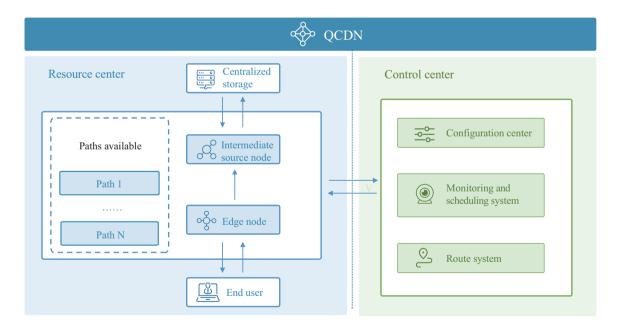
#### QCDN - Content delivery network

A content delivery network (CDN) is a geographically distributed group of servers that caches content close to end users, thus allowing for the quick transfer of Internet content, including audiovisual content. Our integrated QCDN product optimizes the acceleration of data network through building a global network of CDN nodes from multiple providers (including mainly IaaS cloud providers), and, to a smaller extent, our proprietary infrastructure. It accelerates content delivery time by intelligently routing our customers' end users through less congested and more reliable paths. With functions such as comprehensive content delivery network monitoring and intelligent dispatch of nodes, QCDN offers stable and fast network access services, ensuring the stability and consistency of our customers' services. Network resources are crucial to our QCDN products. To enhance our competitive advantages, we have established procurement relationships with an extensive network of suppliers, which enables us to make optimal procurement decisions and adjustments based on market conditions and reduce reliance risks of single suppliers for underlying resources. Moreover, through our self-developed intelligent scheduling services as detailed below, we have the ability to manage different network resources in providing stable and high quality services to our customers.

#### Key features of QCDN include:

- Integrated network Our QCDN product is an integrated control solution which contains nodes from multiple providers that cover different areas across the globe, thereby ensuring high stability.
- Real-time control We provide real-time network availability and access performance monitoring.
- Intelligent scheduling Based on our IP database and combined with the network downtime and performance monitoring, the integrated scheduling system is developed to support an array of dispatch protocols. These dispatch protocols allow dispatch in real time and protect our customers from access hijacking.

Our QCDN product addresses the distribution of audiovisual content from centralized storage (such as Kodo) to user terminals (such as mobile devices and web pages). In the absence of QCDN, the user terminals normally retrieve data from centralized storage, which entails a long network path resulting in slow or failed downloads. We provide integrated QCDN services based on intelligent scheduling services. In essence, our QCDN product procures a large number of edge nodes (i.e. small data centres located in various regions) and directs the download requests to the nearest edge node. The edge nodes store the content downloaded from the centralized storage, allowing subsequent downloads of the same content via such edge nodes to bypass centralized storage, thereby significantly increasing the download speed. Intermediate source nodes refer to the nodes positioned between the centralized storage and edge node, which can help reduce the request load on the centralized storage and thus speed up the download requests. Our QCDN product comprises a resource center and a control center, which in turn comprises a configuration center, a monitoring and scheduling system and a route system. The resource center comprises network paths linking the data source, edge nodes, intermediate source nodes and the user terminals representing the end users. The configuration center determines which edge nodes a user utilizes based on domain configuration. The monitoring and scheduling system decides which edge node to direct a download request from the user terminal based on real time network conditions. The route system determines the network path through which the edge node directs the download request to the centralized storage. Enterprise or individual developers can complete configuration management, including resource and content configuration, through the configuration center. Based on the monitoring system, dispatch system and route system of our control center, our QCDN product enables increased content hit rate, improves user access experience and reduces the cost of back-origin bandwidth. The following diagram illustrates the general workflow of our QCDN product:



Our QCDN product is provided to our customers on public cloud and charged based on network traffic or bandwidth usage. We also provide global QCDN service for customers with overseas business.

# Coocaa Technology (酷開科技)

Shenzhen Coocaa Network Technology Co., Ltd. (深圳市酷開網絡科技股份有限公司) was established in 2006 and provides technology, operation and maintenance services for the Internet smart television industry. Its main business segments include big content business, digital marketing business, converged media business and smart screen business.

#### Main scenarios

· Smart TV on demand content distribution

#### Solutions and benefits

- We provide self-developed edge acceleration capabilities and end-to-end quality monitoring system which result in better user viewing experience.
- Our intelligent scheduling capabilities help the customer reduce network traffic costs
- Based on our audiovisual processing capabilities, we enable the customer to achieve HD and UHD content transcoding which forms the core of its big content business.



#### Kodo - Object storage platform

Object storage is a data storage architecture for storing unstructured data, which sections data into units, i.e. "objects", and stores them in a structurally flat data environment. Each "object" includes the data, metadata, and a unique identifier that applications can use for easy access and retrieval. Kodo is our proprietary object data storage and management platform which supports both centralized and edge storage. Kodo can serve as a cloud-based heterogeneous data lake, which essentially means all types of data, including text, image, audio, video, structured table, etc., whether structured, semi-structured or unstructured, at any scale can be consolidated and stored in one centralized place. This heterogeneous data lake provides users with full access to and storage of data and full life-cycle data management without having regard to the original format of the data. Kodo can be used together with other data analytics products such as Dora, enabling users to optimize the underlying value of massive data volume. Users can run different types of analytics on the data stored to provide actionable insights and drive better decision-making. Kodo is designed on a cloud-native architecture which supports multi-cloud deployment. With connection to our platform via simple and reliable APIs and SDKs, customers are able to conveniently transmit and manage their data. As development of artificial intelligence increased the demand for storage and computation, we started to provide storage and computing all-in-one server to our customers in 2023.

## Key features of Kodo include:

- Upload/download we provide our users with various APIs/SDKs and tools for different
  upload or download scenarios and support downloads from servers and direct uploads from
  customers with acceleration services.
- Cross-regional synchronization Cross-regional synchronization provides users with
  efficient data migration and synchronization in different storage regions through easy
  operations to achieve remote data disaster recovery.

- Life-cycle management Users can choose their storage space based on their business needs with life-cycle management. It can be set up in a way that allows for automatic conversion to designated storage types or automatic deletion after a set amount of time has passed.
- Low-frequency storage Low-frequency storage provides more affordable prices than standard storage and can be applied to business scenarios with real-time access to data and low read frequency, such as data backups, etc.
- *Mirrored storage* Mirrored storage can be applied for migration of existing data in business systems, which helps users complete data migrations seamlessly without affecting access to the business systems.

### **OPPO**

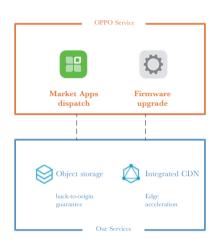
OPPO Guangdong Mobile Telecommunication Corp., Ltd. is a global leading smart device manufacturer.

#### Main scenarios

· Document download, storage and dispatch

#### Solutions and benefits

- Our object storage and intelligent audiovisual capabilities support the underlying service for the customer's smartphone cloud services, such as cloud backup of users' data.
- Our object storage and integrated CDN services allow for the seamless storage and distribution of contents relating to the customer's application market, firmware upgrades and system updates.



Kodo is sometimes offered to our customers on public cloud and charged based on the storage capacity. For customers who have a higher demand for compatibility, reliability, privacy and security in the cloud, Kodo can also be deployed on the customer's server or on a private cloud that we build for the customer and charged based on the storage capacity. If a private cloud is built by us, we sometimes offer an all-in-one server service for our customers. We are developing our overseas storage business by building our overseas cloud infrastructure, which will allow us to gradually roll out our cloud storage nodes and overseas supply chain capabilities.

Following a sharp increase in cloud storage demand driven by the outbreak of COVID-19 and rapid growth in investment in private and public cloud storage by various industries which benefited our Kodo business in 2021, we encountered certain constraints in relation to our all-in-one server business in 2022 as detailed below:

- Macro-economic factors: Our all-in-one server business is reliant on the stable supply of semiconductor chips. There has been a global shortage in the supply of semiconductor chips resulting from the COVID-19 pandemic, increased demand for consumer electronics, and disruption in semiconductor chip production due to labor shortage. Moreover, since mid-2022, the U.S. administration announced new rules and export controls policy on AI and semiconductor technologies in China. The restrictions block U.S. AI computer chip companies from selling U.S.-built advanced chips, chip design software, semiconductor manufacturing equipment and components for AI and supercomputing to China. These restrictions have affected the supply of semiconductor chips to China. Notwithstanding that the semiconductor chips we usually use may not be under the relevant export control restrictions, we have noted the macro-economic factors which may increase the uncertainty of our hardware business going forward.
- Travel restrictions in response to COVID-19: The COVID-19 in China in 2022 led to temporary restrictions in many cities including Shanghai where our headquarters are located. According to public notices issued by Shanghai government authorities, travel restrictions were imposed in Shanghai during the period from March 22, 2022 to June 1, 2022. Most of our sales and marketing team members were based in Shanghai and they were not able to visit customers or carry out face-to-face marketing activities during the temporary travel restrictions in Shanghai. The travel restrictions also affected the supply and delivery of hardware, and delayed the deployment and implementation of our solutions for customers, causing a serious disruption to our all-in-one server business. For example, the number of delivery orders for all-in-one server decreased from 228 in 2021 to 60 in 2022. Our deliveries for hardware were also delayed as a result of the travel restrictions.

In light of the constraints encountered as detailed above and as a result of the readjustment in our business focus, in particular, the formal launch of our APaaS business in September 2021, the role of our all-in-one server related business has diminished. After evaluating the resource utilization of our various business segments, we made the decision in February 2022 to scale down our all-in-one server business to invest more resources in the APaaS solutions which are less capital intensive and has a higher gross profit margin and commenced to optimize the sales personnel dedicated for hardware business in April 2022. In 2023, with the recovery of all-in-one server business in the industry, we gradually increased our all-in-one server business. We will review the risks associated with our hardware related business and adjust our business strategy if and when the macro-economic factors mentioned above or other relevant factors change in the future.

### Interactive live streaming products

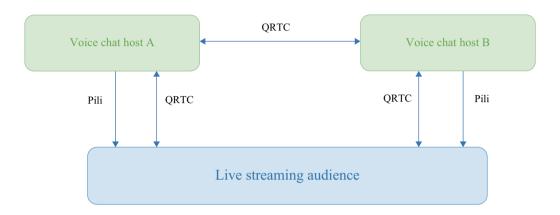
Interactive live streaming refers to streaming audiovisual content simultaneously recorded and broadcast over the Internet in real-time or near real-time, where the audience can interact, participate, or influence the streaming experience in prescribed manners. When compared to our QCDN product which addresses primarily the use case of playback of audiovisual content, our interactive live streaming products address the use cases of real-time audiovisual distribution from host to audience. Our interactive live streaming products cater to developers' various needs of cost-efficiency and low latency for different use cases in live streaming and real-time interactions. We offer end-to-end solution modules with various functions including live stream publishing, transcoding, time-shifting, data processing and monitoring, real-time communication etc., with low latency, high stability and high availability. In addition, we offer our customers various additional features in the form of SDKs covering substantially all use cases in short videos and live streaming, such as filming, editing and publishing.

Key features of our interactive live streaming products include:

- Quality and reliability We offer high quality and reliable live streaming and real-time
  interaction. Our platform delivers high performance around latency and media quality, and
  works under challenging network conditions. Our customers can take comfort from our
  service level agreements that provide assurances on availability, such as uptime, and
  experience, such as latency.
- Comprehensive functionality We offer a breadth of functionality by providing a spectrum of building blocks through APIs/SDKs, product use cases and third-party plugins that improve our customers' offerings and enhance end-user experience, such as HLS time-shifting, live stream recording, stream video views counting, among others.
- Security and compliance Multiple methods of authentication, including IP restrictions, timestamp hotlink protection (an authentication method by limiting the effective time of a link with the use of a timestamp) and call back authentication, among others, are applied to maximize data security. In addition, utilizing features such as content monitoring of Dora, we help our customers meet various compliance requirements.

Our interactive live streaming products are offered to our customers on public cloud which is charged based on usage.

Our interactive live streaming products address the distribution of real-time audiovisual content from the host to the audience as well as real-time interactions between hosts and between host and audience. In a typical multi-host voice chat scenario, the hosts broadcast real-time audiovisual content through Pili (our live streaming distribution tool) to the user terminals of the audience (such as mobile devices and web pages). In addition, QRTC (our real-time content transmission tool) can simultaneously receive and broadcast content from other hosts and audience, enabling features such as video conferencing and interactive live streaming involving multiple hosts and audience. The below diagram illustrates a typical business flow of our interactive live streaming products.



Dora - Intelligent media data analytics platform

Dora is our cloud-based intelligent media data analytics platform, offering a wide array of data processing and analytics capabilities. Media data analytics requires significant resource investment, advanced technology and complex functional systems. We offer Dora to address these requirements. Leveraging deep learning technologies, Dora provides intelligent data identification, monitoring and analytics functions, enabling our users to process massive volume of audiovisual content on a daily basis.

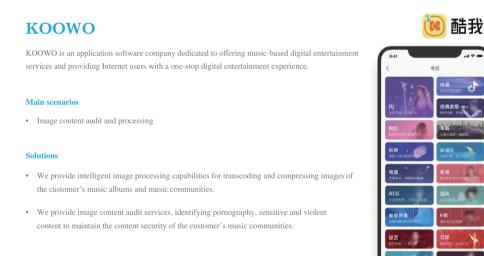
## Key features of Dora include:

- *Media data processing* Dora offers both basic and advanced processing of images, audio and video, including format conversion, editing, image enhancement, transcoding and portrait beautification, among others.
- Cognitive services We offer cognitive services using deep learning algorithms, such as facial recognition, scenes and objects detection and labeling of media content. We also provide content monitoring features to help customers meet various compliance requirements.
- Customizable features Dora also provides our customers with a rich collection of open APIs/SDKs, allowing them to easily access and integrate various features developed by our business partners based on the individual needs and requirements of our customers.

Through the multimedia data processing capabilities (such as multimedia quality analysis and multimedia content improvement) and intelligent multimedia processing capabilities (such as business security and intelligent recognition related algorithms), we provide a wide array of audiovisual processing capabilities across multiple business application scenarios such as intelligent analysis of camera content, intelligent labeling of media resources, intelligent monitoring, etc. The following diagram illustrates Dora's core competencies:



Dora can be offered to most of our customers on public cloud, which is charged based on API calls or usage, and to a lesser extent, can be deployed on a private cloud built for our customers, which is charged on a project basis.



## **Our APaaS solutions**

With over a decade of experience in the audiovisual cloud service industry, we have developed understanding of audiovisual scenarios and gained insight into the scenario-based demands of different customers. We have also developed a low-code platform which provides our users with a comprehensive suite of customizable audiovisual capabilities and an intuitive application development environment, enabling them to efficiently develop new applications without the need to engage in the prolonged process of writing complicated codes and performing extensive script tests. By combining scenario-based knowhow with our MPaaS capabilities delivered through a low-code platform, we formally launched our APaaS business in September 2021 that covers a range of major audiovisual scenarios.

Key features of our APaaS solutions include:

- Highly customized scenario-based solutions Our scenario-based APaaS solutions empower enterprise and individual developers to quickly create, process and distribute audiovisual content that can meet the different customized needs based on their business scenarios.
- *High openness* Our APaaS solutions provide an open platform where software developers can participate in the development of our platform and contribute to the audiovisual capabilities underlying our platform, enabling our users to access a more comprehensive and up-to-date suite of audiovisual capabilities while creating commercial value for us.
- *High compatibility with various systems* Our low-code platform is broadly compatible with a variety of mainstream systems and can be easily connected to external systems which significantly enhance the accessibility of our APaaS solutions.

Leveraging our experience accumulated from our MPaaS business over the years, we have quickly expanded our APaaS solutions across five major application scenarios, including (i) social entertainment, (ii) video marketing, (iii) visual networking, (iv) smart new media and (v) metaverse. The ever-changing audiovisual industry means that the boundaries of audiovisual application scenarios are subject to constant changes. We will continue to build upon our "1+N" (i.e. one platform and multiple scenarios) strategy to develop and iterate our APaaS solutions to cater for the evolving clients' needs and technological innovation, as well as to replicate our success in our existing application scenarios to new ones as and when the business opportunity arises.

According to iResearch, in 2023, we are the second largest audiovisual APaaS provider in China, with a market share of 14.1%. In 2023, we had 2,597 APaaS paying customers which represented a 32.0% increase from 2022 and a customer retention rate of 87.9%. For the three months ended March 31, 2024, we had 2,303 APaaS paying customers which represented a 23.4% increase from the same period in 2023 and a customer retention rate of 93.7%.

During the Track Record Period, a significant number of our APaaS paying customers were upgraded from our MPaaS paying customers as the APaaS solutions we offer are attractive to a large customer base with demand for more intuitive and easy-to-access application development environment and tools which cater specifically for their scenario-based business needs, enabling them to build complex audiovisual applications more efficiently.

The following table sets forth the ratio of APaaS customers which were upgraded from MPaaS customers during the periods indicated:

				For the three	months
	For the year ended December 31,			ended March 31,	
	2021	2022	2023	2023	2024
Ratio of APaaS customers (cumulative)					
upgraded from MPaaS customers (%)	96.0	94.7	91.3	95.3	92.4

Notwithstanding the upgrade from MPaaS customers to APaaS, a significant number of our customers simultaneously utilize our MPaaS products and APaaS solutions after the upgrade. The number of APaaS customers upgraded from MPaaS which continued to use our MPaaS products for the three years ended December 31, 2023 and the three months ended March 31, 2024 was 159, 322, 459 and 275, respectively.

Apart from upgrade from MPaaS customers, we have seen a gradual increase in the number of new customers which exclusively use our APaaS solutions and a significant increase in their average revenue contribution. The following table sets forth the number of our new APaaS customers (i.e. not upgraded from MPaaS customers) and their average revenue contribution during the periods indicated:

	For the yea	r ended Dece	For the three months ended March 31,		
	2021	2022	2023	2023	2024
Number of new APaaS customers  Average revenue contribution from new APaaS	53	69	162	30	35
customers (RMB)	8,079	138,653	244,978	346,795	424,853

The following table sets forth a breakdown of our revenue from APaaS solutions by application scenarios, categorized according to the scenario-based solutions provided to our APaaS customers, in absolute amounts and as a percentage of our revenue from APaaS solutions for the periods indicated.

	202		•	ear ended December 31, 2022 2023				For the three months ended March 31, 2024	
	% of total APaaS			% of total APaaS		% of total APaaS		% of total APaaS	
	Revenue	revenue	Revenue	revenue	Revenue	revenue	Revenue	revenue	
	RMB'000	%	RMB'000	%	RMB'000	%	RMB'000	%	
Social entertainment	14,450	58.1	97,770	50.4	86,796	30.9	27,754	33.3	
Video marketing	9,446	37.9	87,357	45.0	170,261	60.5	45,249	54.4	
Visual networking	404	1.6	5,507	2.8	18,935	6.7	8,991	10.8	
Smart new media	601	2.4	3,212	1.7	5,063	1.8	1,150	1.4	
Metaverse			167	0.1	304	0.1	94	0.1	
Total	24,901	100.0	194,013	100.0	281,359	100.0	83,238	100.0	

We primarily charge our APaaS paying customers by actual usage or service packages (equipped with fixed storage, data, software pack, etc.). The following table sets out the number of APaaS paying customers and their average revenue contribution during the periods indicated. For detailed discussion on the retention rates and expansion rates of APaaS paying customers, please refer to the section headed "Business — Key Operating Metrics" in this document.

