

## BUSINESS

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### OVERVIEW

We are a fast-growing enterprise AI solutions provider in China. Leveraging our research capabilities in deep learning, we have developed proprietary computer vision and machine learning AI technologies to empower businesses in China. Through integration of AI technologies with our industry insights, we offer full-stack AI-based products and solutions, which consist of AI platforms, algorithms, software and AI-empowered devices, to enable businesses to reduce costs, improve operational efficiency, and optimize decision-making through intelligent transformation of their business operations and information management. In less than three years since our inception, we have established our brand in enterprise AI solutions industry in China. According to Frost & Sullivan, in 2020, we were the third largest AI technology driven solution provider in enterprise AI solutions market in China in terms of revenue. We have built upon our industry insights to develop AI technologies and deliver AI-based products and solutions for the manufacturing, financial services and other industries in China, which in turn enhance our competitiveness and strengthen our market position.

At the early stage of development since our inception, we assembled our core R&D team comprising of Mr. Zhang Fa'en, our CTO, and approximately 40 algorithm engineers. With the extensive AI-related knowledge and experience of our core R&D team, we initiated various R&D projects and devoted much resources in the R&D of AI technologies, including computer vision and machine learning. See “Business – Research and Development – Early stages of R&D.” In November 2018 and December 2018, we obtained our first copyrights and applied for a series of patents in machine learning and computer vision, respectively. As a result of our R&D efforts we developed our proprietary computer vision and machine learning AI technologies, which have won some of the most prestigious international AI challenges. See “Business – Awards and recognitions.”

We have independently developed three proprietary AI platforms: ManuVision, our intelligent machine vision platform; MatrixVision, our intelligent edge video platform; and Orion, our distributed machine learning platform. According to Frost & Sullivan, we are one of the nine companies in China with proprietary deep learning platforms. Our AI platforms enable us to accumulate a repertoire of AI technology assets including datasets, operators, algorithm models, design blueprints of hardware components, and software components. Furthermore, our AI platforms enable us to accumulate and iterate algorithm models and build an ever growing algorithm model library, or Model Zoo, a collection of models pre-trained and designed for reusing in our AI-based products and solutions.

Our industry know-how comprises the knowledge and experience in serving customers cross various industry verticals with AI technology. It is derived from the industry experts in our team and the joint ventures we formed with industry leaders in their respective fields and further accumulated from our past project experience. It contributed in accelerating our R&D processes by focusing our efforts in areas with potential commercialization opportunities, and enhancing competitiveness of our proprietary technologies and offerings of products and cost savings. Our technology assets are developed during the R&D process of our proprietary technologies and offerings of products and services, and further accumulated from our solution development and project delivery. Leveraging our industry know-how and our accumulated technology assets, we have developed a rich portfolio of AI-based products and solutions which include assets-based solutions, or ABS, and rapid deployed products, or RDP. Our ABS and RDP can be applied to various business scenarios, with appropriate customization by integrating various ABS or RDP or their respective modules according to customers' requirements. Furthermore, our AI technology assets enable us to develop new ABS or RDP with less engineering efforts and shorter implementation time. Our ABS and RDP have enabled us to develop a suite of products and solutions for our customers.

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In line with the national strategic directives of the construction of “New Infrastructure” in China, we strategically focus on providing AI-based products and solutions for manufacturing industry. We also provide AI-based products and solutions to financial services and other industries. Our AI-based products and solutions are categorized into four value themes, namely Intelligent Production, Edge Vision Analysis, Intelligent Data Center and Intelligent Data Governance. We also offer a suite of AI-based products and solutions for the manufacturing industry, namely AInnovation Intelligent Manufacturing System. According to Frost & Sullivan, in 2020, we were the largest AI technology driven solution provider in China’s AI solutions market in manufacturing industry in terms of revenue.

In addition, we are building an open architecture technology platform to attract more participants along the AI industry value chain and deepen the cooperation with various industry participants. As our ManuVision and MatrixVision platforms are currently embedded into our ABD and RDP for edge-based deployment on-site for our customers, we plan to develop our ManuVision and MatrixVision platforms to become cloud-based and with enhanced compatibility to connect with more devices and applications from different industry participants via WiFi or 5G network. The open architecture of such platforms will be compatible with plug-ins from third parties. We believe such platform capabilities will attract more participants in the value chain of the AI industry. For instance, third-party developers may develop their own technology assets (such as AI algorithm models and software components) that are plug-ins to our cloud-based platforms and provide additional features or capabilities. Suppliers may also offer devices and hardware components that are compatible with such capabilities, such as industrial cameras. Potential customers may explore their options and purchase or subscribe as needed. Such interactive participation will help create an ecosystem on each of the platforms. In this regard, we allocated approximately [3.6]% or HK\$[136.7] million in the R&D of cloud-based ManuVision and MatrixVision platforms into open ecosystems. See “Future Plans and Use of [REDACTED].” We expect to launch a beta version for testing by end of 2022, and introduce the first version with basic functions by the first half of 2023. We anticipate to launch the full version with general availability by end of 2025.

Our AI-based products and solutions can significantly enhance business values for our customers in manufacturing, financial services as well as other industries:

- **AI + Manufacturing.** Guided by our growth direction in new infrastructure and intelligent production and leveraging our AI capabilities in industrial vision, industrial cloud platform and industrial automation, we currently provide customers with AI-based products and solutions for verticals including iron and steel metallurgy, energy and power, automotive equipment, OLED panel and semiconductor, high-tech/3C, and engineering and construction. Our AI-based products and solutions primarily help customers optimize their business or production process, reduce costs, improve operational efficiency and manufacturing flexibility, and realize intelligent transformation of their business operations and information management.
- **AI + Financial Services.** According to Frost & Sullivan, AI solutions providers can help financial institutions to enhance and maintain high reliability, availability and security of information and data systems. As data centers transform from a centralized structure to a distributed architecture, financial institutions need more intelligent IT infrastructure operation and maintenance solution. In addition, financial institutions need more efficient data application since their legacy IT infrastructure is unable to process the data generated from daily operations, and data and information are dispersed in separated IT systems within financial institutions. Our AI-based products and solutions for financial services

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industry are applied to intelligent data center infrastructure and operation, intelligent hybrid cloud management and intelligent data governance and application with an aim to help financial institutions enhance reliability of their IT infrastructure which in effect enhance market competitiveness.

- **AI + Other Industries.** We also serve customers in other industries, such as retail, information technology and other industries. We primarily provide customers in these industries with AI-based products and solutions to automate certain aspects of their operations, such as their supply chain management, and optimize information management.

The development of our AI platforms and AI-based products and solutions are underpinned by our strong R&D capabilities. Our continuous investments in R&D activities result in a wealth of intellectual properties. As of the Latest Practicable Date, we have applied for 634 AI-related patents, and successfully registered 126 AI-related patents, including 79 invention patents. Since the beginning of 2018, we have won first places in five prestigious international computer vision competitions including the PASCAL Visual Object Classes Challenge 2019 for physical objects detection, the Cityscapes 2019 for image segmentation, the Multiple Object Tracking (MOT) Challenge 2020, the MIT Scene Parsing Benchmark, GOT-10K 2020 for generic object tracking. A number of our academic papers were published by the world’s prestigious industry conferences and journals such as the CVPR by IEEE, the ECCV, and journals published by IEEE.

Adhering to our strategic roadmap of “Empowerment, Infusion and Fusion (賦能、注入、融合)”, we have successfully commercialized our AI technologies across several industry verticals. Our go-to-market strategy has established engagements with industry leaders across multiple industries. We work with these customers to address their pain points in their business operations and information management, demonstrating the utility and advantages of our AI-based product and solutions. These customers serve as proof points for other potential customers in their respective industries. Benefiting from the landmark projects with the customers, we have expanded our business footprints in multiple industries and built up a growing and loyal customer base. We have provided AI-based products and solutions to over 400 customers as of the Latest Practicable Date. The number of our customers in the manufacturing industry increased from 16 in 2018 to 93 in 2020. The number of our customers in the financial services industry increased from two in 2018 to 18 in 2020. The number of premium customers increased from 13 in 2019 to 23 in 2020. The total revenue contribution by our premium customers was RMB114.2 million and RMB381.3 million, for 2019 and 2020 respectively. See “Business – Customers” for more details. We believe that the significant business value offered by our AI-based products and solutions will continue to enhance the customer loyalty.

We have experienced a robust growth during the Track Record Period. Our revenue increased from RMB37.2 million in 2018 to RMB229.1 million in 2019 and further increased to RMB462.3 million in 2020, representing a CAGR of 252.5% from 2018 to 2020. Our revenue increased from RMB297.6 million in the nine months ended September 30, 2020 to RMB553.0 million in the same period in 2021. Our gross profit increased from RMB23.4 million in 2018 to RMB71.6 million in 2019 and further increased to RMB134.6 million in 2020, representing a CAGR of 139.8% from 2018 to 2020. Our gross profit increased from RMB85.3 million in the nine months ended September 30, 2020 to RMB170.9 million in the nine months ended September 30, 2021. In 2018, 2019 and 2020 and the nine months ended September 30, 2021, we recorded net losses of RMB71.2 million, RMB248.4 million, RMB360.6 million and RMB438.0 million, respectively.

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Eliminating impact of items including share-based payment expenses, finance cost of financial liabilities of redeemable shares and [REDACTED] expenses, we generated an adjusted net losses of RMB45.4 million, RMB160.0 million, RMB144.5 million and RMB81.0 million in 2018, 2019, 2020 and the nine months ended September 30, 2021, respectively. Adjusted net loss is a non-IFRS measure. See “Financial Information – Non-IFRS Measure” for more details.

### Our Strengths

We believe the following competitive strengths contribute to our success:

#### **Fast-growing enterprise AI solutions provider with strong innovation and research capabilities**

We are a fast-growing enterprise AI solutions provider in China. Our core competence has been the proven capability in integration of AI technologies with industry insights to provide AI-based products and solutions designed to help businesses reduce costs, improve operational efficiency, increase business values through intelligent transformation of business operations and information management. We are a first mover in offering AI-based products and solutions designed for the manufacturing industry. In less than three years since our inception, we have established our brand in the enterprise AI solutions industry in China. According to Frost & Sullivan, in 2020, we were the third largest AI technology driven solution provider in the enterprise AI market in China in terms of revenue; and we were the largest AI technology driven solution provider in China’s AI solutions market in the manufacturing industry in terms of revenue.

The development of our AI platforms, algorithms, software and technologies are underpinned by our strong R&D capabilities. Our continuous investments in R&D activities have resulted in a wealth of intellectual properties. As of the Latest Practicable Date, we have applied for 634 AI-related patents, and successfully registered 126 AI-related patents, including 79 invention patents, covering software, algorithms, hardware and product design. Our strong R&D capabilities and proven track record of technological innovations have been highly recognized by academics and the AI industry worldwide. We have won first places in five prestigious international computer vision competitions such as, the PASCAL Visual Object Classes Challenge 2019 for physical objects detection, the Cityscapes 2019 for image segmentation, the Multiple Objects Tracking Challenge 2020, the MIT Scene Parsing Benchmark and GOT-10K 2020 for generic object tracking by outperforming research teams of global technology giants and world-renowned universities. Furthermore, a number of our academic papers were published by the world’s prestigious industry conferences and journals such as the CVPR by IEEE, the ECCV, and journals published by IEEE. In particular, our research papers on Few-shot Learning and Zero-Shot Instance Segmentation demonstrated our R&D effort to reduce the restriction on the amount of sample data on deep learning technology. We believe such research has high practical value in the manufacturing industry where samples are generally limited. As of September 30, 2021, we had approximately 255 employees engaged in AI and technical functions, accounting for 69.1% of our total employees, and approximately 35.7% of our employees held master’s or higher degrees.

In 2020, we were named as one of the “World’s 50 Smartest Companies” by the MIT Technology Review, the “World’s 100 Most Promising AI Companies” by CB Insights, and the “2020 Global Unicorn Club” by CB Insights. As a fast growing company in the AI industry in China, our solution in intelligent production was named in the “China AI Industry Intellectual Property White Paper 2020” and we were also the leading drafter of intelligent production chapter in the “China AI

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Industry Intellectual Property White Paper 2020”. In April and May 2021, we were the only Chinese company to be listed as an “Example Vendor” in machine vision and “Cool Vendor” in AI for computer vision by Gartner, respectively.

### Proprietary AI platforms

Leveraging our research capabilities in deep learning, we have independently developed world-class proprietary AI platforms, namely ManuVision Intelligent Machine Vision Platform, MatrixVision Intelligent Edge Video Platform and Orion Distributed Machine Learning Platform. Each of the AI platforms has the following features and advantages:

- ***ManuVision Intelligent Machine Vision Platform.*** Our ManuVision Intelligent Machine Vision Platform is an edge-based machine vision inspection software system powered by deep learning technology, designed to locate, measure, detect, and recognize common defects or key metrics. The platform comprises three components, namely, Trainer, Designer, and Runtime, and covers the full spectrum of functions from image labeling, deep learning model training, model testing, inspection pipeline authoring, and online inspection. It significantly improves the quality and reduces the costs for delivering inspection solutions. ManuVision Intelligent Machine Vision Platform is equipped with our proprietary industrial cloud platform, which may operate in a public cloud or on-premise. With WIFI or 5G network, ManuVision running at edge and industrial cloud platform could exchange information bilaterally, including making upgrades to algorithm models enabled by our over-the-air technology, updating status of devices in operation and operation logs.
- ***MatrixVision Intelligent Edge Video Platform.*** Our MatrixVision Intelligent Edge Video Platform systematically combines edge computing and deep learning. Equipped with our proprietary edge computing devices, it performs tasks such as video stream decoding, image encoding and decoding, model conversion and migration, model deployment and real-time inference. Once deployed, MatrixVision will be able to process video streams from cameras and generate real-time data about events of interests, without any transmission of video data over the Internet, saving network consumption and protecting privacy. MatrixVision provides comprehensive and real-time functional interfaces that are adaptable to various commercial applications in terms of model development and hardware compatibility. Similar to the ManuVision platform, our MatrixVision platform is deeply integrated with the industrial cloud platform to realize full-time monitoring and control of edge computing devices through edge-cloud collaboration, as well as dynamic upgrading of algorithm models by over-the-air technology.
- ***Orion Distributed Machine Learning Platform.*** According to Frost & Sullivan, we are one of the nine companies in China with proprietary deep learning platforms. Our Orion Distributed Machine Learning Platform is a machine learning platform. Orion thrives on big data, and encompasses components covering the three key AI elements, namely algorithm, data, and computing power. The technical advantages of Orion are (i) its fully integrated machine learning process that supports one-stop AI solution development while allowing end-users to use each component independently, providing flexibility to augment customers’ existing workflows; (ii) its abilities to process massive real-time heterogeneous data from multiple sources, ensuring high data quality before building AI models; (iii) its AutoML capability, which builds our strong industry know-how into the whole model



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development process; and (iv) its capability in dynamic computing resource management and allocation that increases the utilization of computing resources and as such reduces the total cost for customers. Together with the no code development capability, self-learning machine learning greatly lowers the bar for industry customers to build high quality intelligent models.

We have been accumulating and iterating algorithm models on our AI platforms to build a growing library of algorithm models, or Model Zoo, which is a list of models pre-trained for reusing in our products and solutions for our customers. Our algorithm models can be widely used in detection, positioning, measurement and identification, and provides fast, stable and reliable vision algorithms under poor environment in certain business scenarios, thus achieving “algorithm as scenario”, which is closer to actual applications in those industries. For example, our AI-based products and solutions can be used in liquid crystal semiconductor production, engineering radar inspection, intelligent wind power operation and maintenance, automotive equipment manufacturing, and financial services industries.