				For the three	e months	
	For the year	ended Dece	mber 31,	ended March 31,		
	2021	2022	2023	2023	2024	
Number of APaaS paying customers	1,319	1,967	2,597	1,867	2,303	
<ul><li>Social entertainment</li></ul>	531	792	899	702	752	
<ul> <li>Video marketing</li> </ul>	699	1,017	1,474	1,004	1,318	
- Visual networking	70	116	172	122	165	
- Smart new media	18	39	65	43	65	
- Metaverse	1	3	9	2	7	
Average revenue contribution of APaaS paying						
customers (RMB)	18,879	98,634	108,340	34,319	36,143	

The following table sets forth the movement in the number of APaaS paying customers during the periods indicated:

			For the three months		
	For the year ended December 31,			ended March 31,	
	2021	2022	2023	2023	2024
Number of APaaS paying customers upgraded					
from MPaaS paying customers (1)(6)	1,266	1,862	2,371	1,779	2,128
Ratio of APaaS paying customers upgraded					
from MPaaS paying customers (2) (%)	96.0	94.7	91.3	95.3	92.4
Number of APaaS paying customers upgraded					
from MPaaS which continue to use our					
MPaaS products <sup>(3)</sup>	159	322	459	170	275
Number of new APaaS paying customers (4)(6)	53	69	161	30	35
Average contribution of new APaaS paying					
customers <sup>(5)</sup> (RMB)	8,079	138,653	244,978	346,795	424,853
Contribution of new APaaS paying customers as					
a percentage of APaaS revenue (%)	1.7	4.9	14.0	16.2	17.9

Notes:

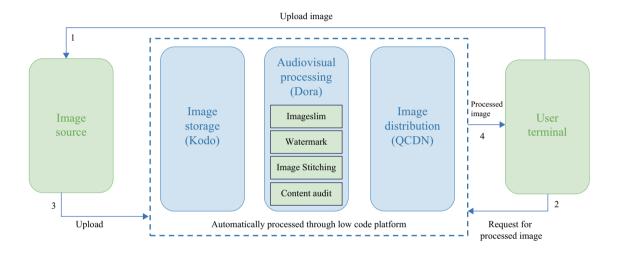
- (1) The number of APaaS paying customers upgraded from MPaaS customers represents the number of APaaS paying customers in the current year/period which have been upgraded from MPaaS paying customers in the previous or current years/periods. For the avoidance of doubt, the number of APaaS paying customers upgraded from MPaaS customers for the three months ended March 31, 2023 and 2024 takes into account only the number of customers which (i) first became our customers by purchasing our MPaaS products; and (ii) have made revenue contribution to APaaS for the three months ended March 31, 2023 and 2024, respectively.
- (2) The ratio of APaaS paying customers upgraded from MPaaS paying customers represents the percentage of the cumulative number of APaaS paying customers in the current year/period which have been upgraded from MPaaS paying customers in the previous or current years/periods over the total number of APaaS paying customers in the current year/period.
- (3) The number of APaaS customers upgraded from MPaaS which continue to use our MPaaS products represents the number of APaaS paying customers in the current year/period which (a) have been upgraded from MPaaS paying customers in the previous or current years/periods and (b) have continued to contribute to the revenue of our MPaaS business since the upgrade.
- (4) The number of new APaaS paying customers represents the number of APaaS paying customers which were not upgraded from MPaaS paying customers in the previous or current years/periods and were not our previous APaaS paying customers.
- (5) The average contribution of new APaaS paying customers represents the average revenue generated by each new APaaS paying customer during the year/period.
- (6) The sum of the number of APaaS paying customers upgraded from MPaaS paying customers and the number of new APaaS paying customers may not add up to the number of APaaS paying customers for the relevant year/period because the APaaS paying customers from the previous year/period who continue to purchase our APaaS solutions are also taken into account for the purpose of calculating the number of APaaS paying customers for the current year/period.

#### Social entertainment

Under the social entertainment scenario, we provide one-stop solutions for different use cases of social entertainment of our customers which involve the processing, distribution and live streaming of audiovisual content. As of the Latest Practicable Date, we have successfully developed the following solutions under the social entertainment scenario: image processing and distribution, short video processing and on demand, long video processing and on demand, file distribution and download, and live streaming of events/shows.

Case study – Image processing and distribution solution

Traditional image processing and distribution service providers often adopt a fragmented approach in providing their service, which means customers need to procure separate products for image storage, processing and distribution and connect their applications via various APIs/SDKs and conduct multiple testing in order to access the full functionality. Our image processing and distribution solution can provide a one-stop solution simplifying the entire service delivery process. Taking e-commerce image processing as an example, our customers only need to access our APaaS solution via the intuitive low code platform, where they can customize certain image processing functions and basic configurations when uploading images, after which all operations will be automatically processed by our system. The below diagram illustrates the general workflow of our image processing and distribution solution:



As shown in the above diagram, when a user terminal (such as mobile device and web page) requests an image file through our image processing and distribution solution, our QCDN is triggered and automatically sends a download request to Kodo, which simultaneously utilizes the image processing capabilities of Dora based on the customer's configurations and returns the processed image back to QCDN. The processed image is automatically stored on Kodo and distributes back to the user terminal via QCDN. Throughout this entire process, there is no direct interaction between the user terminal and our low code platform. Our customers are only responsible for customizing the configurations and are not required to write codes to connect to the APIs/SDKs corresponding to the image processing functionality of our platform or understand the technical aspects of the interactions between different components, thus greatly lowering the technological barrier for using our audiovisual services. Along with the significant growth of e-commerce platform, the demand for processing image, from storage to style processing, review and copyright protection, has seen significant growth. Our one-stop APaaS solution meets the growing demand for image processing, providing a suite of services such as image upload acceleration, processing, review, storage and content distribution.

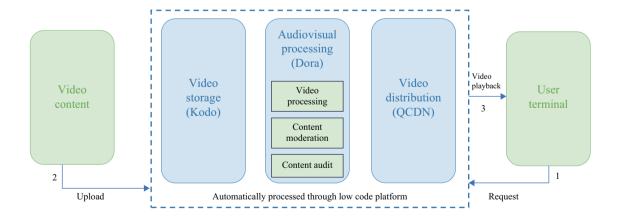
Our one-stop solution for image processing and distribution leverages our underlying MPaaS capabilities as follows:

- Cloud storage The images from our customers' e-commerce platforms will be automatically stored on Kodo.
- Processing and analytical tools After images are uploaded to Kodo, they will be processed by our cloud-native multimedia processing and analytics tools under the Dora platform, such as standardized formatting, cropping and streamlining, application of watermarks and identification of violent and pornography contents.
- Content distribution network When our customers' end users request access to the corresponding images, our QCDN will be deployed to accelerate the data network and rout the users through the nearest path, therefore enabling fast loading of pages and improving user experience.

For example, a leading interest-driven mobile social platform in China which provides its users with functions such as mobile game chat rooms and social chat rooms is a customer using our APaaS social entertainment solution during the Track Record Period. Our APaaS solution supports convenient upload, processing and distribution and transcoding of vast amount of audiovisual content (including image, video and audio content) of its over one million of daily active users.

## Case study - Audiovisual on demand solution

We provide a one-stop audiovisual on demand solution which covers the majority of the audiovisual playback scenarios, such as short videos on demand, long videos on demand and podcasts. We enable integrated management of the entire process including data upload, processing, content audit, storage and delivery. The below diagram illustrates the general workflow of our audiovisual on demand solution:



As illustrated in the above diagram, our audiovisual on demand solution supports the distribution of pre-produced videos for playback on user terminals such as mobile devices and web pages. In a typical MPaaS scenario, our customers would store videos in Kodo, utilize Dora for video processing or content moderation, and distribute the video content to user terminals using QCDN, which require strong technical development capabilities on the part of our customers to write codes to connect to these capabilities via discrete APIs/SDKs. Our APaaS audiovisual on demand solution packages these capabilities into a single solution for easy access and configuration of our customers. It includes a user-friendly configuration interface that allows customers to configure video upload, storage, processing, content review and distribution in a step-by-step approach. Throughout the entire process, there is no direct interaction between the user terminal and our low code platform. This eliminates the need for additional development by our customers while enabling them to enjoy the full array of audiovisual functionalities offered by us.

# Changba

Changba is a music content community application which supports karaoke, recorded singing, live streaming and other functions.

#### Main scenario

· Audiovisual on demand solution under social entertainment scenario

#### Solutions

- · We provide one-stop audiovisual capabilities, including music video data on demand and download.
- We provide data storage and content audit services, including pornography and sensitive person identification, helping to build a more secure Internet environment.



#### Video marketing

Our video marketing scenario provides solutions encompassing different use cases of marketing which involves the use of audiovisual content, helping our customers reach a large number of their target consumers simultaneously online. By combining our various MPaaS capabilities such as interactive live streaming and our scenario-based knowhow in connection with marketing strategies, we empower our customers to swiftly build their own customized live streaming platforms with easy access and simple setup to enhance user loyalty and promote conversion. As of the Latest Practicable Date, under our video marketing scenario, we had successfully developed the following solutions: enterprise live streaming, interactive marketing, low code marketing live streaming, unified message dissemination (which is a marketing approach integrating multiple communication channels, such as emails, text messages and social media, to achieve instantaneous and widespread dissemination of messages from one central location) and short video marketing.

Case study - Enterprise live streaming solution

Live streaming has been increasingly applied to marketing events, training, conferences and other common marketing scenarios of enterprises, with an aim to foster a closer relationship with their users through highly interactive marketing strategies. Our APaaS enterprise live streaming solution empowers our enterprise customers with a quick access to live streaming services, where their marketing content from their online shops is accurately streamed to the audience, i.e. their target customers, in real-time. Live streaming data, which is processed by our platform and automatically generated for our customers depending on their configurations, can also be used by our enterprise customers to improve their operational and marketing strategies.

Features of our APaaS enterprise live streaming solution include:

- Quick assembly of live streaming platform Leveraging our easy-to-use and intuitive toolkit via our low code platform, our customers can quickly assemble a customized interactive live streaming platform, which can provide wide range of functionalities including initiation of live streaming, real-time audio interaction with audience, real-time bullet chats and live streaming marketing of products.
- Strong extension capability All our components and modules, such as real-time voice chats and live streaming management, are built into our platform and readily accessible via APIs/SDKs on our low-code platform. Our customers can quickly assemble the components and modules according to their needs to customize the applications, all dispensing with the need to write complicated codes to connect to the respective APIs/SDKs. They can also add new components and modules to their applications via our platform subsequently as the need arises without the need to rewrite the codes.
- Enhanced security of user data Leveraging our low code platform, our customers are free to decide the storage location of their business data, from local IDCs to designated cloud servers, saving the time and resources for our customers to establish separate connections with and procure service from the relevant suppliers.

# **Kingsoft Office**

Kingsoft Office is the largest self-developed office software developer in China. It provides office software products and services such as WPS Office, Kingsoft Document, Docer, and Kingsoft PowerWord.

#### Main scenario

Enterprise live streaming solution under the video marketing scenario

#### Solution

- We provide intelligent image processing capabilities and massive data storage of marketing content.
- We support accelerated distribution of marketing image content to achieve rapid reach to users
  and our end-to-end verification function improves the success rate of content distribution to



# Visual networking

In the visual networking scenario, we provide one-stop solution that integrates audiovisual cloud management, computing engines, scenario awareness analysis, cloud encoding and decoding, video intelligent processing, and other audiovisual functionalities that support a wide range of IoT devices and have applications across a wide range of scenarios in our daily life, all accessible through our intuitive low-code platform which is designed to cater to different application scenarios with lower development complexity on the part of our customers. For examples, our solution can be used in smart homes, visual intelligence on vehicles, intelligent industrial interconnection, remote monitoring at pre-schools, among others. As of the Latest Practicable Date, under the scenario of visual networking, we had successfully developed solutions including smart homes, smart venues and intelligent cloud connected camera.

#### Case study - Intelligent Cloud Connected Camera Solution

We provide one-stop intelligent cloud connected camera solution for different venues such as vehicles and smart homes. By using our solution, video data from the camera device is uploaded to the cloud in real time, processed on our cloud based on the functions configured by our customers according to their scenario needs, and streamed to the user device to enable real time monitoring. Through the processing of camera data on the cloud, we can further optimize the underlying value of massive data volume and address the demands of more complex business scenarios.

# Shenzhou Eagle — Zhangtong Home

Zhangtong Home is an interactive learning exchange platform based on a combination of "hardware + software + service + mobile Internet + cloud technology". Parents can learn of the latest kindergarten news, communicate one-on-one with teachers and watch real-time videos, thus achieving a seamless connection between home and school

#### Main scenario

· Intelligent cloud connected camera solution under the visual networking scenario

#### Solutions

 We provide integrated monitoring, management and warning services and support real-time streaming and playback of audiovisual content on surveillance cameras or mobile devices.



#### Smart new media

Under the smart new media scenario, we have developed television broadcasting related solutions covering the core television broadcasting work streams from filming, editing, multimodal analysis to content audit, data management and content storage. Through cooperation with leading television broadcasting enterprises, we have developed real-time management and monitoring services for filming under the 5G environment. In addition, leveraging our strong AI recognition and analysis capabilities, we are able to complete fast editing and streaming of large volume of content into the data management system in real time with low latency. While utilizing the same audiovisual capabilities our MPaaS products, our low code platform and scenario-based knowhow enable our customers to quickly assemble the necessary services that cater to their specific business needs at reduced technological development costs. As of the Latest Practicable Date, under the scenario of smart new media, we had successfully developed various solutions including intelligent media resources and new media filming and production.

Case study – New media filming and production solution

The conventional television variety show's filming and production process typically takes at least ten days, from site preparation and on-site filming to footage delivery, clustering and transcoding. The development of 5G network, ultra-high-definition video and other advanced technologies increase the demand for alternatives to the traditional production process, including multi-camera centralized management, remote monitoring of production and quick editing of massive raw audiovisual contents.

Our APaaS new media filming and production solution is primarily delivered through a 5G smart box, which enables centralized management and remote control of the filming equipment. The acquisition terminal of the 5G smart box is generally compatible with mainstream interfaces and common video streaming protocols. Its playback terminal supports up to nine concurrent real-time video streams, as well as real-time preview, text markup and various other functions. Our cloud storage enables video file review for a maximum of 30 days. The 5G smart box also provides a wide array of preliminary editing capabilities, including (i) voiceprint recognition, which extracts and identifies the voice information in an audio file by comparing with the voiceprint database; (ii) face recognition, which enables accurate recognition of facial information of guests in a video file; and (iii) scene recognition, which enables identification of footage types based on analysis of information such as the number of people in a scene.

We believe our APaaS solution helps effectively address the pain points underlying conventional media production. Key advantages of our APaaS solution include:

- Real-time monitoring Based on our video live streaming device management capabilities,
   TV directors can monitor the filming process and control multiple devices in real time through web or mobile devices. Early warnings can be delivered to the monitoring personnel in the event of defects or malfunctions of filming equipment.
- Improved efficiency Our intelligent preliminary editing capabilities also enable various advanced functions which were previously conducted during the more time-consuming post-production processes, such as accurate positioning enabled by our AI capabilities, thus having the potential of significantly shortening the production cycle and driving down the post-production costs.

Reduced risk - Our automatic cloud backup services help address risks associated with hard
disk loss or damage. Our platform also enables remote monitoring and filming which is
particularly useful in adverse circumstances such as the COVID-19 pandemic. Our intelligent
preliminary editing capabilities enable first cut of raw video footages while not
compromising the retention of useful contents for further editing.

A post-production technology company of one of the largest TV stations in the PRC well-known for its entertainment shows adopts our new media filming and production solution to manage equipment and tasks during the production process. Our solution enables television directors to achieve real-time monitoring of the production process and supports quick editing of raw footages, batch processing of data, thus improving the efficiency from filming to post-production.

#### Metaverse

In the metaverse scenario, we combine our audiovisual capabilities with 3D visual engine technologies to enable customers to build metaverse interaction scenes via our low code platform. Our solutions enable scene generation, digital person creation and intra-scenario audiovisual communication which are essential components in allowing interpersonal communication in the metaverse and have huge potential for our customers to expand their business and create commercial value beyond reality into the metaverse scenario. As of the Latest Practicable Date, under the metaverse scenario, we had successfully developed the following solutions: virtual scenario generation, digital person, metaverse XR live streaming.

Case study – Digital person solution for cultural tourism

In this solution, a digital person with distinctive characteristics is created as an avatar to represent cultural tourism spot. Such digital person may be used extensively in promotional videos or virtual live streaming to draw resonance with the audience. Moreover, through the combination of autostereoscopy, holographic projection, AR/VR and motion capture technologies, digital persons guide tourists to visit sightseeing spots and natural sceneries, watch cultural performances and engage in 3D virtual reality interactions.

# Shanghai Pujiang Country Park Miracle Garden

#### Main scenarios

· Digital person solution for cultural tourism under the metaverse scenario

#### Solutions

- Users can view the park landscape anywhere any anytime through the online metaverse cultural tourism mini program on WeChat.
- Users can quickly generate their personalized park tour Vlogs using the prescribed templates and upload to their social media platform.
- Through the mini program, users can meet other tourists while visiting the park, and interact with each other
  with their own metaverse image.

Shanghai Pujiang Country Park
Miracle Garden

The following table sets forth the major differences between our MPaaS and APaaS businesses in terms of key features, drawbacks, target customers, pricing model, value added to our customers, underlying technology infrastructure and market positioning in China's audiovisual cloud service market:

	MPaaS	APaaS
Key features	• Enabled through discrete APIs or SDKs pertaining to individual audiovisual capabilities, which are more readily scalable and particularly suitable for resource-heavy business scenarios	Delivered in the form of scenario-based solutions with access to customized audiovisual capabilities through our low-code platform
Value added to our customers	<ul><li>High flexibility</li><li>Strong stability and reliability</li></ul>	<ul> <li>Simple and easy access</li> <li>Diverse audiovisual capabilities catered to specific business scenarios</li> </ul>
Drawbacks	<ul> <li>Requires stronger technical capabilities to access our products</li> <li>Pricing more significantly influenced by resource price fluctuations</li> </ul>	Lesser extent of scalability compared to MPaaS products
Target customers	Customers with stronger technological capabilities requiring higher flexibility	<ul> <li>Customers with relatively limited technological capabilities and clearly delineated business scenarios requiring rapid verification of their business models</li> <li>Customers with requisite technological capabilities but cautious in developing such capabilities with its own resources</li> </ul>
Pricing model	<ul> <li>(For public cloud) Typically charged a monthly service fee based on actual usage</li> <li>(For private cloud) Typically charged a fee based on the scale of software and hardware required and duration of authorization for private cloud</li> </ul>	<ul> <li>(For public cloud) Typically charged a monthly service fee based on actual usage or based on service package</li> <li>(For private cloud) Typically charged a one-off service fee based on the specific needs of the project</li> </ul>

	MPaaS	APaaS		
Underlying technology infrastructure	<ul> <li>Basic audiovisual capabilities, resource scheduling, fault isolation, etc.</li> <li>AI technologies</li> </ul>	<ul> <li>Low-code platform</li> <li>All MPaaS capabilities</li> <li>Supports upgrade with simple plugins to incorporate new features</li> </ul>		
Market positioning in China's audiovisual cloud service market	<ul> <li>Professional developers can use for highly customized application development</li> </ul>	<ul> <li>Entry-level developers or personnel with no programming knowledge can directly use for highly efficient application development</li> </ul>		

The following table sets forth a detailed comparison of the target customers for our MPaaS products and APaaS solutions in terms of their industries, business nature, size and positions within their respective industries, spending patterns, and spending level:

	MPaaS target customers	APaaS target customers	
Industries	• Spans through a wide array of industries, primarily consisting of companies which are in the TMT (technology, media and telecom) sectors, such as short video communities, e-commerce platforms, technological platforms, etc.	• Spans through a wide array of industries, in particular, companies operating in real economy, including finance, energy, manufacturing, real estate, etc.	
Business nature	<ul> <li>Typically companies with business models driven by advertising traffic</li> </ul>	• Typically companies which are in the process of digital transformation	
Size and positions within their industries	• Top, medium-sized and long-tail enterprises	Small and medium-sized enterprises	
Spending patterns	Typically procurement based on actual demand and occasionally delivered on a project basis	<ul> <li>Typically procurement based on annual budgets and delivered on a project basis</li> </ul>	
Spending levels	• Top and medium-sized enterprises generally have higher spending levels, while a large number of long-tail enterprises have generally lower spending levels	Customers normally have moderate spending power	

#### **Others**

We have developed Pandora to provide our customers with a DPaaS solution. Pandora is a real-time machine data analytics platform, comprised of collection, indexing, search, reporting, analysis, alerting, monitoring and data management capabilities. Pandora enables our customers to develop, run, and manage data analytics applications without the need to build and maintain the infrastructure themselves from scratch.

Pandora can be deployed on-premise at the customers' servers, which is charged on a project basis. In addition, Pandora can also be provided to our customers on public cloud which is charged based on usage. As we are primarily engaged in the audiovisual cloud service market, we have no plans to expand the DPaaS business while we will continue to perform the existing contracts with our customers.

We also provide other cloud services, primarily including QVM, which is a comprehensive suite of solutions including cloud servers, databases, network, security and storage. We provide secure, scalable, on-demand computing resources, enabling customers to flexibly deploy applications and workloads. For our QVM service, we charge our customers based on usage. We provide other cloud services to our customers according to their demand.