We are committed to extending the application of our AI technologies to business operations and information management beyond our current footprints, and improving the implementation and delivery capability of our AI-based products and solutions to customers. In addition, we are building an open architecture technology platform to attract more participants along the AI industry value chain and deepen the cooperation with various participants, so as to create an ecosystem including developers, business partners and customers.

### **Industry-leading AI-based products and solutions**

Through integration of AI technologies with our industry insights, we offer full-stack AI-based products and solutions, which consists of AI platforms, algorithms, software and AI-empowered devices, to enable businesses to reduce costs, improve operational efficiency, and optimize decision-making through intelligent transformation of their business operations and information management. We believe that such full-stack AI solutions will unleash the full potential of our capabilities in addressing the pain points experienced by our customers. Further, our strong software-hardware integrated delivery model also heightens the entry barrier for our competitors. We also benefit from understanding best practices of the industry leaders through our customers’ feedback and continuously upgrade and optimize our AI-based products and solutions. Having considered the business cycle, willingness of intelligent transformation, the digitalization of the verticals in manufacturing and financial services industries and our industry know-how, we further focus on eight verticals, namely, iron and steel metallurgy, energy and power, automotive equipment, OLED panel and semiconductor, high-tech/3C, engineering and construction, insurance and banking.

We continuously improve our solution delivery to our customers by streamlining our portfolio of asset based solutions, or ABS, and rapid deployed products, or RDP. Our ABS or RDP can be applied to business operations and information management of customers independently, or with appropriate customization by integrating multiple ABS or RDP or their modules according to customers’ requirements. This requires profound industry expertise and technological innovation, as well as the integration of “optical, mechanical, electrical automatization by software and algorithm” technologies to achieve the standardization and high reusability of ABS and RDP. By quickly deploying, matching and optimizing technology assets, we can create a suitable AI solution with the shortest practicable time to meet the specific needs of end-users. With the continuous accumulation of

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our technology assets, ABS or RDP modules and industry insights, we are able to offer more diversified and user-friendly AI-based products and solutions for various business scenarios, thereby enhancing the competitive barrier and strengthening our market position.

We further developed a suite of industry focused AI-based products and solutions, as well as applications tailored for certain industry verticals or specific to certain customer(s). In particular, we strategically focused on providing AI-based products and solutions for the manufacturing industry and developed a suite of vertical products and solutions, namely AIInnovation Intelligent Manufacturing System. We also provide AI-based products and solutions to financial services and other industries. Our R&D team has developed technologies suitable for practical application in industries, allowing us to provide effective AI products and solutions to our customers. With the continuous accumulation and iteration of ABS and RDP on our AI platforms, we can effectively reduce the delivery costs and shorten fulfilment timeline. Through rapid combination, matching and optimization of highly reusable AI platforms, technology assets, as well as differentiated and customized integration of ABS and RDP according to specific needs of end-users, we are able to provide a suitable solution within the shortest possible time. By constantly providing and efficiently implementing easy-to-use AI-based products and solutions for customers, we have been creating business values for customers and, in turn, strengthening our market position. During the Track Record Period, our products and solutions have brought about the following efficiency enhancements for the relevant customers:

- Our solution in engineering radar inspection improves the efficiency of radar wave analysis by 20 times on average as compared on-site technicians, while ensuring an accuracy of over 98% that is difficult for on-site technicians to achieve.
- The site-wide car matching and tracking technology achieves license plate recognition accuracy of 99.9% even for large gas station with over 2,000 daily throughput.
- A central processing server is able to process videos from over 2,000 cameras with attire conformity issue detection accuracy of 97%.
- The surface OCR solution recognizes characters on irregular product surfaces such as laptop back panels with over 99% accuracy, compared to lower than 85% accuracy our customers have seen with traditional machine recognition methods.
- The AI screw quality inspection machine has a defect detection accuracy of 99%, at measurement accuracy of 0.02mm. With an effective production speed of 250-300 pieces per minute, the detection efficiency is about 8 times higher than that of manual detection.

### **Proven commercialization capabilities with effective go-to-market strategies**

Adhering to our strategic roadmap of “Empowerment, Infusion and Fusion (賦能、注入、融合)”, we focused on commercializing AI technologies and achieved success during the Track Record Period. We have conducted in-depth research in various industries by analyzing different business scenarios with a vision of empowering traditional businesses with AI technologies.

Our go-to-market strategies have proven to be effective in terms of AI productization, customer service and customer acquisition, where we adopted a three-step approach to engage, grow and repeat. During the Track Record Period, we focused on engaging with industry leaders in manufacturing and financial services industries, who are hallmarked by their large data volume and strong willingness for adopting AI-based solutions in addressing certain pain points specific to their business operations. Such business opportunities allowed us to identify their pain points and commercialize our know-how

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into AI-based products and solutions specific for those markets. When we enter into a new vertical, we typically present our AI-based products and solutions to these customers for a single scenario in their business operations and information management as a starting point. It is part of our strategy that the success of the first project will speak volumes in creating customer stickiness and exploring further opportunities with the same customer by addressing different scenarios, so as to participate in the AI transformation cycle of the customer. We regard this as the “1+N” cooperation. Once we have built our portfolio of AI-based products and solutions with such customers, we then expand our footprints in the same industry by approaching similar companies in the same vertical with our offerings. Given the reusability of our ABS and RDP, our solutions are highly replicable and thus adaptable to existing infrastructure of any new customers. We regard this as the “1\*N” expansion, which enabled our AI-based products and solutions to achieve network effect. Our solution in molten iron transportation management has been used in multiple furnace sites, and our solution in liquid crystal semiconductor production was applied and had gone live with multiple customers. In addition, some of our technology solutions can be applied to similar scenarios across different verticals. For example, as of the Latest Practicable Date, our AI-based solution for intelligent defect detection has been adopted by 79 customers across different verticals.

We have demonstrated a proven record of quickly penetrating new industry verticals. During the Track Record Period, we have established business partnerships with industry leaders and technology partners. Such strategic partnerships give us access to their resources and create a win-win ecosystem. For example, we established CISAI Tech and China Railway Qizhi, two joint ventures with CISDI Group and China Railway No. 4 Engineering Group Co., Ltd., respectively. Both joint ventures proved to be successful as we developed solutions in engineering radar inspection and molten iron transportation management, which disrupted the conventional operations of the tunnel construction industry vertical and the iron and steel metallurgical industry vertical respectively. See “Business – Our Solutions – AI + Manufacturing” for more details. We have also established RewinCloud, a wholly-owned subsidiary, in 2019 to focus mainly in providing AI-based products and solutions for financial institutions such as insurance companies and commercial banks. These solutions are designed to optimize business processes, improve customer service capabilities and enhance market competitiveness for our customers. See “– Our Solutions – AI + Financial Services” for more details. During the Track Record Period, we have provided AI-based products and solutions to a number of well-known insurance companies and commercial banks.

We are committed to creating long-term business values to our customers. We believe that taking into account our customers’ medium- and long-term strategic goals in the process of developing our AI-based products and solutions is crucial to our development in the long run, as it would align our commercial interests with theirs. Our senior management team regularly conducts such assessment of our end-users’ needs and our own business strategies, as well as the potential business values we can create for our customers.

### **Growing high-quality and loyal customer base**

We have amassed a large and diversified customer base across manufacturing, financial services and other industries. The number of customers in manufacturing industry increased significantly from 16 in 2018 to 93 in 2020, and from 66 in the nine months ended September 30, 2020 to 71 in the nine months ended September 30, 2021. The number of customers in financial services increased from two in 2018 to 18 in 2020, and remained stable at 12 in the nine months ended September 30, 2020 and 2021. In aggregate, the total number of customers increased from 50 in 2018 to 157 in 2020, and from



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111 in the nine months ended September 30, 2020 to 130 in the same period in 2021. The number of premium customers increased from 13 in 2019 to 23 in 2020. The total revenue contributed by premium customers was RMB114.2 million and RMB381.3 million for 2019 and 2020, respectively. See “– Sales and Marketing – Customers” for more details.

Our market-entry strategy has been to establish engagements with industry leaders across the multiple industries, who became our customers. We work with these customers to address the pain points in their business operations and information management, demonstrating the utility and advantages of our AI-based products and solutions. The success of our solutions and products for these customers deepens the business cooperation and creates cross-selling opportunities. Our business relationship with one of our key customers began in 2018 when we embarked to automate its inventory replenishment protocol in its operations, and we have worked closely with it since then to explore and automate 13 more operational scenarios such as intelligent inventory management, code reading and precision marketing. This collaboration allowed us to expand our offerings and develop our solution in supply chain management. In addition, these customers also serve as proof points for other potential customers in those industries.

Since the inception, we have established business partnerships with industry leaders in manufacturing and financial services industries and we have offered our AI products and solutions to over 400 customers as of the Latest Practicable Date. We believe that the business values created, and the economic benefits offered through our AI-based products and solutions will continue to enhance the loyalty of our diversified customer base.

### **A veteran management team led by industry leaders with extensive enterprise services experiences and industry insights**

Our Chairman of the Board, Dr. Kai-Fu Lee, founded Sinovation Ventures Group in 2009 focusing on developing the next generation of Chinese high-tech companies. Prior to founding Sinovation Ventures Group in 2009, Dr. Lee was the President of Google China, and senior executives at Microsoft, SGI, and Apple. He served as global vice president and president of Google Greater China. During his tenure at Microsoft, Dr. Lee established Microsoft Research Asia in Beijing, one of the world’s top research labs which nurtured a large number of top AI talents. Dr. Lee received his bachelor’s degree in computer science from Columbia University and Ph.D. with the highest honor from Carnegie Mellon University. He is the Co-Chair of Artificial Intelligence Council for World Economic Forum Center for the Fourth Industrial Revolution and recognized as Times 100 in 2013. We have greatly benefited from the extensive influence of Dr. Lee in the areas of AI technology application directions and his recommendation of outstanding AI talents.

Our co-founder and CEO, Mr. Xu Hui, graduated from Shanghai Jiao Tong University with a bachelor’s degree in electronic engineering, and obtained an EMBA degree from Guanghua School of Management, Peking University. Mr. Xu held various senior leadership capacities including serving as the General Manager of the Insurance and Securities Division, the Deputy General Manager of Banking Division in China Region of Financial Services Sector; the General Manager of Services and Products Line Group and Alliances in Greater China Region and the General Manager of Geography Expansion in China Region of Global Technology Services Sector in IBM from November 1996 to November 2009; the Vice President in Greater China Region and General Manager in East and Central Region in SAP from October 2009 to February 2013; the Vice President and General Manager of Microsoft Enterprise & Partner Group (EPG) in Greater China Region, the General Manager of

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Customer Service and Support (CSS) in Greater China Region and Cloud Executive Sponsor in Asia Pacific Region from March 2013 to November 2016; and the Vice President of Wanda Internet Technology Group from November 2016 to January 2018. Mr. Xu has over 25 years of extensive experience in manufacturing, financial services and retail industries with in-depth experiences in sales, products, technology and services. In 2019, Mr. Xu was awarded the Ram Charan Management Practice Awards – Innovation and Entrepreneurship Practice Award and the “Excellence Award” granted by Harvard Business Review. In 2020, Mr. Xu was selected as one of the 100 Most Creative People in China by Fast Company, a renowned business magazine in the United States.

Our management team has strong technology R&D background and extensive enterprise services experience. Mr. Zhang Fa'en, our Chief Technology Officer has approximately 15 years of experience in software, big-data, machine learning and deep learning technology research, development and management and was the chief architect for Baidu AI Cloud. He is supported by our head of products, who has 20 years of experience in technology product development. Our client relationship and services team is headed by Mr. He Tao, our Chief Revenue Officer, who has more than 20 years of experience in management, and is assisted by a team with on average 20 years of relevant experience in enterprise and technology services, including our head of our regional sales, head of our subsidiary RewinCloud and our head of technology services and customer success. In addition, many other of our team members have extensive enterprise services experience.

Our management team and our R&D team are also advised by the Scientific Research Committee led by Academician Ni Guangnan, which consists of world-renowned scholars and industry KOLs. In order to stay in touch with the emergence of cutting-edge technology, we continue to attract world-renowned scholars and industry KOLs to join our Scientific Research Committee. Among them, Ms. Jingjing Liu, the principle investigator and Guoqiang professor from Institute for AI Industry Research, Tsinghua University, joined our Scientific Research Committee in 2021.

We have also built a strong R&D team by recruiting AI talents and industry experts that would shed light in all areas of “industry, academia, and research”. As of the Latest Practicable Date, we had a team of over 200 technical and industry experts from prestigious domestic and overseas universities, such as Harvard, Columbia, Cornell, Tsinghua University, Peking University and Chinese Academy of Sciences, as well as top-notch domestic and overseas companies, such as Google, IBM, Microsoft, Baidu, SAP, Wanda, Huawei, Alibaba, Xiaomi and JD.com. Our technical and industry experts possess strong AI technological expertise and industry insights. We believe our technical and industry experts are crucial for the robust growth of our business operations.

We believe that our management team and talent pool have been the key factors for our past success and will continue to play critical roles in fulfilling our mission.

### **Our Strategies**

We will focus on the following key strategies to achieve our mission and vision:

#### **Continue to optimize our AI platforms and strengthen our R&D capabilities**

Our leading computer vision and machine learning technologies have laid a solid foundation for the rapid growth of our business. We will continue to invest in the optimization and upgrading of our ManuVision Intelligent Machine Vision Platform, MatrixVision Intelligent Edge Video platform, Orion Distributed Machine Learning Platform and corresponding technology assets, which are further

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deposited into our three AI platforms. We will continue to recruit AI talents and industry experts to enhance our R&D capabilities. We expect to recruit approximately 600 AI talents and industry experts in the next four years, particularly those specialize in deep learning technologies and programming languages. According to Frost & Sullivan, as of 2020, there are tens of thousands of AI talents and industry experts in China. We plan to further strengthen our computing power and data storage capabilities and continue to improve our data privacy protocols and information security management. See “ — Data Privacy and Protection” for details.

We will continue to accumulate and iterate more algorithms through our AI platforms that are adaptable to the practical applications in specific industries, thereby enriching our Model Zoo. We will continue to upgrade our ABS and RDP by improving their standardized features and enhancing reusability. This would reduce costs due to customized delivery and improve efficiency in solution deployment, which in turn enhances our competitive strengths.

We seek to continue with the accumulation of our technology assets and industry insights and grow our current portfolio of AI-based products and solutions. We believe that we can leverage on our technology assets and offer a wider variety of effective AI-based products and solutions suitable for different business scenarios, thereby strengthening our market position in the enterprise AI solutions industry in China.

We will continue to build an open architecture technology platform with better adaptability to connect more devices and applications provided by us or our partners. We believe it would enhance our platform capabilities and attract more participants in the value chain of AI industry. We believe that enhanced adaptability and reduced complexity of our platforms will facilitate our partnerships with a large number of participants in the ecosystem from developers, partners to ultimately our customers, and continuously strengthen our market position.

### **Continue to grow and enrich our solution offerings**

We will continue to develop new AI-based products and solutions including intelligent cloud platforms and PaaS and SaaS products to meet various deployment needs in different business scenarios. We expect to use approximately [REDACTED] of the net [REDACTED] from the [REDACTED] to develop aforesaid cloud-based AI products and solutions. See “Future Plan and Use of [REDACTED]” for details of the relevant R&D projects, plan and estimated staff to be hired for such projects. Further, we will continue to infuse our industry know-how and capabilities to build verticalized cloud platforms and build an ecosystem powered by both cloud and edge computing. According to Frost & Sullivan, in light of the less budget for IT and software system spending compared to large scale enterprises or industry leaders, small and medium-sized enterprises (“SMEs”) prefer more standardized products rather than AI solutions under private deployment with advanced customization. Our planned cloud-based products, such as SaaS, PaaS and intelligent cloud platforms, can address SMEs’ needs for standardized AI-based products and solutions with competitive pricing to improve their operating efficiency and reduce costs. For instance, we can provide defect detection, intelligent automation solutions for SMEs that do not require the purchase of substantial hardware or IT equipment. Therefore, we believe that a comprehensive suite of AI-based products and solutions will position us to capture unmet demands (such as SMEs) in manufacturing, financial services and other industries.