## **Pipeline**

The following table sets forth our pipeline of service offering and their respective features and expected commercialization timetable:

		Expected
		commercialization
Pipeline service	Features	timetable

APaaS solutions – expand the reach of APaaS solutions across application scenarios

Television broadcasting filming and production cloud solution under the smart new media scenario

It builds upon and further consolidates our capabilities and experience in variety show filming and production and extends our capabilities to the filing and production process in the general television broadcasting industry. Our reliable cloud service scheduling capabilities enable flexible combination of various audiovisual cloud services, including for example, intelligent filming, intelligent media resources and intelligent editing, thereby further lowering the technical threshold of deployment by the production team.

Second half of 2024

Pipeline service	Features	Expected commercialization timetable
AIGC digital person solution	It is developed based on the digital person solution under the metaverse scenario and we plan to design 2D and 3D digital persons that closely resemble humans in appearances, expressions and interactions. These digital persons can be used for live broadcasting and live streaming marketing purposes, thus helping save costs and resources for the customers while improving user engagement and satisfaction.	Second half of 2024
Agricultural monitoring solution under the visual networking scenario	It enables security monitoring at agricultural sites and development of algorithms related to the growth and health of agricultural and cattle products. Through connecting camera directly on the cloud and AI processing of gathered data, it aims to improve the digitalization and efficiency in the agricultural industry.	First half of 2025
AIGC 3D content generation platform	It builds upon our digital person generation, 3D object generation and 3D material and picture generation capabilities, which can be used in 3D scene and character generation, as well as game script and code generation, thus accelerating the content creation process and improving the overall quality of their audiovisual content.	Second half of 2025
	olidate and deepen our edge in MPaaS capabilities to reduce a ly chain resources and improve R&D efficiency	access cost of
Cloud edge resource scheduling platform	It enables the resource monitoring and scheduling of media resources at the cloud edge, and supports edge computing scenarios which help reduce latency. It also enables scaling of resources to accommodate changing demands on workloads.	Second half of 2024
AIGC Kodo solution	It realizes the integration of data lake and data storage and is compatible with mainstream vector databases (including various open source data, unstructured data and big data, etc.), which can be used to deliver a one-stop AIGC data storage solution and help reduce storage costs and processing time, while enhancing data security and reliability.	Second half of 2024

#### BUSINESS SUSTAINABILITY AND PATH TO PROFITABILITY

We did not achieve a net profit during the Track Record Period, mainly attributable to the combined effects of the following:

Prioritization of business expansion over short-term profitability: During the Track Record Period, we prioritized the development and continuous expansion of our audiovisual MPaaS and APaaS business, particularly the relatively new and more profitable APaaS business officially launched in 2021, which we believe to have high market growth potential. According to iResearch, the audiovisual APaaS market size in China was RMB2.0 billion in 2023 and is expected to reach RMB14.4 billion in 2028, with a CAGR of 48.6%. As the APaaS market in China is still at its early development stage in China and experiencing fast growth, we strategically invested in our business and prioritized the business expansion and market share growth instead of short-term profitability to capture the market opportunities in the rising market. For example, the research and development relating to the development of our services, including our APaaS business, involved considerable investments, and such investments had not yet fully entered the period of return. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we have incurred R&D expenses amounting to RMB143.4 million, RMB128.8 million, RMB128.0 million and RMB33.6 million, respectively. In particular, we have made substantial investments in developing new functionality in our APaaS solutions, some of which have not yet brought substantial revenue but we believe to have high market potential, including, among others, (i) audiovisual on demand solution under the social entertainment scenario; (ii) enterprise live streaming solution under the video marketing scenario; (iii) intelligent cloud connected camera solution under the visual networking scenario; (iv) new media filming and production solution under the smart new media scenario; and (v) digital person solution under the metaverse scenario. For details of the market potential of these solutions, please refer to the paragraph headed "— (i) Focusing on and Deepening Our APaaS Business" in this section.

The loss-making position of the Company during the Track Record Period is also in line with the general trend of the industry in terms of the time taken to achieve profitability. According to iResearch, companies operating in the audiovisual PaaS industry have generally yet to achieve profitability, given their heavy investments upfront especially in research and the general pricing strategies adopted to quickly capture additional market share. It usually takes over ten years for audiovisual cloud service providers to achieve profitability. For instance, Competitor A (as listed in the paragraph headed "Industry Overview — Competitive Landscape"), a leading audiovisual cloud service provider established in 2009, announced its first annual positive net profit in 2022 fiscal year, taking 13 years to turn profit. Among the top five audiovisual PaaS competitors, only one of them have reached profitability as of 2023, according to iResearch.

- (b) Decision to scale down certain business segments in response to changing market circumstances: While we recorded strong revenue growth of 35.1% in 2021 under exceptionally favourable market circumstances primarily as a result of the sharp increase in cloud storage demand driven by the outbreak of COVID-19 and rapid growth in investment in private and public cloud storage by various industries which benefited our Kodo business, we made various decisions to adjust our business focus in response to the changing market circumstances in 2022. In particular, the travel restrictions associated with the prolonged resurgence of COVID-19 pandemic as well as the shortage in supply of certain semiconductor chips which are key components of our all-in-one servers we procured for some of our private cloud customers, which required domestic deployment of servers with audiovisual software and solutions pre-installed, caused a supply chain disruption to all-in-one server business, which constituted a significant part of our Kodo business. In light of the above events, we made the decision in 2022 to scale down our all-in-one server business. As a result, our revenue from our Kodo business decreased from RMB650.8 million in 2021 to RMB320.4 million in 2022 and our total revenue and gross profit decreased accordingly. As COVID-19 became largely contained in 2023 leading to the recovery of supply chain stability, we reallocated our resources to our Kodo business in 2023. As our customer engagement efforts typically require time to realize into actual revenue growth in particular since procurement of Kodo products is usually conducted on a project basis and thus it takes time for customers to switch from one service provider to another, our revenue from our Kodo business remained at a relatively low level of RMB297.8 million in 2023 when compared to 2022. On the other hand, the above events did not have any material impact on our APaaS business since our APaaS business was at an early stage of development and therefore registered significant growth and it did not involve any all-in-one servers provided to our customers.
- (c) Non-recurring items: We have incurred certain one-off expenses during the Track Record Period, such as consulting and other professional service fees of RMB40.8 million in 2021 mainly in connection with our previous listing attempt on NASDAQ in 2021. We also incurred severance payments associated with the streamline of our employee structure in 2021, 2022, 2023 and the three months ended March 31, 2024 of RMB10.1 million, RMB36.6 million, RMB9.2 million and RMB0.2 million, respectively, and we incurred listing expenses of RMB18.6 million and RMB7.5 million in 2023 and for the three months ended March 31, 2024, respectively. In addition, we recognized fair value losses on convertible redeemable preference shares in 2021, 2022, 2023 and the three months ended March 31, 2024 of RMB96.5 million, RMB83.8 million, RMB156.1 million and RMB111.5 million, respectively. All these had an adverse impact on our financial performance during the Track Record Period.

## Path to profitability

Through years of development, we have achieved substantial market share and leading position in the audiovisual PaaS industry, particularly the relatively new audiovisual APaaS industry. According to iResearch, we are the third largest audiovisual PaaS provider and the second largest audiovisual APaaS provider in China in terms of revenue in 2023. Going forward, we intend to focus more on achieving profitability while expanding our business. Our adjusted net loss (non-IFRS measure) reduced from RMB118.7 million in 2022 to RMB115.6 million in 2023 and from RMB30.7 million for the three months ended March 31, 2023 to RMB24.2 million for the three months ended March 31, 2024, and our adjusted net loss margin (non-IFRS measure) reduced from 10.3% in 2022 to 8.7% in 2023 and 7.1% for the three months ended March 31, 2024, respectively. The improvement was primarily as a result of the continuous recovery of our MPaaS business, continued growth of our APaaS business, and reduction of our costs and expenses as a percentage of our revenue attributing to our cost control efforts. Such is partially offset by the fluctuation in the profit or loss from the fair value changes on financial assets at fair value through profit or loss. We expect that our adjusted net loss (non-IFRS measure) will continue to improve in the entire 2024 with the growth in the industry and our businesses and our measures implemented to further enhance our efficiency. Specifically, we plan to further enhance our financial performance by: (i) focusing on and deepening our APaaS business, (ii) maintaining and continuously strengthening our competitive advantages in our MPaaS business, (iii) expanding our customer base and our solutions to them and (iv) effectively managing costs.

# (i) Focusing on and Deepening Our APaaS Business

As the audiovisual cloud industry evolved, the demand for (i) more customization of audiovisual capabilities, (ii) deeper understanding of multiple scenarios which the customers operate in, (iii) easier access with lower technological threshold in a timely manner; (iv) more intelligent array of scenario-based audiovisual capabilities; and (v) in general, higher service quality and efficiency, has increased significantly. With over a decade of experience in the audiovisual cloud service industry, we have developed various audiovisual capabilities in our MPaaS business and understanding of audiovisual scenarios and acquired insight into the scenario-based demands of a wide range of customer base. Together with our proprietary low-code platform, we have quickly developed APaaS solutions that cover a wide range of audiovisual scenarios.

We intend to further penetrate and deepen our presence in the various application scenarios of our APaaS business to capture the opportunities in the fast-growing audiovisual APaaS market. As the audiovisual APaaS market is a new industry segment, we, as a market leader, benefit from substantial first-mover advantage such as strong negotiation power. In 2023 and the three months ended March 31, 2024, the gross profit margin of our APaaS business is 30.1% and 29.2%, as compared to 19.3% and 18.2% of our MPaaS business during the same period. We plan to further expand our APaaS business by upgrading and iterating our low-code platform and providing more value-added services under various scenarios, such as a television broadcasting filming and production cloud solution under the smart new media scenario and an agricultural monitoring solution under the visual networking scenario, to our existing and new customers.

After the formal launch of our APaaS business in 2021, we have received positive recognition for our APaaS solutions, which has led to a significant expansion in our APaaS customer base, primarily driven by (i) a widespread upgrade of our MPaaS customers that have scenario needs to use our APaaS solutions, as well as (ii) a gradual increase in new APaaS paying customers (i.e., not upgraded from MPaaS customers).

We also experienced a significant bump in spending by our new APaaS paying customers from 8,079 in 2021 to 244,978 in 2023 and 424,853 for the three months ended March 31, 2024, which is attributable to a few major factors, including (i) the feature of APaaS solutions as one-stop solutions providing easy-to-access and comprehensive capabilities to meet customers' various scenario-based demands, (ii) the constant accumulation of market confidence on and therefore willingness to spend on APaaS solutions, and (iii) our marketing and customer education efforts, for example, by adopting more proactive customer relationship management strategies to provide personalized customer support and cross-selling products and solutions or upgrading customers' profiles, which are conductive to nurturing customer loyalty and inducing higher spending. Specifically, we have (i) assembled a dedicated customer acquisition team to explore potential customers and understand their demands and preferences; (ii) employed extensive marketing and brand promotion initiatives involving different channels, advertisements, social media, industry conferences, business partnership, etc.; (iii) offered free trials and demonstrations to potential customers to increase their awareness of and acquire first-hand experience with the APaaS solutions; and (iv) engaged in multi-dimensional cooperation with our business partners to jointly promote APaaS solutions. For example, the customer acquisition team is comprised of members from (a) the product team, which is responsible for understanding and analyzing customer needs and ensuring that our APaaS solutions align with their business requirements; (b) the pre-sales team, which provides technical support and addresses customer enquiries, helping potential customers understand the technical details and advantages of our APaaS solutions; and (c) the sales team, which is responsible for direct communication and negotiation with potential customers and ensuring customer conversion and satisfaction. We expect our APaaS customer base, in particular, the number of new APaaS customers as well as their average spending, to further expand as our APaaS business reaches a mature development stage and more of our APaaS solutions become commercialized.

# (ii) Maintaining and Continuously Strengthening Our Competitive Advantages in Our MPaaS Business

We have developed a strong MPaaS business through our decade of experience in the audiovisual cloud industry in China and we will focus on maintaining such competitive advantages in light of the intensifying market competition. We have a proven track record of stability and reliability in our service offering and built a good reputation among our customers. For example, we offer multi-region disaster recovery capability to reduce operation risks from failures in any single data center. Our MPaaS products are also equipped with various security protections against isolated incidents and security failures. Therefore, our MPaaS products are able to process tens of millions of requests on a daily basis with an average availability of 99.9%. In terms of operating metrics, we have accumulated 1,303 APIs as of March 31, 2024, which is among the high end of the industry level according to iResearch. As of March 31, 2024, our MPaaS platform had a total data storage scale of 1.5EB and a total number of files stored at 494.7 billion, which place us among leading industry participants according to iResearch. Our Kodo product is able to achieve high data reliability with a redundancy rate of 1.14 on the public cloud and 1.10 on the private cloud, both of which are better than the industry average level according to iResearch.

We believe our competition with IaaS enterprises is not a zero sum game and we plan to consolidate the competitive edges of our QCDN products which is the major battleground with IaaS enterprises. According to iResearch, the audiovisual PaaS market in China is still in the period of high growth, among which the MPaaS market size is expected to reach RMB63.2 billion by 2028, representing a CAGR of 24.8% during the same period. Therefore, both existing audiovisual cloud service providers like us and new market participants such as the IaaS enterprises will be open to capture the share of the expanding market, rather than taking the shares from the existing market players. In fact, according to iResearch, the growth rate in our revenue in 2023 (i.e. 16.3%) is higher than the average growth rate of top five audiovisual PaaS service providers (including three IaaS enterprises) in China during the same period (i.e. 11.4%), and our market share in the audiovisual PaaS market has increased from 5.7% to 5.8% during the same period. For details of our competition with IaaS enterprises and the competitive edges of our OCDN product, please refer to the section headed "Business - Competition" in this document. Specifically, since CDN service is typically the major battleground in the competition with IaaS enterprises, in order to address the competition with these IaaS providers, we have (i) strengthened our business relationship with the top Internet enterprises in China, which are typically the largest customers of our QCDN product, to further consolidate our competitive edges; (ii) provided different pricing methods (e.g. based on actual usage or service package) to cater to the different business needs and distribution pattern of our customers; and (iii) engaged in the research and development of QCDN products, for example, the integration of CDN nodes and AI computing power to provide more competitive CDN products in the future. As such, we have recorded a rebound in our QCDN business in 2023 and the first quarter of 2024, recording revenue of RMB628.4 million in 2023, compared to RMB488.9 million in 2022, representing a year-over-year increase of 28.5%, and revenue of RMB176.8 million for the three months ended March 31, 2024, compared to RMB145.2 million for the three months ended March 31, 2023, representing a period-to-period increase of 21.7%, respectively. According to iResearch, the leading PaaS providers are making effort in improving their profit margin and service quality, reducing large scale sales promotions and pricing competitions and it is expected that such trend is beneficial to the profitability of the market as a whole and will contribute to a stabilizing competitive landscape.

We have always placed strong emphasis on the continuous innovation and research and development efforts to expand the service offerings and improve our existing product portfolio. In terms of MPaaS development strategy, we plan to further consolidate and deepen our edge in MPaaS capabilities to reduce access cost of customers, optimize supply chain resources and improve R&D efficiency. For example, we launched a one-stop audiovisual unified access platform in the first half of 2024, which brings together the underlying network of live streaming, real-time interaction and camera on cloud, further reducing the development complexity of audiovisual products by our customers. Specifically, the platform automatically configures storage and moderation settings once the customers complete configuration of streaming domain and playback domain when using the interactive live streaming products. This saves approximately 40% of procedures to access the interactive live streaming products on the part of the customers, thereby reducing the complexity in developing their applications and accordingly, their access costs. The cloud edge resource scheduling platform, which is expected to be commercialized by the end of 2024, will enable the resource monitoring and scheduling of media resources at the cloud edge, support edge computing scenarios which help reduce latency, and enable scaling of resources to accommodate changing demands on workloads. Specifically, it can achieve real-time monitoring of resource status at millisecond (ms) intervals. When a resource failure is detected, the platform can switch to new available resources and achieve failure recovery within seconds, whereas traditional node configurations may take several minutes to accomplish the same tasks. Therefore, the cloud edge scheduling platform can effectively achieve reduced latency when compared to the traditional method. Finally, the AIGC Kodo solution, which is expected to launch in the second half of 2024, can be used to deliver a one-stop AIGC data storage solution and help reduce storage costs and processing time. All these developments are expected to further enhance the functionality and user friendliness of our MPaaS solutions, hereby driving new demands from our existing and new MPaaS customers. Together with our relentless and continuing efforts in addressing competition as set out above, we believe we will continue our track record of effectively competing in the market.

## (iii) Expanding Our Customer Base and Building Long-term Relationship with Our Customers

We successfully expanded our customer base during the Track Record Period. The number of MPaaS paying customers increased from 68,808 in 2021 to 83,970 in 2022, and further increased to 92,480 in 2023 and from 62,311 for the three months ended March 31, 2023 to 62,563 for the three months ended March 31, 2024. We aim to cultivate user habits in using our products and services and expand our customer base. As of March 31, 2024, we had over 1,500,000 registered users, among which 643,857 were active users (Note 1). We intend to build long-term relationship with our existing customers and attract more registered users and convert them or the companies they represent into paying customers. We expect our expanded customer base will lead to increasing economies of scale, which in turn helps improve our overall profitability. Specifically:

Build long-term relationship with our customers. As one of the early market participants in (a) the audiovisual cloud industry, we have accumulated a broad customer base which has been developing rapidly alongside us. Leveraging our technologies, we are able to provide our customers with tailored products and services, at different stages of their developments, which further strengthen our long-term relationship with such customers and effectively increase average revenue from these customers, in particular, as they expand their business and increase their demand for audiovisual cloud services. For example, Customer-Supplier Group I, which is a group of companies of a Chinese social media company that provides audiovisual social networking services, and Customer H, which is a Chinese technology company listed on the Stock Exchange that operates a leading content community and social platform, have been our customers since 2015 and 2014, respectively, when both of them were still at its relatively early stage of development. Customer-Supplier Group I and Customer H continued to grow with us and have experienced significant growth in business with us throughout the years and have become our two largest customers for the year ended December 31, 2023 and the three months ended March 31, 2024. For the year ended December 31, 2023, Customer-Supplier Group I and Customer H contributed revenue of RMB157.5 million and RMB104.1 million to us, accounting for 11.8% and 7.8% of our total revenue, respectively, for the same period. For the three months ended March 31, 2024, Customer-Supplier Group I and Customer H contributed revenue of RMB55.2 million and RMB21.1 million to us, accounting for 16.1% and 6.2% of our total revenue, respectively, for the same period. Customer A, Customer H, Customer-Supplier Group I and Customer-Supplier Group J contributed to a total of 13.9%, 22.7%, 27.6% and 28.0% of our revenue in 2021, 2022, 2023 and the three months ended March 31, 2024, respectively. Our experience accumulated in the audiovisual cloud industry allows us to quickly adapt to the new market demands to enable us to enjoy first-mover advantages and grow with both start-up and more established enterprises which have promising business prospects. We plan to continue to deepen our cooperation with existing customers, with particular focus on customers with favorable business terms and good growth prospect, to build a long-term relationship.

Note:

<sup>(1)</sup> The number of active users represents the number of users which have used at least one of our products or otherwise contributed to usage of our platform during the relevant period. For the avoidance of doubt, such active users include users who engage in trial use of our products and may or may not be our paying customers.

- (b) Expand across more business scenarios of our customers and actively identify market needs. We have been focusing on creating scenario-based audiovisual solutions to cater to different scenario needs of our customers. We plan to create more solutions in the five major scenarios of our APaaS business which in turn could increase our customer base and/or their spending. For example, in the smart new media scenario, we plan to enhance the design and management of intelligent filming, intelligent media resources, intelligent editing and provide other solutions for television broadcasting media. In the visual networking scenario, we plan to develop solutions for the agricultural setting. In the metaverse scenario, we plan to create digital persons for marketing purpose. We are actively identifying and exploring unmet customer needs through various online and offline channels, including reputable industry conferences, insights from existing customers, in various industries. For example, as an active participant in industry conferences and forums of the new media industry, we have learnt about the pain points associated with the traditional production process of variety shows, which involved hundreds of cameras simultaneously working in the outdoor, frequent replacement of memory cards and directors shifting to various camera positions to monitor the shooting process, etc., which typically required heavy manpower and maintenance costs. In light of this, we have developed a new media filming and production solution to enable television directors to achieve real-time monitoring of the production process and supports quick editing of raw footages, batch processing of data, thus improving the efficiency from filming to post-production. Apart from the reputable industry conferences we have participated before, we are looking to organize or participate in over 30 exhibitions, trade fairs and industry conferences over the next five years. We aim to integrate and to extend those diversified demands into our product development platform to enable us to innovate and optimize our product and service offerings.
- Promote the conversion of registered users to paying customers. We have been focusing on (c) multiple strategies in accelerating the decision-making process of our customers and lowering the payment thresholds to encourage our non-paying registered users to convert to paying customers. For example, our platform interface has been streamlined such that our users can place orders with one click after completing user certification, thus shortening the decision-making process. Cost-effective products with lower payment thresholds, first-purchase discounts or free trials will be pushed and promoted to the non-paying customers to encourage them to spend money on our products, so as to further expand our paying customer base. For example, in November 2021, we introduced special discount on two Kodo resource packages (which bundle various individual Kodo resources at a more competitive price) for our Kodo users which have yet to purchase any of our products. Since the introduction of the promotion initiative, the daily number of Kodo customers purchasing the aforementioned resource packages increased by more than ten times. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we have recorded a conversion rate (which is calculated as the percentage of new registered users of the relevant period which have converted to paying customers during the same period) of 8.0%, 17.3%, 20.4% and 15.3%, respectively. We will consider to carry our similar promotion as appropriate to speed up the conversion of registered users to paying customers. For details, please refer to the section headed "Business - Key Operating Metrics" in this document.