We will continue to expand and diversify the range of our AI-based products and solutions in manufacturing and financial services industries. Leveraging our accumulated technological know-how

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and insights in the market trends and the business models of industry participants, we will further penetrate into the different segments of manufacturing and financial services industries and other industry verticals via our 1+N cooperation and 1\*N expansion to meet more needs of our end-users.

### **Continue to enhance our commercialization capabilities**

We will further enhance the commercial value of our AI-based products and solutions. Through project experience gained from serving our customers, we will continue to refine our AI technologies based on the accumulated industry insights, so as to upgrade and optimize our AI-based products and solutions. We believe such efforts can streamline the intelligent transformation of business operations and information management for our customers, so as to support their strategic business development.

We plan to explore new commercial scenarios where we can apply our AI technologies and innovate new AI-based products and solutions that can address more pain points experienced by businesses. Through deepening our collaborative relationships with customers, we will further explore new opportunities in the value chain of existing customers and effectively address other major pain points in those industries. We can harness our competencies in AI technologies and industry insights, thereby expanding our business footprints and creating more commercial values to both existing and potential customers.

### **Continue to broaden our customer base and deepen the relationships with customers**

We will expand our customer base through our sales and marketing efforts. We plan to expand our in-house sales team and strengthen our cooperation with third-party system integrators. We believe that success of landmark projects for our customers confers recognition and will put us in a strategic position to expand our footprints in those industries, or penetrate into new verticals with significant unmet demand for our AI-based products and solutions. With our accumulated project experience, our sales team will explore the needs of end-users and work with our R&D team to offer corresponding solutions. We also expect to promote our brand and solutions by participating in industry events.

We will further deepen and broaden our business cooperation with our customers in manufacturing and financial services industries. Focusing on our customers’ success in their respective industries is critical for our long-term relationships with them. We strive to align the development of our AI-based products and solutions with their medium-term and long-term strategic goals and create long-term value to our customers.

We believe that success of every project will create more cooperation and cross-selling opportunities for us to meet the evolving needs of our end-users. Furthermore, the landmark projects with our customers also serve as proof points for other customers and help us to acquire new customers cost-effectively, thus leading to a wider adoption of our AI-based products and solutions in related industries to drive the sustainable growth of our business.

### **Continue to pursue strategic investments and acquisitions that strengthen our market position**

We will continue to expand our AI capabilities across different industries. While we expect this will occur primarily through organic growth and explore opportunities to embark on joint ventures with our key customers, we also plan to acquire assets and businesses that will strengthen our value propositions to our customers. We primarily focus on entities with differentiated proprietary insights in

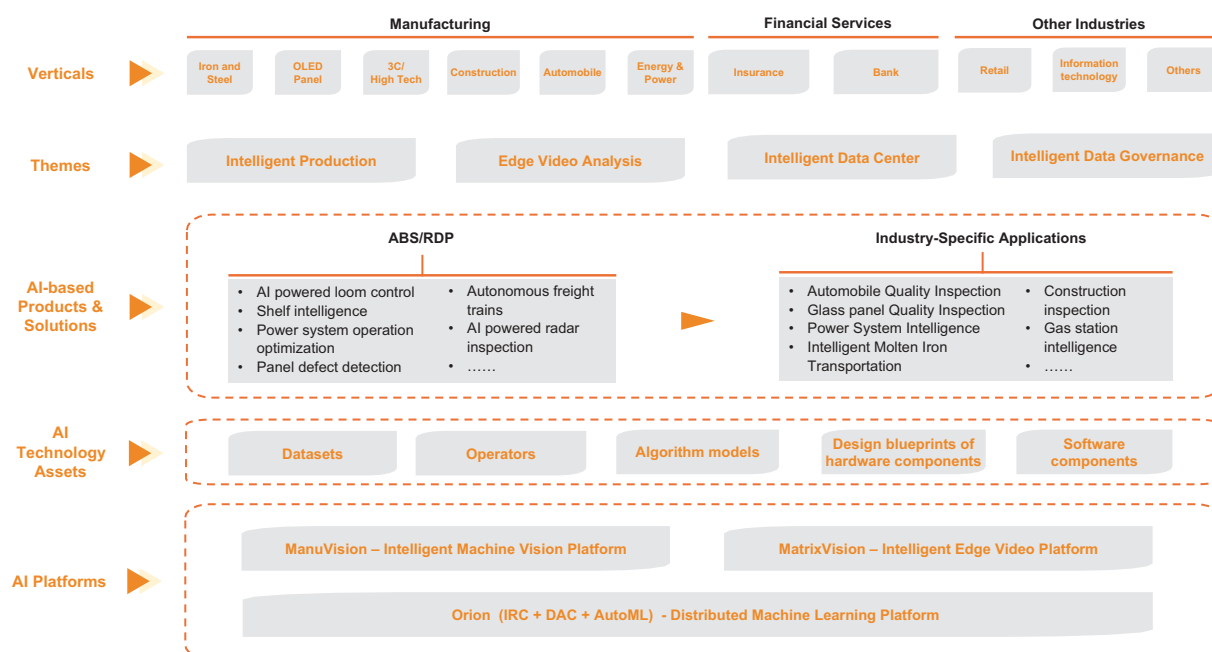
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computer vision and deep learning technologies, as well as PaaS, SaaS, software and cloud-based products that could be complementary to our AI-based offerings. Through strategic alliances, investments and acquisition, we aim to enhance our products and solutions for penetrating into new industry and verticals, and strengthen our market position. As of the Latest Practicable Date, we had not identified any potential acquisition targets.

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Leveraging our AI technology and industry insights, we offer full-stack AI-based products and solutions to our customers in manufacturing, financial services and other industries so as to reduce costs, improve operational efficiency, and enhance business value through intelligent transformation of their business operations and information management.

The following diagram illustrates our AI platforms, AI technology assets, ABS/RDP, industry-specific applications, as well as our four major value themes and targeted industries that our AI-based products and solutions are applied to:



### Core Competencies

We believe the success of our business and our ability to achieve significant revenue growth since our inception has been and will continue to be driven by our core competencies, as we continue to differentiate ourselves from our competitors in the following ways:

- Strategic industry positioning and know-how.** We strategically focus our business in AI solutions for enterprises in China. Enterprises in China have a widely diversified and relatively well-defined business scenarios for AI-based products and solutions. This presents us with vast opportunities for product and solution innovations. Within the enterprise AI solution market, we have strategically focused on the manufacturing industry as we believe there are favorable conditions in such industries for the commercialization of AI solutions in the long run, and we can gain extensive practical enterprise service



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experience while driving technology development. In particular, we were the largest AI technology driven solution providers in China in terms of revenue in the manufacturing industry in 2020, according to Frost & Sullivan. We have accumulated significant first mover advantages in terms of the capabilities of services, products and industry insights as compared with other competitors. In the financial service industry, we primarily focus on AI solutions relating to the utilization of IT infrastructure operations, which is one of the essential pain points faced by financial institutions in China.

- ***Strong technology and solution capabilities.*** Leveraging our proprietary AI technology platforms, we are able to design effective AI-based solutions to meet customer’s demands. We have accumulated significant amount of standardized technology assets, ABS and RDP, which serve as building blocks of our industry-specific solutions and allow us to quickly assemble and deploy AI-based solutions that are both comprehensive and tailored for specific business scenarios. Our product offering is also supported by our industry insights accumulated from partnering with and serving our light house customers. In contrast, according to Frost & Sullivan, solutions from non-AI focused solution providers in China are generally hardware-centric or traditional software-based, which tend to hinder them from efficiently and effectively dealing with complex and evolving business scenarios. In addition, many non-AI driven products and solutions often have limited flexibilities for re-development, which makes them difficult to meet customized requirements of enterprises in China. We believe our AI-based solutions, driven by AI algorithms, are able to achieve higher precision with greater flexibility in adapting to complex and evolving tasks.

Using our ManuVision platform, we developed the OLED panel glass quality inspection solution with our AI algorithm models, and deployed in our customer’s production lines. Detecting defects on panel glass is a complex task, and as technology of making OLED panel glasses changes, the task evolves accordingly. In order for our AI algorithm models achieve an error rate of less than 0.1% and missed detection rate of less than 0.01%, our solution can adapt such models to recognize changing defect patterns. End-users can feed a small number of sample images that contain the new defect patterns, and our solution will refine our AI algorithm models based on our proprietary pre-trained AI models and few-shot learning training algorithm. The refined AI algorithm models ensure that our solution continue to yield such high accuracy in detecting defect patterns.

- ***Effective go-to-market strategies.*** We have adopted a 1+N and 1\*N go-to-market strategy which focuses on a three-step approach, namely engage, grow and repeat. Since our establishment, we have cumulatively served over 400 customers as of the Latest Practicable Date. Our total number of customers increased from 50 in 2018 to 157 in 2020. Furthermore, we have established joint ventures with industry leaders and technology partners, namely CISAI Tech and China Railway Qizhi, with CISDI Group and China Railway No. 4, respectively. Such strategic partnerships not only provided us with access to their industry insights, but also allowed us to leverage their industry resources to quickly penetrate into the relevant industry verticals. During the Track Record Period, our revenue increased from RMB37.2 million in 2018 to RMB229.1 million in 2019 and further increased to RMB462.3 million in 2020. Our revenue increased from RMB297.6 million in the nine months ended September 30, 2020 to RMB533.0 million in the same period in 2021.

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For example, we commenced business relationship with one of the largest steel manufacturers in China in September 2019 with a contract for the Intelligent Molten Iron Transportation Solution of RMB34.1 million in contract value. Our business relationship continued with two additional contracts in November 2020 and April 2021, demonstrating our 1+N go-to-market strategy. In light of our success with these engagements, we entered into contracts to provide similar solutions with two enterprises in the same industry in China in the nine months ended September 30, 2021, with contract values of RMB63.5 million and RMB29.5 million, respectively.

The key components of our AI offerings include (i) AI platforms, namely ManuVision Intelligent Machine Vision Platform, MatrixVision Intelligent Edge Video Platform, and Orion Distributed Machine Learning Platform; (ii) AI technology assets; and (iii) AI-based products and solutions, consisting of ABS/RDP as well as industry-specific applications combining certain ABS and RDP or their modules to meet customer’s requirements.

### **AI Platforms**

Our AI platforms function as our underlying AI infrastructure and provide critical support for our proprietary AI model training and model improvement processes. AI platforms enable us to develop a rich and growing portfolio of models that are customized for the differentiated needs of customers in various industry verticals.

#### ***ManuVision Intelligent Machine Vision Platform***

Our ManuVision Intelligent Machine Vision Platform is an edge-based machine vision inspection software system powered by deep learning technology, designed to locate, measure, detect, and recognize various objects, including common defects and key metrics. The platform comprises three components, namely, Trainer, Designer, and Runtime, and provides a one-stop solution from image labeling, deep learning model training, model testing, inspection pipeline authoring, and online inspection. It significantly improves the quality and reduces the costs for delivering inspection solutions. ManuVision Intelligent Machine Vision Platform is equipped with our proprietary industrial cloud platform, which monitors operation status of inspection stations in the field, raises alert upon occurrence of abnormality, and manages inspection stations such as automatically updating inspection model. As of the Latest Practicable Date, we registered 64 patents and 45 copyrights of software relating to our ManuVision Intelligent Machine Vision Platform.

ManuVision platform is developed based on our deep learning technologies in machine vision, which can be adopted in various industry verticals and manufacturing scenarios, such as measurements, defect detection and positioning and recognition. ManuVision supports our product development process by streamlining the data collection, image labelling and model training processes. Our ManuVision Intelligent Machine Vision Platform supported the development of AI + Manufacturing solutions, such as Intelligent Engineering Radar Inspection, Intelligent Defect Detection, Intelligent Automotive Equipment Manufacturing, and Intelligent Liquid Crystal Semiconductor Production. For example in defect detection, we provided a comprehensive solution combining hardware and software components, that detects any defects, such as cracks, on OLED panels, and achieved an error rate of less than 0.1% and missed detection rate of less than 0.01%.

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### ***MatrixVision Intelligent Edge Video Platform***

Our MatrixVision Intelligent Edge Video Platform systematically combines edge computing and deep learning. Equipped with our proprietary edge computing devices, it performs tasks such as video stream decoding, image encoding and decoding, model conversion and migration, model deployment and real-time inference. Once deployed, MatrixVision will be able to gather video streams from cameras and generate real-time data about events of interests, without the need to transmit video data over the Internet, saving network consumption and protecting privacy. MatrixVision provides comprehensive and real-time functional interfaces that are adaptable to various commercial applications in terms of model development and hardware compatibility. As of the Latest Practicable Date, we registered 71 patents and 46 copyrights of software relating to our MatrixVision Intelligent Edge Video Platform. Similar to the ManuVision platform, our MatrixVision platform is deeply integrated with the industrial cloud platform to enable fulltime monitoring and control of edge computing devices through edge-cloud collaboration, as well as dynamic upgrading of algorithm models by over-the-air technology.

MatrixVision Platform can be adopted in various industry verticals, and is able to operate on various types of hardware, and analyze video streams in real time, which recognize the objects and understand events in the video stream in order to form structured data. We have developed various solutions leveraging the MatrixVision Platform. Our MatrixVision Intelligent Edge Video Platform was applied in Intelligent Molten Iron Transportation and our development of license plate matching and vehicle tracking technology and attire conformity detection capabilities. Equipped with on-premise cameras, we provide solutions with video stream decoding and AI algorithm model inference in various operational scenarios for our customers, such as identifying instances where there are obstructions or personnel on the transportation tracks, and the system will automatically manage the vehicles to avoid collision. Such capabilities to recognize object and understand events can also be applied to monitoring uniform attire of employees in production sites and tracking license plates at petrol stations.

### ***Orion Distributed Machine Learning Platform***

According to Frost & Sullivan, we are one of the few companies in China with self-developed deep learning platforms. Our Orion Distributed Machine Learning Platform is a machine learning platform. Orion encompasses components covering the three key AI elements, namely algorithm, data, and computing power. It supports the entire process of large-scale AI development through intelligent resource center (IRC), data automation center (DAC), and automated machine learning (AutoML). Orion supports PB-level multisource heterogeneous data fusion, cleansing, structuring, visualization, and data lineage. It fully manages distributed model training, one-click model deployment, and full life cycle management of models. See “—Our AI Technology—Orion Distributed Machine Learning” for more information.