## (iv) Effectively Managing Costs and Expenses

During the Track Record Period, we incurred substantial operating expenses, including selling and marketing expenses, administrative expenses and research and development costs, to scale up our business, develop new solutions and enhance our brand recognition. Notwithstanding that 2022 was a difficult year and we recorded decrease in revenue, we downsized both our sales team and administrative team and optimized our R&D team in an effort to control costs without prejudicing our operations and we managed to maintain our adjusted net loss (non-IFRS measure) at similar level as 2021 through our cost control efforts. We intend to further optimize our operating expenses by achieving economies of scale and improving sales efficiency and effectiveness. Going forward, we intend to efficiently manage costs and expenses as a percentage of total revenue and further benefit from operating leverage. Specifically:

#### Selling and marketing expenses

In 2021, 2022, 2023 and the three months ended March 31, 2024, our selling and marketing expenses amounted to RMB193.0 million, RMB147.5 million, RMB139.1 million and RMB27.4 million, respectively, representing 13.1%, 12.9%, 10.4% and 8.0% of our revenue during the same periods, respectively. The decrease in our selling and marketing expenses as a percentage of revenue since 2022 and further in 2023 and the first quarter of 2024 is attributable to our cost control efforts and the resulted personnel adjustment. Notwithstanding the cost control efforts and personnel adjustment, we expect to continue to benefit increasingly from the effect of our enhanced brand awareness which we have built. Specifically, we intend to improve our sales and marketing efficiency by adopting the following measures:

(a) We have and will continue to participate in reputable industry conferences such as World Artificial Intelligence Conference, QCon Global Software Development Summit, Global Operation Summit, Global Artificial Intelligence Technology Conference, ArchSummit, Global Internet Architecture Conference, Shanghai Cyber Security Fair and Summit Forum, Smart Manufacturing Forum, International Congress of Intelligent and Connected Vehicles Technology. These conferences and events helped us better demonstrate our latest products and services offerings, as well as research innovations, which helped us attract more developers and customers to our platform, solidifying our market leadership in the audiovisual PaaS industry. For example, we hosted a closed-door conference in Shenzhen in March 2023, which attracted more than 20 biotech companies participating in the conference, which in turn converted into multi-million worth of contract value with the participating companies for the year ended December 31, 2023. We will continue to focus on these efficient and less labor-intensive channels in enhancing our selling and marketing efficiency;

- We actively explore various marketing channels, whether traditional and alternative, to further improve our marketing efficiency. Our sales and marketing team is well dedicated to customer contact to understand customer needs and improve our service quality. In addition, we adopt search engine optimization as our marketing strategy to improve the quality and quantity of traffic to our platform. We also emphasize the cooperation with enterprises relevant to our business, providing them with the resources and technical guidance they may need in constructing their platforms, which in turn brings more traffic and revenue to our platform. For example, we have entered into business cooperation with 20 enterprises (which are our audiovisual capabilities suppliers) in 2023, primarily consisting of AI service providers and other audiovisual solution providers. We have also entered into business partnership agreement with a third party during the Track Record Period for the purpose of co-development of products with revenue sharing mechanism. For details of such business partnership arrangement, please refer to the section headed "Business - Our Suppliers - Business partnership arrangement" in this document. Through close cooperation with these business partners, we also acquire important knowhow about the business scenarios our customers operate in, which helps improve the depth and breadth of our scenario-based platform in attracting more customers in the same business scenarios;
- (c) We have established a well-trained sales and marketing team through our in-house training and appraisal system. We conduct regular training, covering areas from product knowledge to sales and negotiation skills, as well as ad hoc pre-sales and small-team training sessions, for our sales and marketing team. For example, for the three years ended December 31, 2023 and the three months ended March 31, 2024, we conducted over 80 training sessions in aggregate for our employees. We will continue to invest resources in our internal training system to improve the capabilities and efficiency of our sales and marketing team; and
- We have implemented advanced and efficient systems in the management of our customers. Apart from the Customer Relationship Management (CRM) system which empowers a streamlined and optimized sales process, real-time review of sales opportunities and communication records, etc., we have also introduced the data platform operated by GuanData in 2022, which helps facilitate sales data analysis, optimized resource allocation, forecasts and planning through a combination of business intelligence tools. Our sales and marketing team has been able to retrieve data charts generated by the GuanData platform which covered various aspects of customer management and sales incentives, including daily monitoring of customer usage, profit/loss analysis, cycle comparisons and performance incentives, etc. In addition, we have implemented a multi-tier customer follow-up strategy primarily depending on the revenue contribution and industry features of our customers. For example, customers classified at higher tiers will be followed up by our more experienced offline sales team on a one-on-one basis. The offline sales team can provide a full range of professional consulting services and provide solutions most relevant to such key customers, which aim to further improve customer loyalty and satisfaction and thus retention rate. All these are expected to continuously improve our marketing efficiency.

#### Research and development costs

We had a R&D team with 168 members as of March 31, 2024, accounting for 43.3% of our total employees at the relevant time. In 2021, 2022, 2023 and the three months ended March 31, 2024, we incurred research and development costs of RMB143.4 million, RMB128.7 million, RMB128.0 million and RMB33.6 million, respectively, accounting for 9.7%, 11.2%, 9.6% and 9.8% of our total revenue during the respective periods. Our R&D team experienced a downsize in 2022 as we decided to make redundant of the R&D personnel of businesses that made less contribution to the Company's business and no longer a focus of the Company, for instance, the DPaaS business.

Looking forward in the near future, we will continue to enhance our research and development capabilities to maintain our competitiveness. We expect to maintain a R&D team of a size appropriate for our scale and long-term business growth and continue to offer competitive compensation and benefits to attract and retain talents. Meanwhile, we plan to continue to improve our R&D efficiency. We will strike an optimal balance between short-term financial performance and long-term business prospects and profitability through the adoption of the following measures:

- (a) We have conducted and will continue to conduct profound review of product portfolio to focus our R&D efforts on products with meaningful financial impact and/or higher returns, such as our APaaS solutions, so as to improve our R&D efficiency. For example, in light of the explosive growth in AI application. we plan to develop the AIGC Kodo solution which can be used to deliver a one-stop AIGC data storage solution and help reduce storage costs and processing time of our customers. Furthermore, in the metaverse scenario, in order to address the pain points in e-commerce settings such as 24-hour live streaming marketing which typically involves significant cost of live broadcasting hosts, we are developing an AIGC digital person solution which involves 2D and 3D digital persons that closely resemble humans in appearances, expressions and interactions and can be used in live broadcasting and live streaming marketing purposes. All these are business scenarios which have long-term business prospects and we believe our ability to quickly adapt to our customers' business scenarios will be conducive to future profitability in the mid-to-long term as these solutions become commercialized; and
- (b) We have implemented a cross-team collaborative mechanism across our R&D department to improve R&D efficiency. Specifically, we integrate our R&D staff from different product teams to facilitate collaboration and co-development of projects, which are especially efficient for products which depend on similar underlying resources and infrastructure. In combination of our cross-product and cross-team architecture design review mechanism, we achieve rapid completion of projects through reusing previous R&D efforts, thus enabling more efficient use of resources and enhanced overall R&D efficiency. Taking a certain R&D project of our QCDN product as an example, the average number of tasks accomplished per month increased from 186 in 2022 to 232 in 2023.

Notwithstanding the R&D team optimization during the Track Record Period, we successfully developed our APaaS business in 2021 which has gained market recognition and secured our leading position in the audiovisual cloud service industry which is a testament to our R&D capabilities. With the R&D efficiency enhancement measures mentioned above, we expect that, as our business continues to grow and we invest on R&D cautiously, our research and development expenses as a percentage of total revenue will decrease over time.

## Administrative expenses

Our administrative expenses accounted for 8.1%, 9.7%, 10.2% and 9.0% of our total revenue in 2021, 2022, 2023 and the three months ended March 31, 2024, respectively. Our administrative expenses as a percentage of total revenue increased from 2021 to 2022 largely due to (i) the decrease in revenue and (ii) the increase in severance payments due to the downsizing of our team in 2022 in a cost control effort. Our administrative expenses as a percentage of total revenue further increased in 2023 primarily due to (i) the increase in staff cost mainly due to the increase in share-based payments, and (ii) the increase in [REDACTED] expenses in relation to our proposed [REDACTED], partially offset by the decrease in severance payment as less staff redundancy was made in 2023. Our administrative expenses as a percentage of total revenue decreased in the three months ended March 31, 2024 primarily due to the decrease in severance payment. We intend to optimize our administrative expenses by enhancing our standard of management, streamlining our internal workflows, and leveraging technology to drive convenience, cost-efficiency and productivity.

As we conduct regular management review according to the market condition to ensure efficient and effective operation, we believe there is significant headroom for us to further improve our operating efficiency. We have conducted and will continue to conduct comprehensive review of our operations, including R&D, sales and marketing and client support processes, to streamline our business processes with a focus on core procedures to increase efficiency and cost-effectiveness. For example, we have introduced an HRSaaS talent management platform to systematize employee onboarding, transfers and departures, improving efficiency in handling administrative matters. By implementing more standard operating procedures on administrative matters, we expect to further improve our operational efficiency.

With the operating efficiency enhancement measures mentioned above and the reduction of non-recurring expenses such as [REDACTED] expenses, we expect that administrative expenses as a percentage of total revenue will decrease over time due to the greater economies of scale and improved operational efficiency.

## **Working Capital Sufficiency**

Taking into account our cash and cash equivalents, operating cash flows, bank borrowings, the available bank facilities, and the estimated [REDACTED] available to us from the [REDACTED], our Directors believe that we have sufficient working capital for our present requirements and for at least the next 12 months from the date of this document. Taking into account the above, and based on the written confirmation from the Company in respect of working capital sufficiency, review of the accountants' report, the financial due diligence conducted on the historical financial information of the Group during the Track Record Period and the discussion with the Directors, nothing material has come to the attention of the Joint Sponsors that would cast doubt on the Company's conclusion that the Company has sufficient working capital for its present requirements and for at least the next twelve months from the date of this document.

#### **OUR INFRASTRUCTURE AND TECHNOLOGIES**

#### Our cloud-native infrastructure and network

Our technology infrastructure is built on a highly scalable, cloud-native technology architecture through our cooperation with mainstream cloud computing service providers. Cloud native infrastructure represents an approach to designing, constructing, and operating workloads that are built in the cloud and take full advantage of the cloud computing model. Based on such cloud architecture, we have established an extensive network in China and overseas and achieved EB-level storage capacity. Our cloud infrastructure and network allow us to process large volumes of data on a real-time basis and ensure high-speed and stable performances on a large scale to accommodate and support the increased demands from our customers. We have made continuous investment in our technology infrastructure and network to ensure our cloud infrastructure can effectively address our growing business needs.

Our technology infrastructure is supported by servers in geographically dispersed data centers across China and other countries and regions so our network is able to ensure service consistency and eliminate operation risks from failures in any single data center. In addition, we have in place a comprehensive set of contingency plans to manage potential risks of any emergency or service disruption. We also regularly test the data recovery capability of our systems, which helps us ensure our backup data can be completely retrieved. As of the date of this document, we had not experienced any material service disruptions.

We create an open platform architecture, encouraging third-party developers and business partners to provide innovative applications to our customers, which we believe will enrich our products and technology platform. Our open architecture facilitates the integration of customers' and third-party applications into our platform. With minimum or low-code requirements, we support rapid application development, deployment, execution and management using declarative, high-level programming abstractions.

#### Our technology capabilities

Our over-a-decade experience has enabled us to independently develop key technologies to support our one-stop scenario-based audiovisual solutions. Some of our key technologies include:

## Audiovisual technology

Audiovisual encoding and decoding capabilities

We have self-developed scenario adaptive enhancement algorithms, noise reduction detail enhancement algorithms and self-developed high-performance compression algorithms of H264 and H265 in Avsmart scenario, which reduce storage space and improve the image quality of secondary encoding at lower bandwidth costs. Avsmart reduced the storage space (an industry-leading average saving rate of 45%) and transmission bandwidth costs, improved the video quality and sound effect for live streaming/VoD scenarios through smart scenario recognition, image quality enhancement (anti-interlacing, texture detail enhancement), audio enhancement (noise reduction, volume and loudness normalization), region of interest (ROI) code, and efficient scenario adaptive compression algorithm.

Multi-cloud intelligent scheduling management

Our multi-cloud intelligent scheduling management technology integrates network downtime and performance monitoring, and is able to automatically choose the best route and achieves duplication and backup of files. As compared to conventional CDN service providers which only provide standard content delivery services, our multi-cloud intelligent scheduling management technology adopts an integrated control protocol which chooses high quality routes from multiple providers that cover different areas across the globe, thereby ensuring high stability. Moreover, based on our IP database and combined with the network downtime and performance monitoring, our intelligent scheduling system is developed to support an array of dispatch protocols. These dispatch protocols effectively protect customers from access hijacking and allows for accurate and controllable dispatch in real time. Leveraging the decoupling network architecture, our intelligent scheduling management system is able to quickly switch routes in the event of network failures, shortening the average failure recovery time to within five minutes.

As a mainstream audiovisual traffic carrier service provider, we can achieve real-time precise and controllable dispatch and reduce system risks and cost risks caused by sudden customer traffic. According to iResearch, we are one of the first PaaS players to develop multi-cloud intelligent scheduling management for CDN services.

Software-defined global live streaming network

Deployed upon global acceleration nodes, we have developed a software-defined global live streaming network, LiveNet. As compared to conventional live streaming networks which adopt a tree structure with multiple centers and hierarchy, LiveNet adopts a decentralized mesh network, where the infrastructure nodes connect directly, dynamically and non-hierarchically to as many other nodes as possible and cooperate with one another. LiveNet is able to continually measure the transmission performance between each nodes and optimize and route. Therefore, supported by LiveNet, we are able to offer interactive live streaming and real-time communication products with high elasticity, high availability and low latency, and which offer various functions including elastic on-demand network resource, automatic timeout for failing nodes, flexible node operation, policy-based routing, among others.

According to iResearch, we are one of the first PaaS players in China to develop a software-defined global live streaming network.

Cloud-native media data analytics platform

Leveraging cloud-native architecture, our media data analytics platform enables smooth operation and development of media applications in a distributed multi-cluster environment. We enable our customers to choose the products and features based on their actual business needs, which provides them with great flexibility. Furthermore, we allow users to scale rapidly as we serve more users or develop additional use cases without incurring significant costs, while maintaining the quality of the user experience. We are also able to constantly update and develop new features without affecting other feature modules or the entire infrastructure. This facilitates the customization, iteration and delivery of configurable functions that meet the requirements and preferences of our customers.

According to iResearch, we are one of the first PaaS players in China to develop a cloud-native media data analytics architecture.

Low redundancy erasure code

With our erasure code architecture, we provide customers with high data reliability in a cost-efficient manner. Kodo is able to achieve high data reliability with an industry leading redundancy rate of 1.14 on our public cloud. For on-premise deployment customers, Kodo is able to adjust the redundancy rate based on business needs, which can reach industry leading level of 1.10. In addition, Kodo is able to reduce the storage cost as compared to traditional replication methods.

## AI technology

Comprehensive intelligent multimedia technology

Based on audiovisual processing technology and deep learning models, our comprehensive intelligent multimedia technology utilizes convolutional neural networks and gate recurrent unit (GRU) to learn video content features and timing information on a large-scale expert annotated sample set. By combining multitasking learning, we are able to assess image quality and aesthetics of images and videos, accurately producing multi-dimensional objective quality indicators to guide and position specific quality issues.

Intelligent AI services with high business efficacy

With high-performance cloud servers and large-scale storage resources, we have developed a deep learning platform that can utilize large language models, such as BERT, GPT, Transformer, LLaMA and PaLM. By using large language models, we are able to cultivate content generation capabilities such as audiovisual generation and text generation. In addition, we can process multiple structures or types of data by combining multimodal large language models, and continue to contribute to the improvement of large language models through reinforcement learning from human feedback. Our interaction with and repeated utilization of the large language models will enable them to further adapt to our business scenarios improving the controllability and accuracy of our results. We involve business partners in the industry to build an open platform, and provide customers with more comprehensive services in various scenarios.

Besides, we have applied the development components of large language models in providing our audiovisual cloud services and we will build more AI development components with commercial value for the quick access by our customers to empower their applications. For example, based on visual recognition technology (such as object detection, portrait matting and tracking), we have developed advertisement placement tool which can quickly generate advertising replacement content by combining scenario keywords and models such as Diffusion and GAN, which enables our customers to quickly insert or replace the advertising content in the videos. We intend to use large language model, multimodal large model, generative large model, NeRF 3D reconstruction, auto-rigging and other algorithms in the AIGC development components to provide more competitive service capabilities in the areas of image generation, audio generation, text generation, video generation, 3D generation, action generation, etc.

#### Low-code platform

Low-code platform underpins the core strength of our APaaS solutions. Our APaaS solution is embedded with various APIs and SDKs with simple designs and comprehensive functions. Our APaaS solutions take advantage of our existing technological capabilities platform to offer low-code development tools to our customers, helping them quickly and conveniently develop applications, while substantially lowering the technological barriers for accessing complex applications. Customers utilizing our APaaS solutions can enjoy our intuitive, extensive and easy-to-use development tools to pick necessary modules from our low-code audiovisual library that cater to their business needs and as such, we help our customers integrate our products into their applications efficiently.

Our low-code platform has the following advantages:

- Improve development efficiency Our low-code platform enables developers to build audiovisual applications faster, thus improving development efficiency and saving manpower and time resources.
- Improve application quality Our low-code platform integrates various audiovisual processing technologies and AI technologies, which can help developers build more intelligent applications and provide high-speed, efficient, and highly available audiovisual processing services, thereby improving the quality and performance of applications.
- Expand product functionality Our low-code platform provides diversified audiovisual processing capabilities and AI technologies, which can add new functions and features to our existing APaaS solutions and expand product functionality.

According to iResearch, we are one of the first market participants to develop audiovisual APaaS solutions and achieve commercialization.

## **KEY OPERATING METRICS**

We manage our business using the following key operating metrics. We use these metrics to assess the progress of our business, make decisions on how to allocate capital, time and technology investments.

The following table sets forth the key operating metrics relevant to our business as of/ for the year ended December 31, 2023 (for the purpose of comparison with industry peers), the revenue segments or sub-segments that they correspond to in measuring the operational performance, and a comparison with industry peers (where applicable):

Key operating metrics	As of/for the year ended December 31, 2023	Relevant revenue segments or sub-segments	Comparison with industry peers (if applicable)
Number of applications utilizing our network modules	Approximately 21,000	MPaaS	Within industry level (10,000-35,000)
Data storage scale	1.4 EB	MPaaS	Within industry level (EB level)
Number of files stored	491.9 billion	MPaaS	N/A
Daily average audiovisual playback minutes	3.6 billion	QCDN	At high end of industry level (over one billion)
Redundancy rate	1.14 on public cloud and 1.10 on private cloud	Kodo	Better than industry level (1.25 on public cloud and 1.15 on private cloud)

#### Number of registered users and active users

				As of/For t	the three	
	As of/For the year ended December 31,			months ended March 31,		
	2021	2022	2023	2023	2024	
Number of registered users	1,217,596	1,350,001	1,497,516	1,407,087	1,516,411	
Number of active users (1)	541,578	600,245	654,179	600,605	643,857	

Note:

(1) The number of active users represents the number of users which have used at least one of our products or otherwise contributed to usage of our platform during the relevant period. For the avoidance of doubt, such active users include users who engage in trial use of our products and may or may not be our paying customers.

The number of registered users and active users measure the penetration and popularity of our platform and demonstrate our ability in attracting users to our platform. Our registered user base serves as an important engine for our future growth as we convert these users to our paying customers. We have grown in our registered user base during the Track Record Period. According to iResearch, the number of registered users of our platform at over 1.4 million as of December 31, 2023 is above the industry level, which ranges from tens of thousands to millions.

## Number of paying customers

				For the three	months
	For the year ended December 31,			ended March 31,	
	2021	2022	2023	2023	2024
Number of MPaaS paying customers	68,808	83,970	92,480	62,311	62,563
Number of APaaS paying customers	1,319	1,967	2,597	1,867	2,303

Our ability to grow the number of MPaaS and APaaS paying customers is a key indicator of our ability to scale our business and future growth opportunities. For the avoidance of doubt, the number of MPaaS/APaaS paying customers for the three months ended March 31, 2023 and 2024 takes into account only the customers which have made revenue contribution to MPaaS/APaaS (as the case may be) for the three months ended March 31, 2023 and 2024, respectively.

#### Number of APIs

The number of APIs possessed measures the scope of functionalities provided by an audiovisual cloud service provider. The larger the number of APIs, the more comprehensive scope of functionalities a service provider offers to its users to build and enhance audiovisual applications on their platforms. With over a decade of experience in the audiovisual industry, we had accumulated 1,292 and 1,303 APIs as of December 31, 2023 and March 31, 2024, respectively.

#### Conversion rate from registered users to paying customers

Conversion rate from registered users to paying customers measures the effectiveness of the conversion process in generating revenue from user engagement through PaaS services. It is calculated as the percentage of new registered users of the relevant period which have converted to paying customers during the same period. Our conversion rates from registered users to paying customers for the three years ended December 31, 2023 and the three months ended March 31, 2023 and 2024 are 8.0%, 17.3%, 20.4%, 16.4% and 15.3%, respectively.

## Average revenue contribution, retention rate and dollar-based net expansion rate

				For the thre	e months
	For the year	ended Dece	ended March 31,		
	2021	2022	2023	2023	2024
Average revenue contribution $(RMB)^{(1)}$ :					
- MPaaS paying customers	19,905	10,420	10,537	2,991	3,987
- APaaS paying customers	18,879	98,634	108,340	34,319	36,143
Retention rate (%) <sup>(2)</sup> :					
- MPaaS paying customers	72.1	72.5	67.6	84.7	84.0
- APaaS paying customers	-	88.8	87.9	94.2	93.7
Dollar-based net expansion rate (%) <sup>(3)</sup> :					
- MPaaS paying customers	133.3	63.9	111.7	93.5	96.1
- APaaS paying customers	-	779.1	145.0	119.8	108.4

#### Notes:

- (1) The average revenue contribution of MPaaS/APaaS paying customers represents the average revenue generated by each MPaaS/APaaS paying customer (as the case may be) during the relevant year/period.
- (2) The MPaaS/APaaS paying customer retention rate represents the percentage of MPaaS/APaaS paying customers (as the case may be) in the immediately preceding year/period who remain our MPaaS/APaaS paying customers (as the case may be) in the current year/period.
- (3) The dollar-based net expansion rate represents the ratio of revenue contribution of the MPaaS/APaaS paying customers (as the case may be) in the current year/period to the revenue contribution of the MPaaS/APaaS paying customers (as the case may be) for the immediately preceding year/period.

Our ability to maintain long-term revenue growth depends on our ability to improve customer loyalty and stickiness, increase customers' usage of our platform over time and grow revenues generated from existing customers. We track our performance in this area by measuring retention rate and dollar-based net expansion rate for our MPaaS and APaaS paying customers. The retention rate of our MPaaS paying customers declined in 2023 primarily as a result of the loss of long tail customers due to the decision of the Company to focus on larger customers in 2023. For detailed reasons for the fluctuations of the dollar-based net expansion rate, please refer to the paragraph headed "Financial Information — Key Operating Metrics" in this document. Our MPaaS paying customer dollar-based net expansion rate is also within the range of the industry norm, which ranges from 85% to 122% among leading players.

## Number of applications utilizing our network modules

The number of applications utilizing our network modules measures the popularity of network modules offered by audiovisual cloud service providers. It also reflects the ability of audiovisual cloud service providers in matching market demands with the various functions offered by different network modules. For the year ended December 31, 2023 and the three months ended March 31, 2024, we had approximately 21,000 and 22,000 applications utilizing our network modules, respectively. According to iResearch, the number of applications utilizing our network modules for 2023 at approximately 21,000 is above industry level. The industry level ranges from 10,000 to 35,000.

#### Data storage scale and number of files stored

Data storage level measures data storage capability and scalability. The higher data storage level, the more data can be stored, and more customers can be served. As of December 31, 2023 and March 31, 2024, our MPaaS platform had a total data storage scale of 1.4 EB and 1.5 EB, and the total number of files stored on our MPaaS platform amounted to 491.9 billion and 494.7 billion, respectively. According to iResearch, the average data storage scale among leading industry participants is around EB level. According to iResearch, due to the diverse file types and sizes stored, the number of stored files ranges from millions to trillions among the industry players. Therefore, no meaningful comparison can be made with industry peers.

# **Duration of audiovisual playback**

Duration of audiovisual playback measures the amount of audiovisual content consumed (through on-demand video and live streaming) by users through PaaS services. For the years ended December 31, 2022 and 2023 and the three months ended March 31, 2024, our MPaaS platform provided a daily average audiovisual playback of 1.5 billion minutes, 3.6 billion minutes and 4.6 billion minutes, respectively. According to iResearch, the daily average audiovisual playback of our MPaaS platform as of December 31, 2023 is at high end of industry level, where the leading audiovisual PaaS service providers provide a daily average of over one billion minutes of audiovisual playback.

## Redundancy rate of Kodo

Redundancy rate for erasure coding measures how much redundant data pieces is required to recover failed original data. Within reasonable level of reliability, lower redundancy rate means higher storage efficiency and lower storage costs. Kodo is able to achieve high data reliability with a redundancy rate of 1.14 on our public cloud and 1.10 on our private cloud. According to iResearch, the average redundancy rate for public cloud service is around 1.25, while the average redundancy rate for private cloud service is around 1.15.

#### RESEARCH AND DEVELOPMENT

We believe our strong research and development abilities and ability to keep up with the rapid development and advances in technologies through developing innovative solutions that are crucial to our continued success. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we have incurred research and development expenses amounted to RMB143.4 million, RMB128.7 million, RMB128.0 million and RMB33.6 million, respectively representing 9.7%, 11.2%, 9.6% and 9.8% of our revenue during the same periods, respectively. Our continuous investments in research and development activities result in a wealth of intellectual properties.

#### Research and development team

Our technological capabilities are built by our talented and dedicated research and development team. We focus on building and maintaining a large pool of talented researchers to drive our research and development efforts. We provide rigorous training to new recruits to get them familiarize with our platform. As of the Latest Practicable Date, we had a team of 174 R&D professionals, representing approximately 45.0% of our total employees. Over 90% of the members in our R&D team have a bachelor's degree or higher. We encourage different perspectives as they lead us to inspirations and improve our products and solutions.

Our R&D team is led by our founder, chief executive officer and chief technical officer, Mr. Xu Shiwei, who brings over 20 years of industry and management experience to our Company. He previously served as the technical director at Kingsoft Corporation Limited, where he was responsible for the overall architecture of the Kingsoft WPS2005 software and led the distributed storage laboratory. Mr. Xu is also the creator of the programming language Go+ with characteristics of low-code and de-complexity, Go+ caters to young people and attracts a wide range of developers.

## Research and development process

Our development process for our solutions generally takes up to 8 months depending on the complexity of the project. The key steps in our development process consist of:

- Demand gathering We gather information from various sources such as customer feedback (through pre-sales, sales and after-sales support), market demand analysis conducted by product managers, and the Company's top-down strategic planning.
- Demand review We prioritize the development of new functions for our solutions which are highly demanded in our sprint session, which is a set period of time during which our R&D team will focus on the building, testing and release of new functions. While it normally takes two weeks for one sprint session, we are able to launch the new function within two weeks if that new function is relatively straightforward.
- Framework design We devise a technical design based on the outcome of the review. Our plan, besides meeting with the technical standards, must be able to meet a series of non-technical requirements such as usability and intuitive user interface. We finalize the design plan after it is reviewed by the leader of the sprint or chief technical officer (when more complicated projects are involved).

- Functions development and self-testing Once we complete the new function, we write a unit test to test the code and conduct self-testing to review holistically whether the new function meets both technical and non-technical standards and requirements.
- Quality assurance and user acceptance We conduct a user acceptance testing on the user end to review whether the new function meets users' demands and expectations.
- Grayscale release (available to some users) We launch a new version of our solution with the new function to some selected users who expressed their demands for the new function. During the grayscale release, we monitor the progress and test whether the actual performance of the new function meets real users' demands and expectations.
- Official launch (available to all users) We launch the new version of our solution in full functionality to all users.

#### INTELLECTUAL PROPERTY

We regard our patents, copyrights, trademarks, trade secrets and other intellectual property rights as critical to our business operations. In this regard, we rely primarily on a combination of patents, copyrights, trademarks, trade secret and anti-unfair competition laws and contractual rights, such as confidentiality agreements entered into with our employees, customers and others, to protect our intellectual property rights. We clearly state all rights and obligations regarding the ownership and protection of our intellectual properties in employment agreements and commercial agreements we enter into. In addition, we have implemented a set of comprehensive measures to protect our intellectual property. For details, please refer to the paragraph headed "Risk Management and Internal Control — Intellectual property risk management" in this section.

As of March 31, 2024, we had fourteen material patents and seven material software copyrights in the PRC, mainly for technologies in, among others, cloud storage, content delivery, media data processing and analytics. In addition, as of March 31, 2024, we had nine material trademarks and four material domain names in the PRC, five material trademarks in Hong Kong, and three material domain names overseas. For details of our material intellectual properties, please refer to the paragraph headed "Statutory and General Information — 2. Further information about our business — B. Intellectual Property Rights" set out in Appendix IV to this document.

During the Track Record Period and as of the Latest Practicable Date, we were not subject to any material disputes or claims for infringement upon third parties' intellectual property rights.

#### DATA PRIVACY AND DATA SECURITY

We value data security and privacy as a top priority in our business. The Group's cloud services are operated in-house. During the course of our business, we may collect, process and store personal data of our customers. The personal data, as specified in our Qiniu Cloud Privacy Rights Policy (《七牛雲隱私權政策》, the "Privacy Rights Policy"), which our customers have to consent to before they proceed to register an account with us, can be categorized into (i) account registration information (such as real name, e-mail addresses), (ii) real-time identity authentication information (such as mobile number and facial image), (iii) payment information (such as bank account, payment and order information), and (iv) other information which the customers voluntarily provide to us when enrolling in our marketing and promoting activities. We process such personal information only to the extent necessary for verifying the identity of the customers, providing them with relevant products or services, security and communications, and processing payment. For the avoidance of doubt, we have no access to the data of our customers/end users and our customers/end-users retain full ownership and control of their data when using our cloud platform.

Pursuant to the Privacy Rights Policy, unless we have obtained our customers' permission and authorization, we will not share, disclose or transfer our customers' personal data to third parties. During the course of business, some of our products or services may be procured from or offered by third parties such as our suppliers, service providers and third-party SDKs. Under these circumstances, we will seek our customers' permission and authorization separately before we share with third parties the personal data necessary for providing such products or services.

To prevent any unauthorized access to or illegitimate use of data, we only grant access to employees holding specific positions at certain levels to data on a need-to-know basis and maintain the access records of such employees. During our ordinary course of business, we do not need to access or use any sensitive personal data (i.e. data relating to an individual that can be used to identify such individual). If there are circumstances which render the access to or use of such sensitive personal data necessary, we require that such access or use be authorized in advance. We monitor and record any access or use of sensitive personal data in real time.

## Data security system and infrastructure

To reinforce data protection, we deploy different encryption methods at both software/application and infrastructure levels. Data collected in the course of our business is stored in our firewall-secured database subject to additional encryption and decryption procedures. We adopt RSA cryptosystem to prevent data leakage and secure communications and transmission of data. The data is randomly partitioned by way of database sharding, that is, the data is partitioned in a large number of small chunks across machines in specific format to enhance security.

We will store our customers' personal data during the period when they use our products or services. Unless it is required by relevant laws or regulations or authorized by our customers, we will not store the personal data longer than necessary to achieve the permitted purposes and will delete or anonymize such personal data as appropriate.

## Data security policies

To mitigate the risks of data misuse, we provide data security and protection training to our employees on a regular basis. According to our internal policies, our employees would be penalized for breaching our data security policies. The level of penalty depends on the severity and frequency of the breach. We also have contingency plans and conduct regular data backup and recovery tests to enhance the resilience, reliability and stability of our systems. We have set up a data security team consisting of seven members, which is responsible for overseeing our data security and data compliance. Two members have obtained the Certified Internet Security Administrator by the Public Security Bureau by the PRC and the core members have years of working experience in the IT industry. Our employees are required to report any data security incidents (e.g. leakage or loss of confidential data) to our data security team which will then investigate the causes of the incident and monitor the implementation of any rectification measures and any follow up measures to be taken by the responsible department or team to prevent recurrences of similar incidents.

Our data security system is certified with ISO27001 (Information Security Management System Certification), an internationally recognized standard for information security management system. Where collection of personal information is involved, we require our customers to agree in the Privacy Rights Policy that they will comply with all relevant laws applicable to the collection of personal information. Our storage services have been certified as Trust Cloud by the Chinese Academic of Information of Communication Technology since 2015, showing our public and private cloud services are secure and trustworthy pursuant to industry and regulatory standards. We have also completed the grading and filing of our primary business information systems under the PRC Multiple-level Protection System according to the Administrative Measures for the Hierarchical Protection of Information Security (《信息安全等級保護管理辦法》). For example, Qiniu Information has obtained the information system security level protection record certificate for its website system (second-level) and cloud storage system (third-level).

In addition, we have established a holistic system to ensure data security and privacy:

- We have formulated and implemented various policies and measures such as Data Security Management System (《數據安全管理制度》), Personal Information Security Management System (《網絡安全管理制度》) and Internet Security Management System (《網絡安全管理制度》) in compliance with the applicable laws and regulations to ensure our employees have clear and transparent guidelines to follow when handling data and conducting business.
- We have applied access control through our internal policies including Data Classification Protection Implementation Plan (《數據分級保護實施方案》). Data are classified into four tiers, namely confidential, secret, internal use only, and external use), and allow only employees with prior authorization to access confidential data and secrets.
- We conducted regular in-house training with employees in relation to data security and
  privacy laws, regulations and internal policies to raise their awareness towards data security
  and personal privacy, and prevent data misuse. Our employees would be accessed on the
  training materials and penalized for breaching our data security policies.

• We have established a data backup and recovery mechanism, as well as a disaster recovery emergency plan based on Qiniu Cloud Backup and Recovery Management System (《七牛雲 備份與恢復管理制度》) to enhance the resilience, reliability and stability of our systems. Structured sensitive data are stored using field encryption.

During the Track Record Period, we did not experience any material data leakage or loss of data and we were not subject to any administrative investigation, or punishment in relation to cybersecurity, data protection or other similar incidents. We believe we had complied with the applicable laws and regulations regarding the collection, possession, use and disclosure of data in all material respects during the Track Record Period and up to the Latest Practicable Date.

#### Data privacy and protection laws and regulations

In terms of data collection, the Data Security Law provides that network operators shall abide by the principles of "lawfulness, legitimacy and necessity" when collecting and using personal information by stating expressly the rules, purpose, methods and scope of such collection and use, and obtain the consent of the person whose personal information is to be collected ("Data Subject"). Network operators shall not disclose such information to others without prior consent of the Data Subject.

In terms of data management and data security, the Data Security Law stipulates that 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, in accordance with the provisions of laws and regulations. See the sections headed "Regulatory Overview — Regulations Relating to Cybersecurity and Data Security" and "Regulations Relating to Privacy Protection" for more information for details.

Our Group has never been subject to any penalties or claims for violating applicable data security or cybersecurity laws and has adopted the relevant measures to satisfy the aforesaid data security and cybersecurity requirements.

During the Track Record Period and as of the Latest Practicable Date, (i) any data (including personal information) collected and generated during the domestic operations is and will be stored within the Mainland China and will not be transferred outside the Mainland China; (ii) any data stored domestically is not accessible to any institutions, organizations, or individuals outside the Mainland China; (iii) the development of our generative artificial intelligence service and the subsequent provision of such service do not and will not involve cross-border data transfer; (iv) our generative artificial intelligence services will be provided only within the Mainland China and will not involve the export or provision of algorithms, technologies, or applications abroad. Considering that our business does not involve cross-border data transfer, our PRC Legal Advisor is of the view that Security Assessment Measures and Standard Contract Measures shall not apply to us. Based on the above, our Directors are of the opinion that Security Assessment Measures and Standard Contract Measures will not materially affect our current and future business operations and financial performance.

As (i) we have adopted measures and policies regarding personal information and data security pursuant to applicable laws and regulations; (ii) our Group has never been subject to any penalties or claims for violating applicable personal information and data security laws and regulations; (iii) we will closely monitor and assess further regulatory developments regarding cybersecurity and data security laws and comply with the latest regulatory requirements; and (iv) our PRC Legal Advisor is of the view that our business operations are in compliance with all current PRC data privacy and protection laws and regulations during the Track Record Period and up to the Latest Practicable Date in all material aspects. Our Directors are of the view that our Group in all material respects complies with all applicable PRC laws and regulations with respect to data privacy and protection and has never been subject to any penalties or claims for violating applicable data security or cybersecurity laws.

#### SALES AND MARKETING

We primarily sell and market our audiovisual cloud services through our in-house direct sales forces, consisting of 121 employees as of the Latest Practicable Date. We generally conduct sales through leveraging the network effect and word-of-mouth referrals by stakeholders across the business cycle, and occasionally through phone calls and on-site visits, to strategically expand our market presence and scale up our business in a cost-effective manner. By engaging in various direct marketing campaigns, such as summits and forums across different industries, we are also able to reach out to various enterprises and organizations.

Our industry-leading clients include listed companies and other large-sized enterprises, covering 15 of the Top 20 audiovisual mobile applications in China published by iResearch. The total revenue contributed by these industry-leading clients accounted for 19.6%, 26.3%, 31.4% and 33.0% of our revenue for the three years ended December 31, 2023 and the three months ended March 31, 2024, respectively.

For the three years ended December 31, 2023 and the three months ended March 31, 2024, our selling and marketing expenses amounted to RMB193.0 million, RMB147.5 million, RMB139.1 million and RMB27.4 million, respectively, representing 13.1%, 12.9%, 10.4% and 8.0% of our revenue during the same periods, respectively.

#### **Pricing**

We generally charge cloud service customers based on usage, and to a lesser extent, on a project basis. We adopt different pricing models depending on the specific products/solutions. For example, if deployed on the public cloud, MPaaS products are typically charged by actual usage while APaaS solutions are typically charged by actual usage or service packages. In addition, we charge differently depending on whether the products/solutions are deployed via public cloud or private cloud. Typically, customers deploying products/solutions via public cloud are charged a monthly service fee based on actual usage or service package, whereas customers deploying products/solutions via private cloud are charged a one-off deployment fee based on the scale of software and hardware required and maintenance fee based on the duration of the authorization for the specific project. In general, We adopt a holistic and case-by-case approach when formulating our service fees chargeable for our customers, taking into account various factors including but not limited to (i) types of services; (ii) market prices for similar services offered by our competitors in the audiovisual cloud services market; (iii) types of customers and their industries; (iv) market demand; and (v) our costs and profit margin.

In general, we set different unit prices for API calls based on their complexity. For example, the unit price for image synthesis API (which involves processing multiple images) is typically two times that of image compression API.

The following table sets forth a breakdown of the pricing model based on the core revenue segments (and therefore core services) offered by us:

Product/Solution	Pricing model			
	Public cloud			
QCDN	Typically charged by actual usage based on data traffic (i.e. the amount of data transmitted over the network) and bandwidth (i.e. the speed at which data is transmitted through the CDN network, which typically increases with the number of users and volume of data)			
Kodo	Typically charged by actual usage based on storage (i.e. the storage space occupied by the data on the cloud), data traffic, API calls, etc.			
Dora	Typically charged by actual usage based on different processing items and methods. Such include processing duration, number of images processed, API calls, and others			
Interactive live streaming	Typically charged by actual usage based on data traffic (i.e. the amount of live streaming data transmitted over a network) and bandwidth (i.e. the speed at which data is streamed to the users, which typically increases with the number of audience and volume of data)			
APaaS solutions	Typically charged by actual usage (such as volume of data or storage, data traffic, bandwidth, processing duration, API calls, etc.) or based on service package (equipped with fixed storage, data, software pack, etc.)			
Private cloud				
All products/ solutions (including MPaaS and APaaS)	Typically charged a one-off deployment fee based on the scale of software and hardware required and maintenance fee based on the duration of the authorization for the specific project			

For details of our pricing model, please refer to the paragraph headed "Financial Information — Material Accounting Information and Estimates — Revenue recognition" in this document.