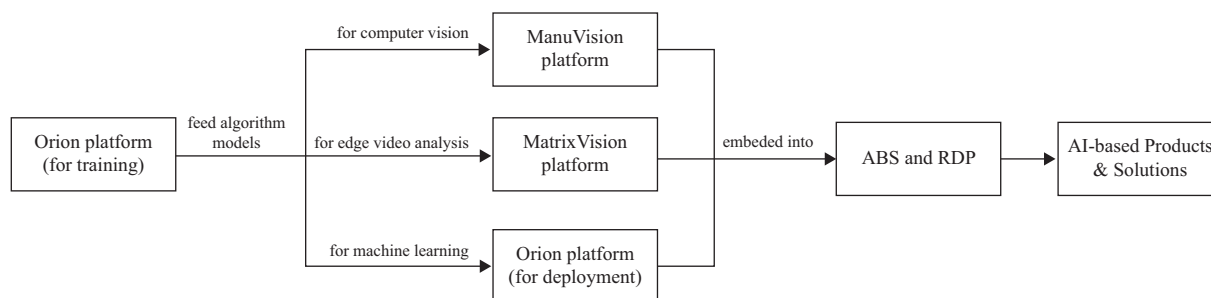
Our Orion platform thrives on big data, as it accesses more data, the more accurate the AI models that it trains will become, which creates greater business value to our customers. For instance, the accuracy of an AI model trained with bigger data may increase from 99% to 99.9%, which reduces the margin of error by 10 times. Our Orion platform can process data from two sources, namely (1) the Internet of Things (IoT), and (2) third-party sources. As billions of physical devices around the world are now connected to the Internet, collecting and sharing data, it forms the Internet of Things (IoT). We leverage IoT through 5G or WIFI networks to transfer data from devices connected to our ManuVision

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and MatrixVision platforms to Orion-DAC. Orion-DAC can intelligently process massive amounts of data up to petabyte level, then transfer such data to Orion-AutoML for training AI models. Customers may have IoT devices on-site, such as cameras and sensors, that are connected to our proprietary AI platforms, such as ManuVision and MatrixVision platforms, as deployed for the relevant customer on-site. Data collected will be fed to the Orion platform for on-site processing, and such data is not transferred to our servers.

The advantages of Orion are (i) its fully integrated machine learning process support while allowing customers to use each component independently, providing flexibility to augment customers’ existing workflows; (ii) its abilities to process massive real-time heterogeneous data from multiple sources, ensuring high data quality before building AI models; (iii) its automated machine learning capability, which builds our strong industry know-hows into the whole model development process; and (iv) its capability in dynamic computing resource management and allocation that increases the utilization of computing resources and as such reduces the total cost of ownership for customers. Together with the no code development capability, self-learning machine learning greatly lowers the bar for industry customers to build high quality intelligent models. As of the Latest Practicable Date, we registered 17 rights of patents and 40 copyrights of software relating to our Orion Distributed Machine Learning Platform.

The diagram below illustrates the relationships between our three proprietary AI platforms:

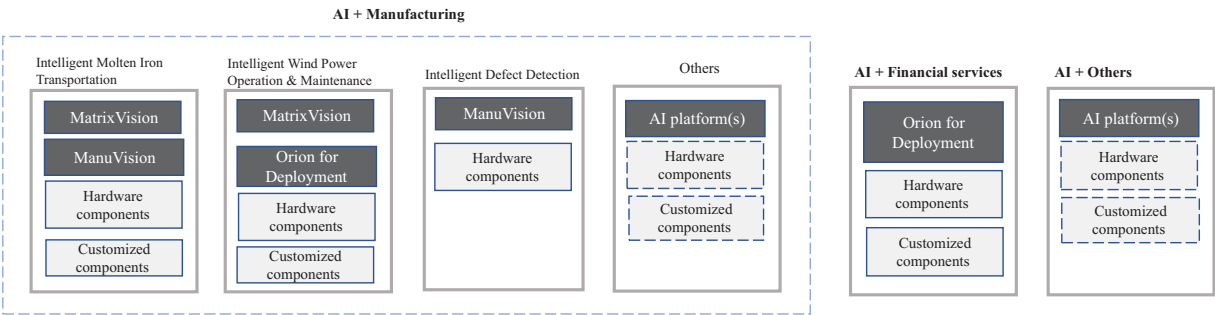


Our Orion Distributed Machine Learning Platform is used by our in house algorithm engineers to train mainly three types of algorithms model, namely (i) computer vision algorithm models for defects detection, object locating, characters or codes recognition and size measuring; (ii) edge video analysis algorithm models for understanding videos; (iii) machine learning algorithm models on structured data for intelligent prediction, smart decision. These algorithm models can then be transferred to any of our three AI platform for project delivery and run on-site for our customers (i.e. private deployment). For instance, imagery processing algorithm models are fed to our ManuVision platform while video processing algorithm models are fed to our MatrixVision platform.

Our ManuVision Intelligent Machine Vision Platform is a machine vision inspection software system that is embedded into our ABS and RDP, such that it operates on-site for our customers. It is designed to process imageries and can locate, measure, detect, and recognize various objects, including common defects and key metrics. Our MatrixVision Intelligent Edge Video Platform is typically paired with our proprietary edge computing devices, such that it can perform tasks such as video stream decoding and real-time inference for understanding videos. Such algorithm models are then developed into our portfolio of ABS and RDP by embedding our proprietary platforms and are paired with compatible hardware, such as panel defect detection and radar inspection capabilities in our solution

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offerings. The diagram below illustrates how such components are integrated into some of our AI-based products and solutions:



Our Orion platform can be applied to the development of AI models, data analytics and management of computing resources. It has supported the development of various AI + Financial Services and AI + Others solutions, including Intelligent Data Governance and Application, Intelligent Data Center Infrastructure and Operation. Orion platform also helps our customers manage their computer resources with high efficiency and reliability. For example, we have established a new data center equipped with our Orion platform for a research institute, which performs functions such as monitoring and allocating dynamically computing resources, managing data and training. Through the underlying Remote Direct Memory Access technology and parallel storage system, the data center has improved the operational and management efficiency of our customer.

AI Technology Assets

Our success in developing our proprietary AI technologies is a collective efforts by our algorithm engineers, software engineers, hardware design engineers, data engineers, product managers, user experience engineers, testing engineers, researchers and scientists. The contributions by each of such expertise form the wealth of AI Technology Assets we possess (namely, datasets, operators, algorithm models, design blueprint of hardware components and software components). The integration of various technology assets in forming our products and solutions to the customers are facilitated by the efforts of our architects, product managers, user experience engineers and testing engineers.

Our AI Technology Assets take the forms of datasets, operators, algorithm models, design blueprints of hardware components and software components. These assets are developed during the R&D process of our proprietary technologies and offerings of products and services, and further accumulated from our solution development and project delivery and stored in our internal database such that we can deploy in future projects and solution development processes. As of the Latest Practicable Date, we have accumulated approximately 1,985 AI technology assets and up to 96.2% of such assets have been reused in different products and solutions for our customers. Given the highly cohesive, low coupling and reusable nature of our technology assets, they become a pool of assets which we can utilize to construct and achieve high efficiency in projects delivery with customized requirements. The key components of our AI workflow include our AI technology assets in the development of our AI-based products and solutions.

- **Datasets.** Datasets may be a set of labeled images, videos or structured data samples. For instance, a set of labeled images of phone glasses with defects identified in digital image processing. Data are collected, pre-processed, labeled, and reviewed by data engineers in



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advance into datasets to meet the requirements of model training and testing. In the process of product development and customized project delivery, AI models are trained and fine-tuned for specific application scenarios, and datasets are fundamental to such process. The more datasets are used to train AI model, the more accurate AI models will be, which translate into more business value for our customers. In fact, the accuracy of an AI model trained from a greater pool of data may increase from 99% to 99.9%. As we continue to accumulate more datasets for varied industrial applications as part of our project delivery, they become an important asset that guarantees the continued optimization of algorithms and provides strong support for the development of our technologies.

- **Operators.** Operators are used to preprocess data, which may change the structure of data or filter out certain data. They play a critical role in transferring data from one form to another such that labeled datasets may be used in the training process. Different types of operators are applied to the primary data collected, regardless of its format, be it video, image, text, or tabular data, so as to improve the quality of the data or making it more consumable by the AI system. By linking a few operators, a series of processing, conversion and other operations can be performed to the primary data collected, so as to improve the quality of the training dataset or online inference data sample and ensure a high-quality trained model. Prebuilt operators significantly reduce the time of this conversion process by saving users’ time from authoring the conversion code themselves.

The operators can be broadly categorized into general-purpose operators and scene-specific operators. The latter contains the methods that address the specific issues in each application scenario based on our project experience in various industries, which greatly accelerate our project delivery for similar type of customers. Our pool of operators will continue to grow as we serve more customers.