#### **OUR CUSTOMERS**

We have a broad base of customers across various industries including, among others, pan-entertainment, social networking, healthcare, e-commerce, education, media, financial services, automotive, telecommunications and intelligent manufacturing. The majority of our customers were situated in the PRC. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we had 68,808, 83,970, 92,480 and 62,563 MPaaS paying customers, respectively. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we had 1,319, 1,967, 2,597 and 2,303 APaaS paying customers, respectively.

For the three years ended December 31, 2023 and the three months ended March 31, 2024, our revenue amounted to RMB1,471.0 million, RMB1,147.3 million, RMB1,334.0 million and RMB342.4 million, respectively. For the three years ended December 31, 2023 and the three months ended March 31, 2024, we did not have any substantial reliance on any single customer. Our revenue generated from our largest customer for the three years ended December 31, 2023 and the three months ended March 31, 2024 accounted for 11.3%, 8.1%, 11.8% and 16.1%, respectively, of our revenue during the period. Our revenue generated from our five largest customers for the three years ended December 31, 2023 and the three months ended March 31, 2024 accounted for 22.7%, 25.5%, 34.3% and 38.5%, respectively, of our revenue during the period. During the Track Record Period, our customers generally settled their payments through bank transfer. We have established and maintained stable and good relationships with our five largest customers for each year during the Track Record Period, having a relationship of five years or above with a majority of them.

Below is the breakdown of our revenue derived from our five largest customers for each year/period during the Track Record Period, and their respective background information:

For the year ended December 31, 2021:

Rank	Customer	Types of services provided	Transaction amounts (RMB'000)	Percentage contribution to total revenue (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(9)</sup>
1	Customer A	MPaaS	166,107	11.3	A group of PRC companies (associates of a company listed on the Stock Exchange and NASDAQ) principally engaged in mobile games production and the operation of VoD platform	2017	Note (1)	90 days after receipt of invoice
2	Customer E	MPaaS	65,031 <sup>(6)</sup>	4.4	A PRC company principally engaged in the operation of a social media and e-commerce platform	2015	USD100 million	90 days after receipt of invoice
3	Customer F	MPaaS	37,582	2.6	A PRC company principally engaged in information technology and computer software services	2020	RMB10.98 million	Five working days after receipt of invoice/nil
4	Customer G	MPaaS	33,904	2.3	A PRC company principally engaged in cloud and edge computing services	2018	RMB17 million	90 working days after receipt of invoice
5	Customer- Supplier Group D	MPaaS	30,927 <sup>(7)</sup>	2.1	A group of PRC companies (associates of a company listed on the Stock Exchange and NYSE, being one of the largest Internet companies in China) principally engaged in e-commerce, Internet, cloud computing, retail and technology services	2014	Note (2)	45 working days after receipt of invoice

For the year ended December 31, 2022:

Rank	Customer	Types of services provided	Transaction amounts (RMB'000)		Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(9)</sup>
1	Customer H	MPaaS	92,466	8.1	A PRC company (associate of a company listed on the Stock Exchange) principally engaged in the operation of social media and live streaming platforms	2014	USD6 billion	30 days after receipt of invoice
2	Customer- Supplier Group I	MPaaS and others	71,146	6.2	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	USD100 million	60 days
3	Customer A	MPaaS	61,450 <sup>(8)</sup>	5.4	A group of PRC companies (associates of a company listed on the Stock Exchange and NASDAQ) principally engaged in mobile games production and the operation of VoD platform	2017	Note (1)	90 days after receipt of invoice
4	Customer- Supplier Group J	MPaaS	34,140	3.0	A group of PRC companies (subsidiaries of a company listed on the Stock Exchange, being one of the largest Internet companies in China) principally engaged in Internet and cloud services	2015	Note (3)	20 working days after receipt of invoice
5	Customer G	MPaaS	32,300	2.8	A PRC company principally engaged in cloud and edge computing services	2018	RMB17 million	90 days after receipt of bill

For the year ended December 31, 2023:

Rank	Customer	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total revenue (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(9)</sup>
1	Customer- Supplier Group I	MPaaS and others	157,457	11.8	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	USD100 million	60 days
2	Customer H	MPaaS	104,092	7.8	A PRC company (associate of a company listed on the Stock Exchange) principally engaged in the operation of social media and live streaming platforms	2014	USD6 billion	30 days after receipt of invoice
3	Customer- Supplier Group J	MPaaS	85,824	6.4	A group of PRC companies (subsidiaries of a company listed on the Stock Exchange, being one of the largest Internet companies in China) principally engaged in Internet and cloud services	2015	Note (3)	28 working days after receipt of invoice
4	Customer K	MPaaS	73,501	5.5	A PRC company (subsidiary of a company listed on the Shanghai Stock Exchange) principally engaged in data processing and telecommunications services	2023	RMB700 million	80% received in advance, 20% received in six months after goods receipt
5	Customer Group M	MPaaS and others	36,957	2.8	A group of PRC companies (subsidiaries of a company listed on NASDAQ, one of a leading online video playback platform in China	2018	Note (4)	90 days after receipt of invoice

For the three months ended March 31, 2024:

Rank	Customer	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total revenue (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(9)</sup>
1.	Customer- Supplier Group I	MPaaS	55.2	16.1	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	USD100 million	60 days
2.	Customer H	MPaaS	21.1	6.2	A PRC company (associate of a company listed on the Stock Exchange) principally engaged in the operation of social media and live streaming platforms	2014	USD6 billion	30 days after receipt of invoice
3.	Customer N	MPaaS	20.3	5.9	A PRC company principally engaged in the provision of intensive computing service in China, focusing on IT technology services in the fields of supercomputing, artificial intelligence and big data	2023	RMB10 million	Six months after receipt of goods and invoice
4.	Customer- Supplier Group O	MPaaS	18.3	5.4	A group of PRC companies (subsidiaries of a company listed on the Stock Exchange), principally engaged in the research and application of artificial intelligence (AI) software	2020	Note (5)	180 days after receipt of goods and invoice

Rank	Customer	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total revenue (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(9)</sup>
5.	Customer- Supplier Group J	MPaaS	16.8	4.9	A group of PRC companies (subsidiaries of a company listed on the Stock Exchange, being one of the largest Internet companies in China) principally engaged in Internet and cloud services	2015	Note (3)	28 working days after receipt of invoice

#### Notes:

- (1) It included Customer A and its affiliate. The registered capital of Customer A and its affiliate are RMB10.99 million and RMB500 million, respectively.
- (2) The registered capital of our customers in Customer-Supplier Group D are RMB1 billion, RMB1.8 billion and RMB0.24 million, respectively.
- (3) The registered capital of our customers in Customer-Supplier Group J are RMB65 million, RMB1.04 billion and USD2.0 billion, respectively.
- (4) The registered capital of our customers in Customer Group M are RMB5 million and RMB30 million, respectively.
- (5) The registered capital of our customers in Customer-Supplier Group O are RMB239.4 million, RMB16.25 billion and RMB3.5 billion, respectively.
- (6) During the Track Record Period, we decided to gradually reduce our sales to Customer E since 2022 as a result of our strategy to allocate our resources to other customers with more favourable commercial terms.
- (7) During the Track Record Period, we made substantial sales to Customer-Supplier Group D in 2021 and 2022 mainly because of some projects of Customer-Supplier Group D which required procurement of audiovisual PaaS services from us. Our sales to Customer-Supplier Group D had diminished gradually.
- (8) During the Track Record Period, we gradually scaled down businesses with Customer A with less favorable commercial terms for better allocation of resources to other customers with more favorable commercial terms.
- (9) Invoice in the credit term refers to a VAT invoice.

During the Track Record Period, save for Customer-Supplier Group D, being an associate of Taobao China (our substantial shareholder), all of our other five largest customers for each year/period during the Track Record Period were Independent Third Parties. Save for Taobao China, none of our Directors, their close associates or any of our shareholders (who, to the knowledge of the Directors, own more than 5% of our issued share capital) had any interest in any of our five largest customers for each year during the Track Record Period and as of the Latest Practicable Date. For details, please refer to the paragraph headed "Continuing Connected Transactions".

The summary of the salient terms of our standard agreements with our customers for MPaaS and APaaS products or solutions during the Track Record Period are set out below:

- Scope. We generally set out the scope of our MPaaS services (QCDN, Kodo, interactive live streaming products and Dora) and APaaS solutions (social entertainment, video marketing, visual networking, smart new media and metaverse) within the terms of services.
- Pricing. We primarily charge our customers by actual usage (such as volume of data or storage used, API calls, etc.) or based on service package (equipped with fixed storage, data, etc.). For details on our MPaaS and APaaS fee model, see "Business Sales and Marketing Pricing".
- Payment and credit terms. We send an invoice to customers every month detailing their actual
  usage of our services in the previous month. Customers are typically required to settle the
  invoice on a monthly basis. We generally grant a credit term of 30 to 90 days to our
  customers.
- *Confidentiality*. Both parties are obliged to treat all confidential information made known to it by the other party in strict confidence during and after the contract term.
- Term and termination. The agreement typically has a term of one year. The agreement can be terminated by either party with prior written notice of 30 days or payment in lieu of notice. The term of the agreement can be extended on the same terms until such time as our customers cease to use the service.

#### **Customer support**

We are devoted to serving customers and empowering them with cloud technologies. With our customer-centric service philosophy, we always prioritize the needs of our customers and strive to provide an exceptional experience to them. As a result, our brand has received broad recognition in the audiovisual cloud industry and 15 of the Top 20 audiovisual mobile applications in China are our customers during the Track Record Period.

In our ongoing efforts to enhance customer satisfaction and improve service quality, we maintain a dedicated customer support and service team that is focused on real-time problem-solving with the ultimate goal of improving user experience and customer stickiness. Moreover, we also provide helper libraries, comprehensive user guides and a wide range of code samples and demos to our customers.

#### **OUR SUPPLIERS**

Our suppliers primarily consist of enterprises in the cloud technology industry that provide (i) network and bandwidth services, (ii) IDC services and (iii) server and storage services. Our transaction amounts with our largest supplier for the three years ended December 31, 2023 and the three months ended March 31, 2024 accounted for 36.1%, 16.3%, 5.9% and 8.0%, respectively, of our total purchase during those periods. Our transaction amounts with our five largest suppliers for the three years ended December 31, 2023 and the three months ended March 31, 2024 accounted for 63.5%, 52.4%, 25.7% and 28.6%, respectively, of our total purchase. During the Track Record Period, we generally settled our payments to our suppliers by bank transfer. We have established and maintained stable and good relationships with our five largest suppliers for each year during the Track Record Period, having a relationship of 6 years or above with a majority of them.

Below is the breakdown of our five largest suppliers for each year/period during the Track Record Period, and their respective background information:

For the year ended December 31, 2021:

Rank	Supplier	Types of services provided	Transaction amounts (RMB'000)		Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
1	Customer- Supplier Group D	Network and bandwidth and server and storage	478,398	36.1	A group of PRC companies (associates of a company listed on the Stock Exchange and NYSE, being one of the largest Internet companies in China) principally engaged in e-commerce, Internet, cloud computing, retail and technology services	2014	Note (1)	Around three months/nil
2	Supplier Group D	Server and storage	132,160	10.0	A group of PRC and Macau companies (subsidiaries of a company listed on the Stock Exchange and Shenzhen Stock Exchange) principally engaged in information technology infrastructure services	2020	Note (2)	Nil
3	Supplier A	Network and bandwidth and IDC	94,678	7.1	A PRC company principally engaged in network and bandwidth and IDC services	2014	RMB5 billion	Around three to four months after receipt of bill
4	Supplier E	Server and storage	81,416	6.1	A PRC company principally engaged in software engineering and artificial intelligence services	2021	RMB50 million	Nil

Rank	Supplier	Types of services provided	Transaction amounts (RMB'000)	Percentage contribution to total purchase (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
5	Supplier F	Server and storage	55,929	4.2	A PRC company principally engaged in server and storage services	2021	RMB70 million	Nil

For the year ended December 31, 2022:

Rank	Supplier	Types of services provided	Transaction amounts (RMB'000)		Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
1	Customer- Supplier Group D	Network and bandwidth and server and storage	136,499	16.3	A group of PRC companies (associates of a company listed on the Stock Exchange and NYSE, being one of the largest Internet companies in China) principally engaged in e-commerce, Internet, cloud computing, retail and technology services	2014	Note (1)	Around three months
2	Customer- Supplier Group G	Network and bandwidth	84,839	10.2	A group of PRC companies principally engaged in cloud services and the provision of information and communication technology infrastructure and devices	2020	Note (3)	Three months after receipt of bill
3	Supplier A	Network and bandwidth and IDC	76,178	9.1	A PRC company principally engaged in network and bandwidth and IDC services	2014	RMB5 billion	Around three to four months after receipt of bill

Rank	Supplier	Types of services provided	Transaction amounts (RMB'000)		Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
4	Supplier Group D	Server and storage and technical service	73,064	8.7	A group of companies (subsidiaries of a company listed on the Stock Exchange and Shenzhen Stock Exchange) principally engaged in information technology infrastructure services	2020	Note (2)	Nil/around one month after receipt of invoice
5	Customer- Supplier Group I	Network and bandwidth and technical service	67,813	8.1	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	Note (4)	60 days

For the year ended December 31, 2023:

Rank	Supplier	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total purchase (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
1	Customer- Supplier Group I	Network and bandwidth and technical service	58,034	5.9	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	Note (4)	60 days
2	Supplier H	Server and storage	51,313	5.2	A PRC company principally engaged in providing cloud computing overall solutions for software and hardware integration	2023	RMB20 million	Nil

Rank	Supplier	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total purchase (%)	Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
3	Supplier A	Network and bandwidth and IDC	48,491	5.0	A PRC company principally engaged in network and bandwidth and IDC services	2014	RMB5 billion	Around three to four months after receipt of bill
4	Supplier C	Network and bandwidth and IDC	47,183	4.8	A PRC company principally engaged in information technology management and cloud computing services	2011	RMB51 million	90 days
5	Customer- Supplier Group G	Network and bandwidth	46,514	4.8	A group of PRC companies principally engaged in cloud services and the provision of information and communication technology infrastructure and devices	2020	Note (3)	Two months after receipt of bill

For the three months ended March 31, 2024:

Rank	Supplier	Type of services provided	Transaction amounts (RMB'000)	Percentage contribution to total purchase (%)	8 1 1	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
1.	Customer- Supplier Group I	Network and bandwidth and technical service	19.1	8.0	A group of PRC companies principally engaged in cloud services and the operation of social media and live streaming platforms	2015	Note (4)	60 days

Rank	Supplier	Type of services provided	Transaction amounts (RMB'000)		Background and principal business activities	Year of commencement of relationship with the Group	Registered capital	Credit term <sup>(5)</sup>
2.	Supplier I	Server and storage	16.6	6.9	A PRC company principally engaged in providing comprehensive technical services and overall solution for social informatization	2024	RMB12 million	Six months after receipt of goods and invoice
3.	Customer- Supplier Group G	Network and bandwidth	11.8	4.9	A group of PRC companies principally engaged in cloud services and the provision of information and communication technology infrastructure and devices	2020	Note (3)	Two months after receipt of bill
4.	Supplier J	Network and bandwidth	10.8	4.5	A PRC company principally engaged in providing electronic computer technology services and technical consulting	2022	RMB10 million	60 days after receipt of invoice
5.	Supplier K	Technical service	10.4	4.3	A PRC company listed on the Stock Exchange principally engaged in providing full stack interactive AI solutions to enterprise level users	2023	RMB31.06 million	30% paid in 30 days after contract signed, 60% paid in 15 days after receipt of goods,10% paid in 15 days after final acceptance

#### Notes:

- (1) The registered capital of our suppliers in Customer-Supplier Group D are RMB1 billion, RMB80 million and SGD4.2 billion, respectively.
- (2) The registered capital of our suppliers in Supplier Group D are MOP1.03 million and RMB1.04 billion, respectively.
- (3) The registered capital of our suppliers in Customer-Supplier Group G are RMB5 billion and RMB500 million, respectively.

- (4) The registered capital of our supplier in Customer-Supplier Group I is RMB1 billion.
- (5) Invoice in the credit term refers to a VAT invoice.

We have a vast number of suppliers for sourcing network and bandwidth services, server and storage services and IDC services and they are scattered across different regions in China and overseas. For instance, our IDC suppliers are scattered across over 20 cities in different regions of China, which provide for enhanced stability of our services in the event of server failures in certain regions. During the Track Record Period, we have not experienced any significant fluctuation in prices set by our suppliers, material breach of contract on the part of our suppliers, or delay in delivery of our orders from our suppliers.

During the Track Record Period, save for Customer-Supplier Group D being an associate of Taobao China (our substantial shareholder), all of our other five largest suppliers for each year/period during the Track Record Period were Independent Third Parties. Save for Taobao China, none of our Directors, their close associates or any of our shareholders (who, to the knowledge of the Directors own more than 5% of our issued share capital) had any interest in any of our five largest suppliers for each year/period during the Track Record Period and as of the Latest Practicable Date. For details, please refer to the paragraph headed "Continuing Connected Transactions".

The summary of the salient terms of our agreements with our suppliers for network and bandwidth and IDC services during the Track Record Period are set out below:

#### Network and bandwidth and IDC services

- *Scope*. For network and bandwidth services, we are entitled to use the CDN that accelerates the data network for data-heavy products and solutions. For IDC, we procure both space and infrastructure of the data center.
- *Pricing*. We are typically charged by actual usage.
- Payment and credit terms. We are generally required to settle payment to our suppliers within three months after the suppliers issue invoices for services accrued the previous month.
- *Confidentiality*. Both parties are obliged to treat all confidential information made known to it by the other party in the strictest confidence during and after the contract term.
- *Term and termination*. The agreement typically has a term of one year. The agreement can be terminated by either party with prior notice. The term of the agreement can typically be extended for one year on the same terms unless otherwise agreed by both parties.

### **Business partnership arrangement**

While we primarily focus on the development of proprietary technologies to maintain our core competitiveness, we are committed to building and maintaining our relationships with industry participants. For example, we procure licenses of audiovisual services from our suppliers which are typically our business partners engaged in audiovisual related value-added services, such as video conferencing system and audiovisual editing tools, and integrate these features into our platform for easy access to our customers based on their specific business needs.

We also enter into agreement with third party business partners to engage in joint development of products or solutions with revenue sharing mechanism in limited circumstances. During the Track Record Period, we have entered into business partnership agreement with a third party which is specialized in building software with beauty retouch and filter features. Neither the total purchase was material when compared to our total cost of sales and total revenue during the same period.

The key terms of business arrangement with the aforementioned business partner are set out below:

- Term of cooperation: One year.
- *Mode of cooperation:* We are authorized to integrate the business partner's software into our products, which are deployed by our customers in the form of live streaming and short video SDKs.
- Revenue sharing: According to a prescribed revenue sharing ratio based on the price of the underlying service which should not be set substantially lower than the standard price set out in the agreement (except where prior consent has been obtained from the business partner).
- Ownership right: The intellectual property is jointly owned by the business partner and us.

#### OVERLAPPING CUSTOMERS AND SUPPLIERS

Certain of our top five customers during the Track Record Period (Customer-Supplier Group D, Customer-Supplier Group I, Customer-Supplier Group J and Customer-Supplier Group O) were also our suppliers during the Track Record Period, of which Customer-Supplier Group D and Customer-Supplier Group I were top five suppliers in one or more periods during the Track Record Period. In addition, one of our top five suppliers for the years ended December 31, 2022, 2023 and the three months ended March 31, 2024, Customer-Supplier Group G, was also our customer during the Track Record Period.

Customer-Supplier Group D is a group of companies which are associates of a Chinese technology company listed on the Main Board of the Stock Exchange that specializes in e-commerce, Internet, cloud computing, retail and technology. Customer-Supplier Group D was our fifth largest customer in 2021 and our largest supplier in 2021 and 2022. During the Track Record Period, we provided MPaaS (including our Dora, QCDN and Kodo products) to Customer-Supplier Group D. At the same time, as Customer-Supplier Group D is a cloud service provider, we purchased network and bandwidth and server and storage services from them for our business.

Customer-Supplier Group I is a group of companies of a Chinese social media company which provides audiovisual social networking services. Customer-Supplier Group I was our second largest customer and fifth largest supplier in 2022 and largest customer and supplier in 2023. During the Track Record Period, we provided Kodo, Dora, QCDN and Pandora to Customer-Supplier Group I. At the same time, as Customer-Supplier Group I is a cloud service provider, we purchased network and bandwidth services from it for our business to enhance our cross-regional cloud technical capabilities and efficiency.

Customer-Supplier Group J is a group of companies under one of the largest Internet companies in China listed on the Main Board of the Stock Exchange that operates a leading multi-purpose instant messaging, social media and mobile payment mobile application. Customer-Supplier Group J was our fourth and third largest customer in 2022 and 2023, respectively. During the Track Record Period, we provided Kodo, Dora, QCDN and interactive live streaming products to Customer-Supplier Group J. At the same time, as Customer-Supplier Group J is a cloud service provider, we purchased network and bandwidth services from it for our business to enhance our cross-regional cloud technical capabilities and efficiency.

Customer-Supplier Group G is a group of companies of a Chinese technology company that provides information and communication technology infrastructure and devices. Customer-Supplier Group G was our second largest supplier in 2022. During the Track Record Period, we primarily provided Kodo to Customer-Supplier Group G. At the same time, as Customer-Supplier Group G is a cloud service provider, we purchased network and bandwidth services from it.

Customer-Supplier Group O is a group of companies of a company listed on the Stock Exchange principally engaged in the research and application of artificial intelligence (AI) software. Customer-Supplier Group O was our fourth largest customer for the three months ended March 31, 2024. During the Track Record Period, we primarily provided Kodo to Customer-Supplier Group O. At the same time, as Customer-Supplier Group O is an AI software company, we purchased AI audiovisual SDK services from it.

For details of these customers and suppliers, please refer to the paragraphs headed "Our Customers" and "Our Suppliers" in this section. It is an industry norm to have overlapping customer-suppliers in the audiovisual cloud services industry, according to iResearch.

The following table sets out our total sales revenue and our purchases amount from these overlapping customer-suppliers during the Track Record Period:

For the

			For the
			three
			months
			ended
For the yea	r ended Decem	ber 31,	March 31,
2021	2022	2023	2024
51,283	115,916	251,934	100,296
3.5%	10.1%	18.9%	29.3
514,212	289,881	142,618	39,305
38.8%	34.7%	14.6%	16.4
	2021 51,283 3.5% 514,212	2021 2022  51,283 115,916 3.5% 10.1%  514,212 289,881	51,283       115,916       251,934         3.5%       10.1%       18.9%         514,212       289,881       142,618

Our Directors confirm that our sales to and our purchases from all overlapping customer-suppliers were conducted in the ordinary course of business under normal commercial terms and on an arm's length basis. To the best knowledge and belief of our Directors, save for Customer-Supplier Group D, these overlapping customer-suppliers are Independent Third Parties. Save for Customer-Supplier Group D, none of our Directors, their respective close associates, or any Shareholder who, to the best knowledge of our Directors, owns more than 5% of our issued capital nor did they have any interest in each of these overlapping customer-suppliers during the Track Record Period. Save as disclosed above, to the best knowledge of our Directors, we did not have any other overlap between our major customers and major suppliers during the Track Record Period.

#### **SANCTIONS**

We had transactions with certain companies on the Entity List and/or the list of Specially Designated Nationals and Blocked Persons (the "SDN List") during the Track Record Period.

### **Procurement**

As of the Latest Practicable Date, we had six suppliers that are on the Entity List and none of the suppliers are on the SDN List. During the Track Record Period, we primarily procured CDN services and cloud servers from suppliers on the Entity List. The transaction amount with such companies for the three years ended December 31, 2023 and the three months ended March 31, 2024 were RMB15.9 million, RMB85.0 million, RMB46.6 million and RMB11.8 million, which amounted to 1.2%, 10.2%, 4.8% and 4.9% of our total purchase amount, respectively. For the risk associated with our procurement from entities on the Entity List, please see "Risk Factors — Risks Relating to Our Business and Industry — Export control and economic or trade restrictions that were imposed on our business partners may affect our business, financial conditions and results of operations" in this document.

Under the EAR, a license from the BIS (the "BIS License") would be required for any transactions involving the export, re-export or in-country transfer of any items subject to the EAR where entities on the Entity List is a purchaser, end-user, intermediate consignee or ultimate consignee. During the Track Record Period, to the best of our Directors' knowledge, none of the items that we procured from the companies on the Entity List were subject to the EAR nor involved in any actual or suspected violation of the EAR. Accordingly, our legal advisor as to U.S. export control laws is of the view that the items and scope of services that we procured from our suppliers on the Entity List during the Track Record Period and up to the Latest Practicable Date did not violate any applicable restrictions of the EAR. Our legal advisor as to U.S. export control laws confirmed that, absent a very significant change in the Group's business or operations, there is no foreseeable risk that the Company or any member of the Group would be added to the Entity List, the SDN List, the Unverified List (the "UVL") or the Non-SDN Chinese Military-Industrial Complex Companies List (the "NS-CMIC List") in the future. In the event that procurement from any of our suppliers becomes restricted or forbidden as a result of any sanctions imposed on them, we will be able to procure similar services from alternative suppliers with comparable terms.

### **Provision of Services**

As of the Latest Practicable Date, we had 17 customers that are on the Entity List and three customers that are on the SDN List. During the Track Record Period, we primarily supplied public and private cloud services to customers on the Entity List and the SDN List. The transaction amount with such companies for the three years ended December 31, 2023 and the three months ended March 31, 2024 were RMB4.3 million, RMB5.5 million, RMB12.2 million and RMB10.8 million, which amounted to 0.3%, 0.5%, 0.9% and 3.1% of our total sales amount, respectively.

As the services that we provided to our customers did not involve the export, re-export or in-country transfer of any items subject to the EAR where entities on the Entity List or the SDN List is a purchaser, end-user, intermediate consignee or ultimate consignee, we would not need a BIS License to carry out the transaction and our provision of such services did not constitute any actual or potential violation of the EAR. Accordingly, our legal advisor is of the view that the items and scope of services that we supplier to the customers on the Entity List and the SDN List during the Track Record Period and up to the Latest Practicable Date did not violate any applicable restrictions of the EAR. Our legal advisor confirmed that, absent a very significant change in the Group's business or operations, there is no foreseeable risk that the Company or any member of the Group would be added to the Entity List, the SDN List, the UVL or the NS-CMIC List.

Pursuant to our internal control policy, namely Qiniu Cloud Anti-Bribery and Anti-Corruption Management System (《七牛雲反舞弊反賄賂管理機制》), all employees of our Group would be penalized for engaging in bribery, corruption, misappropriation and fraud in exchange for personal or commercial benefits. The audit department is responsible for identifying, assessing and reporting corruption incidents to the CEO in accordance with a prescribed set of criteria, including the scope, severity and complexity of the suspicious activity, As precautionary measures, we also strengthen our internal control measures against bribery and corruption from time to time. In addition, we include a warranty in our procurement contract that suppliers shall guarantee to us that all goods or services that they provided comply with relevant U.S. trade control and sanctions laws and regulations.

#### **COMPETITION**

The market competition of the audiovisual PaaS industry is intense. We face competition in every major aspect of our business. In particular, we compete primarily with other audiovisual PaaS service providers in the PRC. We compete mainly on product functionality and scope, performance, service scalability and reliability, technical strengths, marketing and sales capabilities, user experience, pricing, brand awareness and reputation. In addition, emerging and enhanced technologies are likely to further intensify competition of our industry. In terms of revenue in 2023, we are the third largest audiovisual PaaS provider and the second largest audiovisual APaaS provider in the PRC, with a market share of 5.8% and 14.1%, respectively. For details, please refer to "Industry Overview — Competitive Landscape".

### Competition with IaaS providers

During the Track Record Period, we have experienced intensifying competition from large internet enterprises which previously focused on IaaS that have expanded to provide PaaS and SaaS solutions. These IaaS enterprises typically have accumulated significant underlying resources, which give them competitive edge in resource-heavy segments, particularly CDN business. According to iResearch, the price reduction pressure among our competitors will mainly concern CDN business going forward because of the nature of CDN business which typically comes with lower switching costs when changing from one service provider to another. Notwithstanding this, we believe we are strategically well-positioned to overcome competition from these IaaS enterprises since (i) we are focused on providing a one-stop platform which achieves a vertical integration from the underlying technology (such as content delivery network and object storage services) to high-level scenario-based functions based on the customized business needs and pain points of our customers, which allow us to avoid direct competition with IaaS enterprises which typically provide non-customized infrastructure to its customers; (ii) we primarily provide integrated CDN services which place less reliance on single IaaS supplier and provide multi-cloud scheduling capabilities which enable flexible control over underlying resources and various product features such as reduced back-to-origin costs (i.e., the cost for sending requests and retrieving data back to/from the original CDN server) for our customers; and (iii) our asset-light business model and strong focus on maintaining the access to a wide source of underlying resources allow us to perceive and respond quickly to changing market circumstances.

Given our market share and our competitive advantages as detailed in the section headed "Business — Business Sustainability and Path to Profitability" in this document, we are of the opinion that we are well positioned to compete effectively. However, some of our existing competitors have higher recognition, broader layout, longer operating history, larger customer base and greater financial, technical and other resources. Please refer to "Risk Factors — Risks Relating to Our Business and Industry — The market in which we participate is competitive, if we do not compete effectively, our business, operating results and financial condition could be harmed" for the risks concerning market competition. For more information on the competitive landscape of our industry, please refer to "Industry Overview".

### Competition with SaaS providers

APaaS refers to a service that leverages the MPaaS technologies by using a low-code platform and packaging the functionalities to provide services based on application scenarios. Users can leverage the APaaS's flexibility and ease of use to design applications that address specific needs in a short time, fostering innovation and adaptability. In contrast, SaaS requires users to rely on ready-to-use features and updates provided by SaaS service providers, limiting the ability to customize the application to meet specific demands. Therefore, APaaS is interchangeable to SaaS in achieving specific functions with less development resources and shorter development cycle. The below table sets forth a comparison of MPaaS/APaaS and SaaS in terms of key features, target customers, value added to customers, underlying technology infrastructure, application and pricing model:

	SaaS	MPaaS/APaaS
Key features	<ul> <li>Enabled through ready-to-use software applications that run on the cloud</li> <li>Fixed functions pre-set by providers</li> </ul>	<ul> <li>Enabled through higher-level         <ul> <li>(i.e. more specialized and scenario-based) APIs/SDKs</li> <li>with access to multiple capabilities through our low-code platform</li> </ul> </li> <li>More customized functions, achieving greater flexibility</li> </ul>
Target customers	Customers with limited or no technological capabilities and clear business needs (often business personnel)	<ul> <li>Customers with relatively limited technological capabilities and clearly delineated business scenarios requiring rapid verification</li> <li>Customers with the necessary technological knowhow but reluctant to expend resources on developing such capabilities</li> </ul>
Value added to our customers	<ul> <li>Easy access</li> <li>Diverse capabilities based on business scenarios</li> </ul>	<ul> <li>Easy access</li> <li>Diverse capabilities based on business scenarios</li> <li>Strong scalability and iteration ability</li> <li>Data can be stored on customers' own platform and leveraged for inter-enterprise applications</li> </ul>

	SaaS	MPaaS/APaaS
Underlying technology infrastructure	<ul> <li>Ready-to-use software applications</li> <li>Supports upgrade automatically</li> </ul>	<ul> <li>Low-code platform</li> <li>Supports upgrade with simple plugins to incorporate new features</li> </ul>
Application	<ul> <li>Widely applied in various audiovisual scenarios with greater focus on delivering scenario-specific functions</li> </ul>	<ul> <li>Widely applied in various audiovisual scenarios with greater flexibility to deliver cross-scenario functions</li> </ul>
Pricing model	<ul> <li>Generally charged a regular subscription fee (usually annually)</li> </ul>	<ul> <li>Charged a monthly service fee based on actual usage or based on service package</li> <li>Or charged a one-off service fee based on the specific needs of the project</li> </ul>

According to iResearch, it is expected that APaaS will be able to penetrate SaaS market, especially meeting the customization needs of medium and small-sized clients. Audiovisual service market exhibits characteristics that favors the development of APaaS as most of the audiovisual content processing and engagement are applicable across various scenarios, for which APaaS can be delivered easily. For example, under our Company's APaaS image processing and delivery solution, customers can achieve streamlined image processing, distribution, and editing functionality which are also available in SaaS applications, but can further customize image storage setup, image CDN domain setup and image presets setup, thus optimizing the process to suit individual customer's needs. Such customization capabilities of which are not possible in similar SaaS application. Another example is our APaaS digital person solution, where customers can generate short videos of digital persons similar to SaaS applications offered by other companies. However, our APaaS solution allows much more customizations than our counterpart SaaS applications such as person's appearance, physique, voices, emotions for different purposes, and also room for post productions.

To the best of the Company's knowledge, We are not aware of any material loss of our APaaS customers during the Track Record Period.

#### **EMPLOYEES**

As of the Latest Practicable Date, we had 387 full-time employees. The following table sets forth the number of our employees by function as of December 31, 2021, 2022, 2023 and March 31, 2024 and as of the Latest Practicable Date:

									As of the	
									Latest	
			As of Decem	iber 31,			As of Mar	ch 31 P	racticable	
Function	2021	%	2022	%	2023	%	2024	%	Date	%
Research and Development	254	40.3	172	39.3	170	43.6	168	43.3	174	45.0
Sales and Marketing	281	44.5	177	40.4	137	35.1	134	34.5	121	31.3
General and Administrative	69	10.9	62	14.2	59	15.1	62	16.0	68	17.6
Operation and Maintenance	27	4.3	27	6.1	24 _	6.2	24 _	6.2	24	6.2
Total	631	100.0	438	100.0	390	100.0	388	100.0	387	100.0

Our employees are currently represented by a labor union. We believe that we maintain a good working relationship with our employees and we have not experienced any significant labor disputes or any difficulty in recruiting staff for our operations during the Track Record Period.

#### **Recruitment policy**

We primarily recruit our employees through recruitment agencies, campus job fairs, internal referral program and online channels, including our company website and social networking platforms. We focus on and devote resources to ensure that our culture and brand remain highly attractive to potential and existing employees. As part of our recruiting and retention strategy, we have established comprehensive training programs that cover topics such as corporate culture, employees' rights and responsibilities, team building, professional behavior, compliance and job performance. We provide regular technical training to our employees so that they can familiarize with the new features of our products and solutions. We also invite managers to participate in company retreats and encourage them to contribute to the shaping of our business strategy. Through these trainings, we ensure that our employees' skill sets are up-to-date and enable them to discover and meet our customers' needs. We believe our training culture has contributed to our ability to recruit and retain qualified employees.

We enter into standard employment, confidentiality and non-compete agreements with our employees. As required by PRC laws and regulations, we participate in housing provident fund and various employee social security plans that are organized by applicable local municipal and provincial governments, including housing, pension, medical, work-related injury and unemployment benefit plans.

We believe that we maintain good working relationship with our employees and we have not experienced any material labor disputes or any difficulty in recruiting staff for our operations during the Track Record Period and up to the Latest Practicable Date.

### Compensation and benefits

We believe that our success depends on our ability to attract, retain and motivate qualified talents. As part of our human resources strategy, we offer competitive salaries, performance-based promotion, incentive stock options, bonuses and other incentives such as fitness allowance. We also provide a team building budget for departments to organize meetings, trainings and retreats for employees. As a result, we have successfully attracted and retained our core employees since our inception.

#### **PROPERTIES**

Our headquarters is located in Floors 1-4, Building Q, No.66 Boxia Road, Pudong New District, Shanghai, PRC. We do not own any properties as of the Latest Practicable Date. As of the Latest Practicable Date, we leased seven properties in the PRC with an aggregate gross floor area of approximately 7,857.9 square meters. These properties serve as our management headquarters, which accommodate our sales and marketing, research and development, and general and administrative activities. We believe that there is sufficient supply of properties in mainland China and we do not rely on any of the existing leases for our business operations.

As of the Latest Practicable Date, five lease agreements of our leased properties had not been registered and filed with the competent PRC Governmental Authorities as required by applicable PRC laws and regulations. Our PRC Legal Advisor has advised us that failure to complete the registration and filing of lease agreements will not affect the validity of such leases or impede our use of the relevant properties but could result in fines of up to RMB10,000 per unregistered leased agreement if we fail to rectify such non-compliance within the time frame prescribed by the relevant authorities. Our PRC Legal Advisor is of the view that the non-registration of lease agreements will not affect the validity of the lease agreements, and we are entitled to use such properties in accordance with the lease agreements insofar as these lease agreements are legal, valid and enforceable. Furthermore, our leased properties mainly serve as office spaces, which give us the flexibility to relocate them with relative ease and minimal impact on our business continuity. As a result, we do not believe that the non-registration of these lease agreements will, individually or in the aggregate, have a material adverse effect on our business operations. For details, please refer to the paragraph headed "Risk Factors — Risks Relating to Our Business and Industry — We face certain risks relating to the properties that we lease, our rights to use some of our leased properties could be challenged by property owner or other third parties, and we may be subject to fines as a result of unregistered leases which may adversely affect our business operations and financial condition" in this document.

As of the Latest Practicable Date, the lessors have provided us with the relevant title certificates for six leased properties. We have not yet obtained the relevant title certificates for one leased property with a gross floor area of approximately 31.82 square meters, representing approximately 0.5% of the gross floor area of all of the leased properties. Our PRC Legal Advisor has advised that the failure to obtain the relevant title certificates of the leased property may result in a risk that the relevant lease agreements to be deemed invalid by competent authorities or that we will not be able to continue to use the leased property. However, if we suffer losses due to the title defects of such leased property, we may request rent reduction or need not to pay the rent to the lessor according to the relevant provisions of the Civil Code of the People's Republic of China. As of the Latest Practicable Date, although the actual use of the leased property has not been affected and the leased property has not been subject to any disputes or investigation or punishment from the competent authorities due to such failure to obtain the relevant title certificates, if our leases of such property was terminated or voided as a result of challenges from third parties or the authorities, we would need to seek alternative premises and incur relocation costs. We believe that there are alternative properties at comparable rental rates available on the market, the use of which would not materially and adversely affect our business operations. Moreover, one of our leased properties is subject to mortgage and therefore, in case the mortgagees enforce the mortgage, we may not be able to continue using such leased properties.

We have enhanced our internal control measures in the following: (i) strengthen legal compliance training for employees, including appointment of external PRC legal advisor to provide relevant legal and regulatory training to employees; and (ii) keep abreast of the latest developments in the PRC laws and regulations relating to property leasing.

#### **INSURANCE**

Our employee-related insurance consists of pension insurance, unemployment insurance, work-related injury insurance and medical insurance, as required by PRC laws and regulations.

In line with general market practice, we do not maintain any business interruption insurance or product liability insurance, which are not mandatory under PRC laws. We do not maintain key-man life insurance, insurance policies covering damages to our network infrastructures or information technology systems or any insurance policies for our properties. During the Track Record Period, we did not make any material insurance claim in relation to our business.

We believe our insurance policy complies with the relevant rules and regulation in the PRC. For details, please refer to the paragraph headed "Risks Factors — Risks Relating to Our Business and Industry — We may not have sufficient insurance coverage to cover our potential liability or losses, and our business, financial conditions, results of operations and prospects may be materially and adversely affected should any such liability or losses arise." in this document.

### LICENSES, PERMITS AND APPROVALS

During the Track Record Period and up to the Latest Practicable Date, we had obtained all requisite licenses, approvals and permits from relevant regulatory authorities that are material to our operations in China. The following table sets out a list of our material licenses and permits:

License/Permit	Holder	Granting Authority	Grant Date	Expiry Date
Value-Added Telecommunications Business Operating License (增值電信業務經營許可證)	Qiniu Information	MIIT	2023.8.17	2026.03.24
High and New Technology Enterprise Certificate (高新技術企業證書)	Qiniu Information	Science and Technology Commission of Shanghai Municipality; Shanghai Municipal Finance Bureau; Shanghai Municipal Tax Service, State Taxation Administration	2022.12.14	2025.12.14
Information System Security Level Protection Record Certificate (信息系統安全 等級保護備案證明) (second-level website system)	Qiniu Information	Shanghai Municipal Public Security Bureau	2018.04.25	-
Information System Security Level Protection Record Certificate (third-level Qiniu cloud storage system)	Qiniu Information	Shanghai Municipal Public Security Bureau	2018.04.25	-
Value-Added Telecommunications Business Operating License	Qiniu Shenzhen	MIIT	2023.03.08	2027.10.31
Value-Added Telecommunications Business Operating License	Beijing Kongshan	MIIT	2023.04.19	2028.04.19

#### LEGAL PROCEEDINGS AND NON-COMPLIANCE

During the Track Record Period and up to the Latest Practicable Date, we had not been involved in any actual or pending legal, arbitration or administrative proceedings (including any administrative penalties, bankruptcy or receivership proceedings), which we believe would have a material adverse effect on our business, results of operations or financial condition. As of the Latest Practicable Date, we were not aware of any pending or threatened legal, arbitral or administrative proceedings against us or any of our Directors, which we believe would have a material adverse effect on our business, results of operations or financial condition.

During the Track Record Period and up to the Latest Practicable Date, we had not been involved in any material non-compliance incidents that we believe would have a material adverse effect on our business, results of operations or financial condition.

During the Track Record Period and as of the Latest Practicable Date, we have not experienced any major error, defect, security vulnerability or service interruption in our products and solutions, nor have we been subject to any material claims brought against us by any of our customers.

#### COMPLIANCE WITH AI MEASURES

As of the Latest Practicable Date, we are developing generative artificial intelligence service, but have not yet provided generative artificial intelligence services to any third parties. We intend to provide the generative artificial intelligence services through Qiniu Information. We had not been subject to any investigation or administrative penalty by any competent authority due to the violation of the AI Measures. We have taken and will take a series of measures in accordance with the AI Measures and relevant regulations, including:

- Qiniu Information carried out training by using data (such as open source data set) which were publicly available on the Internet, and complied with relevant open source agreements, statements or licensing agreements.
- Qiniu Information intends to mainly provide services to enterprises rather than individuals, and will enter into service agreements with Users to specify the rights and obligations. Qiniu Information did not use personal information in the training data processing activities.
- Qiniu Information will improve and strictly implement the internal control system, and perform network information security obligations. Qiniu Information will promptly take measures such as stopping generation, stopping transmission, eliminating any illegal content discovered, take model optimization training and other measures for rectification, and report the same to the competent authorities; in case personal information is involved, Qiniu Information will perform personal information protection obligations according to laws and regulations.

- Qiniu Information will not mark data during the research and development process of generative artificial intelligence technologies. Qiniu Information will take appropriate protection measures for Users' input information and use records, mark pictures and videos and other generated content as required by applicable laws, clarify and disclose the applicable groups, occasions and purposes of the services, and guide Users to acquire a scientific and rational understanding and use generative artificial intelligence technology in accordance with the laws and regulations.
- Qiniu Information will establish a complaint and reporting mechanism and set up a convenient portal for complaints and reports.

Based on the above, our PRC Legal Advisor is of the view that we comply with the AI Measures in all material respects.

Our Directors believe that the AI Measures will not materially affect our current and future business operations and financial performance, on the grounds that: (i) our PRC Legal Advisor's opinion mentioned above; (ii) we have taken or will take sufficient measures to comply with the AI Measures and relevant regulations and such measures will not have any material adverse effect on the business and financial performance of us; and (iii) we will continue to closely monitor market practice and any further interpretation of the AI Measures.

#### ENVIRONMENTAL, SOCIAL AND GOVERNANCE MATTERS

We do not operate any production facilities. Therefore, we are not subject to any significant health, safety or environmental risks. To ensure compliance with applicable laws and regulations, our human resources department would, if necessary and after consultation with our legal advisors, adjust our human resources policies to accommodate material changes to relevant labor and safety laws and regulations. We do not expect any material liabilities or expenditures to be incurred in these respects. During the Track Record Period and as of the Latest Practicable Date, we had not been subject to any fines or other penalties due to non-compliance with health, safety or environmental regulations.

### CORPORATE SOCIAL RESPONSIBILITY

We have aimed for long-term sustainable growth since our inception. To achieve this aim, we strive to work with all stakeholders to ensure that our Group is not only an exceptional audiovisual cloud services provider, but also a respected market player. This includes continually assessing and improving our role in the communities and environment in which we operate. We are therefore committed to working with our partners, customers, investors, employees, and society as a whole to play our part in building a healthy, robust and sustainable future.

#### Economic responsibility and employee care

We strive to consistently reach our business and development targets in order to create value which will enable us to reinvest in our talents, as we believe that our talents are an integral part of our success. We have invested significant resources in career development and training for our employees of all levels. Such training includes newcomers' training, on-the-job training, professional development seminars and accredited educational courses. We also have comprehensive review systems and promotion pathways in place to clarify the career advancement opportunities within the Group for our employees. By providing resources for professional development and a clear career pathway, we foster a corporate culture of professionalism and demonstrate to our employees that we value their contributions.

We also offer a comprehensive compensation and benefits package, with competitive salaries, bonuses, maternity leave, and other allowances, on top of social insurance and housing provident fund contributions. We also embrace diversity and inclusion, so all our employees enjoy equal opportunities in all respects, ranging from recruitment, training, welfare coverage, career and personal development during their time with us. Besides, we will also continue to encourage a culture of work-life balance, in order to create a positive and comfortable work environment for our employees. For details, please refer to the paragraph headed "Employees — Compensation and benefits" in this section. We treat all employees equally regardless of age, race or sex.

### **Environmental responsibility**

We are committed to reducing our environmental impact. Although we do not believe that the audiovisual cloud services industry is a major source of environmental concerns, we believe that everyone in society should do their part in conserving the environment.

As such, we have adopted environmentally friendly practices and policies, including but not limited to:

- switching off all electronic equipment and light when they are not in use;
- installing energy saving lights;
- encouraging recycling by providing recycling bins at easily accessible points;
- stop providing disposable cutlery at our canteens and pantries;
- using electronic channels for internal communication to minimize paper waste;
- encouraging double-side printing and reusing of waste paper; and
- switching off all the air conditioners after normal business hours and during non-working days, encouraging our employees to close the doors and windows when the air conditioners are turned on and not to set the air conditioners lower than 26 degrees Celsius in summer and arranging technicians to maintain the cooling systems regularly.

The following table sets forth the electricity, paper and water consumption of our headquarters during the Track Record Period:

			For the
			three
			months
			ended
For the year	r ended Decemb	oer 31,	March 31,
2021	2022	2023	2024
610,697	549,497	457,882	133,627
92.2	$145.0^{(1)}$	$264.2^{(2)}$	41.9
2,445	$1,697^{(3)}$	$1,736^{(4)}$	337
	2021 610,697 92.2	2021 2022 610,697 549,497 92.2 145.0 <sup>(1)</sup>	610,697 549,497 457,882 92.2 145.0 <sup>(1)</sup> 264.2 <sup>(2)</sup>

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Notes:

- (1) We experienced a significant increase in paper consumption in 2022 due to the travel restrictions in Shanghai during COVID-19 and the consequential increase in-house printing needs.
- (2) Our paper consumption for the year ended December 31, 2023 increased significantly as a result of the confidential printing of sheer amount of documents in connection with the [REDACTED] application.
- (3) Our water consumption for the year ended December 31, 2022 decreased significantly as a result of the travel restriction measures and therefore closure of office premises between March and May 2022 due to resurgence of COVID-19 in the PRC.
- (4) The total area of office premises at our headquarters reduced since November 2022 and thus our water consumption for the year ended December 31, 2023 is smaller than that for the year ended December 31, 2021.

In 2023, we restructured our infrastructure layout and relocated our servers as cost control measures. The data centers we choose comply with national standards for carbon emissions. We collaborate with quality service providers with low-energy consumption in our selection of data centers. In particular, we choose data centers with high power usage effectiveness (PUE) values.

To effectively address environmental risks along the supply chain, we have implemented rigorous quality requirements and standards when selecting suppliers. We prioritize hardware and software suppliers who have obtained recognized environmental certifications to demonstrate a strong commitment to sustainable practices and strictly require hardware and software suppliers to comply with relevant environmental standards and regulations. Moreover, we emphasize transparency and information sharing to effectively manage environmental risks across the supply chain. Open communication is encouraged among suppliers regarding their environmental practices and regulatory updates. This collaborative approach fosters a collective effort towards sustainability. By promoting transparency, we ensure suppliers are well-informed and empowered to make environmentally responsible decisions. By prioritizing suppliers that align with our environmental values and promoting transparency, we actively manage and mitigate environmental risks.

### Social responsibility

We have made contributions to the welfare of society and sharing our corporate social responsibility. For example, we donated medical supplies to a hospital and procured agricultural produce from the Yunnan province during the COVID-19 pandemic. We also took up social responsibility by communicating with relevant stakeholders to understand and fulfill their needs. Our Group encourages employees to participate in social and charitable activities and promotes harmony in social development. In 2022, 15 of our employees volunteered, under our encouragement, to provide logistical support to the community during the COVID-19 pandemic.

### **ESG-related Risks and Opportunities**

During the Track Record Period and up to the Latest Practicable Date, we had not been subject to any investigations, inquiries, fines or penalties for non-compliance with applicable laws and regulations in relation to health, work safety or environment. We had not encountered any incident, or received any third-party claim or legal proceedings for breach or violation of applicable laws and regulations which had materially and adversely affected our financial condition or business operations.

We have established Qiniu Comprehensive Risk Management Measures (《七牛全面風險管理辦法》), which specifies the roles and duties of our Board, management and employees in relation to the identification, assessment, monitoring and management of, among others, credit and liquidity risks, market risks, operational risks, reputational risks, compliance risks, and information and data security risks. We have set up a risk management working group which comprises department heads of various disciplines. For instance, the finance department, the marketing department and the audit department are responsible for managing and handling liquidity risks, reputational risks, and comprehensive risk management, respectively. The risk management working group will identify and assess the risks that we face, formulate measures to alleviate or resolve the identified risks, and report to the Board regularly.

Our compliance management department has been assessing and managing ESG-related risks and opportunities over the short, medium and long terms. The table below outlines our assessment regarding ESG-related risks that we consider material to us and our stakeholders.

### **Risks and Impact**

#### **Short-term**

Climate risks: Extreme weather such as flooding, typhoons and heat waves caused by climate change worldwide may seriously affect the stability and sustainability of electricity supply, which may result in power shortage and disruption of our business operations. These natural disasters may also seriously affect the safe and stable operation and business continuity of our suppliers' data centers. Service interruption or major equipment damage may negatively impact the sustainability of our services.

Reputational and market risks: As the PRC government and global investors pay more attention to ESG issues, particularly environmental issues, inaction or reactive response to policy changes or market sentiments may negatively affect our reputation, market position or loss of financing opportunities.

### **Our Responses**

Our OCDN product adopts integrated approach through building a global network of CDN nodes. Our data centers are dispersed across different regions thus diversifying the risk of extreme weather disruptions. We select data center providers which strictly follow the Emergency Operating Procedure (EOP) extreme weather in the data centers.

proactively address such risks, our risk control department incorporated climate-related risks into its risk assessment model and has studied the possible impact on reputation and taken the next steps. In addition, we have established transparent information disclosure mechanism to better communicate to our stakeholders our efforts and objectives related to ESG.

### **Risks and Impact**

Medium-term Policy risk: Implementation of regulatory policies relating to employment, health and safety, and carbon emission and power restrictions may increase our operational and compliance costs. In particular, power restrictions may negatively affect the operations of our suppliers' internet data centers and our cloud storage facilities, which will in turn materially affect our business operations and financial position.

> Technology risk: With the rapid development of low-carbon technologies and other emerging technologies, failure to identify and apply emerging technologies promptly may present climate-related risks to our operations.

### **Our Responses**

Our risk management team pays close attention to changes in policies and regulations to ensure that our business operations comply with the relevant regulatory requirements. In order to reduce the impact of power restrictions on us, we implement strict control of our supply chain and choose data centers which are power efficient and environmentally friendly. Specifically, we evaluate our data center suppliers based on national industry standards and regulations, such as Power Usage Effectiveness ("PUE") level, in selecting our suppliers.

We plan to keep abreast of technology development, in particular low-carbon technologies and other ESG related technologies, and consider adopt ESG related technologies.

### Risks and Impact

#### Long-term

Climate risk: Climate change may bring about weather-related hazards such as flooding, storms, sandstorm, prolonged droughts etc. more frequently, which may negatively affect our and our business partners' business operations if such hazards happen in our vicinity, which may lead to operational instability and higher costs in the long term.

### **Our Responses**

We place huge emphasis on sustainability standards when selecting our business partners such as center service providers. We will actively prioritize explore and business cooperations with data center suppliers which utilize clean and renewable energy sources such as wind power, hydro power and solar power and use natural resources and waste heat recovery for server cooling.

#### RISK MANAGEMENT AND INTERNAL CONTROL

We established, and currently maintain, risk management and internal control systems consisting of policies and procedures which we consider appropriate for our business operations. We are dedicated to continually improving these systems. We adopted and implemented comprehensive risk management policies in various aspects of our business operations, such as information technology, financial reporting, compliance, and human resources. Our Board is responsible for the establishment and updating of our internal control systems, while our senior management monitors the daily implementation of the internal control procedures and measures with respect to each subsidiary and functional departments.

#### Information and data security risk management

To ensure a healthy and sustainable development of our business, we are dedicated to building and maintaining well-functioning information security management and operational risk management systems through policies and procedures.

During the course of business, we handle and process customers' data which is stored on the cloud platform. Other than collecting customers' phone numbers for the purpose of account registration and verification, we do not collect or utilize the data and only provide reports or analysis subject to customers' demands. We have never been subjected to any penalties or claims for violating applicable data security or cybersecurity laws. We have adopted a rigorous encrypted algorithm to store data and have strictly executed a data access and transmitting policy to ensure the confidentiality of our customer data. We have also developed strict internal control and data access mechanisms as well as detailed approval and operation procedures regarding customer data processing. Under such mechanisms and procedures, any operations violating information security regulations will result in internal disciplinary action. In general, the information that our staff have access to is anonymous and insensitive. Our staff are expected to undertake trainings on data protection, which we organize regularly.

We also have a comprehensive data backup system to encrypt and store data on servers in different locations in order to minimize the risk of data loss. In addition, we conduct data recovery tests to examine the status of the backup system on a regular basis.

Furthermore, our data security team is also responsible for inspecting any suspicious data deriving and transmitting activities, as well as enhancing our data protection system pursuant to the changes of laws and regulations and technology development. Meanwhile, this team takes charge of reviewing, discussing and improving our technologies in managing information security and our internal control system to ensure adequate protection is given to our users' data.

The Group has not experienced any disruption, loss of data and/or received complaints from the customers that materially affected the Group's operation during the Track Record Period.

### Intellectual property risk management

Aside from making trademark and patent registration applications, we have also adopted the following key measures to manage our intellectual property risk: (i) establishing a dedicated intellectual properties legal taskforce to guide, manage, supervise and monitor our daily work regarding intellectual properties; (ii) applying for registration of our intellectual properties before we commence relevant business; (iii) timely registration, filing and application for ownership of our intellectual properties; (iv) actively tracking the registration and authorization status of intellectual properties and take action in a timely manner if any potential conflicts with our intellectual properties are identified; (v) separating physical areas for technology development areas and business secrets protection areas which are only accessible with authorization under strict visiting rules; and (vi) clearly stating all rights and obligations regarding the ownership and protection of intellectual properties in all employment contracts and commercial contracts we enter into.

### Operational risk management

We pay detailed attention to the review of contents published by our customers. We have developed a proprietary intelligent content censor system, which leverages the machine learning technology to determine within several seconds whether the contents published by customers (including texts, graphics, and videos) have violated or is likely to violate any policies, and we manage this accordingly, through measures such as blocking such content from being published. At the same time, we set up an operational risk management team, members of which will conduct comprehensive reviews of contents used in our platform.

In addition, end customers can give feedback or report any violating contents published by our customers through different channels. Our operational risk management team will, pursuant to applicable laws and regulations, delete or remove offending contents and penalize such customers.

### Regulatory compliance risk management

In order to effectively manage our exposure to compliance and legal risk, we adopt strict internal procedures to ensure compliance of our business operations with the relevant rules and regulations.

In accordance with these procedures, our in-house legal department performs the basic function of reviewing and updating the form of contracts we enter with our customers. Our legal department examines the contract terms and reviews all relevant documents for our business operations, including licenses and permits obtained by the counterparties to perform their obligations under our business contracts and all the necessary underlying due diligence materials, before we enter into any contract or business arrangements.

We also have in place detailed internal procedures to ensure that our in-house legal department reviews our services and distribution contents, including upgrades to existing services, for regulatory compliance before such services and distribution contents are made available to the general public. Our in-house legal department is responsible for obtaining any requisite governmental pre-approvals or consents, including preparing and submitting all necessary documents for filing with relevant Governmental Authorities, within the prescribed regulatory timelines.

We continually improve our internal policies in accordance with changes in laws, regulations and industry standards, and update internal templates for legal documents. We undertake compliance management over various aspects of our operations and employee activities. We have also established an accountability system in respect of employees' violations of laws, regulations and internal policies. In addition, we continually review the implementation of our risk management policies and measures to ensure our policies and implementation are effective and sufficient.

We have an employee handbook in place, which has been approved by our senior management and distributed to all our employees. It contains internal rules and guidelines regarding basic working rules, work ethics, confidentiality, negligence, anti-bribery, and anti-corruption. We provide our employees with regular training to explain the guidelines contained in the employee handbook.

#### Financial reporting risk management

We have a set of policies in connection with our financial reporting risk management, such as financial system management, assets protection management, budget management, and operation analysis management. We also have procedures in place to implement such policies, which our financial department follows when reviewing our management accounts. In addition, we provide regular training to our financial department staff to ensure that they understand our accounting policies and procedures.

#### **Investment risk management**

We invest in or acquire businesses that complement ours, such as those that can expand our service scope and strengthen our R&D capabilities. We usually plan to hold our investments for the long term. To protect Shareholders' interests and control potential risks related to investments, we generally require the investees to grant us the usual investor protection rights.

In our investment projects, our corporate strategic management center identifies investment projects based on our investment strategies and evaluates the risks and potential of these investment projects in advance. We adopt different levels of approval and due diligence mechanisms depending on the specific circumstances of the investment project. Our finance and legal affairs department collaborates with the corporate strategic management center on evaluation, structure, analysis, communication, execution, risk control, reporting and post investment risk management of transactions. In addition, our finance and legal affairs department regularly monitors trading behavior. Any significant issues will be timely reported to the Board and the corporate strategic management center composed of several senior management team members with rich industry experience for further discussion.

#### Internal control risk management

We have designed and adopted strict internal procedures to ensure the compliance of our business operations with the relevant rules and regulations. To ensure the effectiveness of our internal control, our business department (i.e. sales department) works closely with our operations departments (i.e. security and risk control department as well as operational and maintenance security department). Our internal control team would also conduct regular reviews to monitor the status and effectiveness of our risk management procedures and policies, to ensure the effectiveness and adequacy of our procedures and policies in place.

#### AWARDS AND RECOGNITIONS

During the Track Record Period, we received awards and recognitions in respect of our services, technology and innovation. The following table sets out the details of some of the notable awards and recognitions which we have received:

Award/Recognition	Award Year	Awarding Institution/Authority
Shanghai Top 100 Software and Information Technology Service Providers (上海軟件和信息技術服務業百強)	2023	Shanghai Municipal Commission of Economy and Informatization (上海市經濟和信息化委員會)
Outstanding Service Support Enterprise (優秀服務支撐單位)	2023	Shanghai Information Network Security Administration Association (上海市信息網路安全管理協會)
High and New Technology Enterprise	2022	Science and Technology Commission of Shanghai Municipality (上海市科學技術委員會)
Shanghai Top 100 Software and Information Technology Service Providers (上海軟件和信息技術服務業百強)	2022	Shanghai Municipal Commission of Economy and Informatization (上海市經濟和信息化委員會)
REAL 100 Innovation Units	2022	Jiemian.com

Award/Recognition	Award Year	Awarding Institution/Authority
Most Watched Startup of the Year	2021	Sina.com
WISE 2021 Digital Innovation Icon Award (WISE 2021數字化創新標杆獎)	2021	36Kr (36 氪)
2020-2021 Best Practice of Trusted Cloud Technology – Object Storage (2020-2021年度可信雲技術最佳實踐 – 對象存儲)	2021	China Academy of Information and Communications Technology (中國信息通信研究院)
2021 TOP50 Digital Service Providers in Chinese Automotive Industry	2021	EqualOcean (億歐智庫)
Cloud Service Pioneer Institution Award	2021	01 Caijing (零壹財經)
2021 TOP 100 Digital Transforming Service Providers in China (2021中國數字化轉型服務商 TOP100)	2021	EqualOcean (億歐智庫)
Top 20 Growing Chinese Internet Enterprises	2021	Internet Society of China