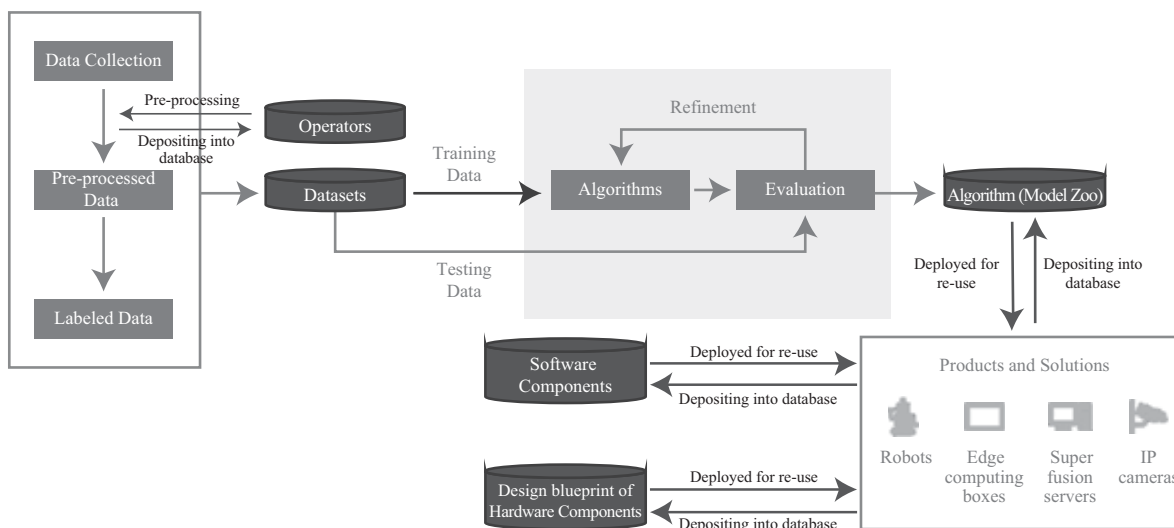
- **Algorithm models.** Algorithm models are software modules that are produced by training processes of datasets. They can be reused easily in different devices, products and solutions. Typically, algorithm model is independent function module, such as to identify defect on a phone glass. Algorithm models are our core technology assets, and those tailored for some specific scenarios often require weeks to develop by very experienced algorithm experts. We have built a talent pool of algorithm experts, who have extensive experience in developing algorithm models for AI-based products and solutions. These models are deposited on our three AI platforms for reusing. Our technology assets have affinity with AI platforms and thus run with optimal efficiency on our proprietary AI platforms. As of the Latest Practicable Date, we have developed 334 types of algorithm models for our ManuVision platform on defect detection and 413 types of algorithm models for our MatrixVision platform on scene inference.
- **Design blueprints of hardware components.** Our design blueprints of hardware components can be reused with different customized solutions for our customers as they are compatible with our industry specific applications. As they can be customized with diversified configurations, they are highly versatile to fit the specific project needs to construct devices, such as robots, edge computing boxes, super fusion servers and IP cameras. For example, we designed a series of edge-computing boxes with different configurations that can be reused in different projects running at different computing intensity levels algorithms models.

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- Software components.** Software components are function-independent software modules that bridge between industry know-how and the real-world applications for our customers. They can be broadly categorized into three types, namely platform software components, application software components and middleware components. While platform software components provide the toolkit to build various types of software applications efficiently, application software and middleware components directly function as needed by specific solutions. AI technologies are seamlessly infused into each one of the three types of software components.

### Typical AI workflow

Our R&D team follow a typical AI workflow to develop our AI-based products and solutions. The following diagram illustrates how our AI technology assets are utilized in our development of AI-based products and solutions.



The typical stages of our AI workflow include data collection, data pre-processing, data labeling, building datasets with operators, model training and refinement, evaluation, and deployment to produce products and solutions. We can automate some aspects of the workflow by utilizing our technology assets, as such we achieve high efficiency in projects delivery despite the customized requirements.

We collect data in the form of imagery and video stream in various operational scenarios, which include simulation data by our self-developed data labeling platform, on-site data collection with written consent from our customers, and data collected by customers that are then provided to us. We conduct the pre-processing and labelling processes in-house at the early stages of our product development based on the requirements of our algorithm engineers. In pre-processing stage, we apply different operators (i) to filter out bad quality data samples, and (ii) to augment data samples, through cropping, flipping, rotating, or adjusting brightness of images. After data is pre-processed, our data labeling engineers typically label the data on our self-developed data labeling platform, and mark target defects/objects in the data (e.g. an image) using bounding boxes. Upon completion, such data is stored in a centralized data center, and we back-up such data periodically in separate and various secured data back-up systems to minimize the risk of data loss or leakage. We also outsource part of such processes to our suppliers based on pre-set perimeters so as to expedite delivery timeline.

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### AI-based Products and Solutions

Our full-stack AI-based products and solutions are categorized into four primary value themes, namely Intelligent Production, Edge Video Analysis, Intelligent Data Center and Intelligent Data Governance. Each of our AI-based products and solutions is extensible and customizable to meet customer requirements.

Our AI-based products and solutions primarily consist of our ABS and RDP as well as customized industry-specific applications combining selected ABS and RDP or their respective modules. Our ABS is AI-based solutions built upon different technology assets and can be developed further into RDP. We typically deploy ABS in accordance with the progression of particular projects as agreed with customers. Our RDP is more standardized than ABS, which can be rapidly delivered to customers and deployed in various business scenarios. We have been committed to continuously developing and rolling out new ABS and RDP to address customers’ evolving business needs in various production or business scenarios and produce industry-specific applications. For details of our AI-based products and solutions and their applications, see “—Our Solutions”.

During the Track Record Period, we primarily derived revenue from sales of our AI-based products and solutions to customers in manufacturing, financial services and other industries.

### By Industry Verticals

The table below sets forth our revenue breakdown by our AI-based products and solutions applied in industry verticals in absolute amounts and as percentages of our total revenues for the periods indicated:

	Period from February 6, to December 31, 2018		Year ended December 31,				Nine months ended September 30,			
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
	(RMB in thousands except for percentages)									
<b>Manufacturing</b> . . . . .	<b>13,636</b>	<b>36.6</b>	<b>78,429</b>	<b>34.2</b>	<b>193,098</b>	<b>41.8</b>	<b>80,153</b>	<b>26.9</b>	<b>281,095</b>	<b>50.8</b>
Automotive equipment . .	238	0.6	1,956	0.9	2,382	0.5	981	0.3	116,358	21.0
High-tech/3C . . . . .	4,140	11.1	17,491	7.6	36,504	7.9	11,403	3.8	77,846	14.1
OLED panel manufacturing . . . . .	—	—	—	—	36,527	7.9	—	—	13,539	2.4
Engineering and construction . . . . .	—	—	1,887	0.8	4,044	0.9	1,968	0.7	1,877	0.3
Iron and steel metallurgy . . . . .	—	—	5,165	2.3	31,418	6.8	188	0.1	17,354	3.1
Energy and power . . . . .	—	—	—	—	19,240	4.2	19,017	6.4	4,667	0.8
Others <sup>(1)</sup> . . . . .	9,258	24.9	51,930	22.7	62,983	13.6	46,596	15.6	49,454	9.1
<b>Financial Services</b> . . . . .	<b>5,356</b>	<b>14.4</b>	<b>53,539</b>	<b>23.4</b>	<b>183,520</b>	<b>39.7</b>	<b>151,577</b>	<b>50.9</b>	<b>192,803</b>	<b>34.9</b>
Banking . . . . .	—	—	17,365	7.6	40,120	8.7	10,221	3.4	100,077	18.1
Insurance . . . . .	3,632	9.8	28,736	12.5	117,145	25.3	115,226	38.7	17,727	3.2
Others <sup>(2)</sup> . . . . .	1,724	4.6	7,438	3.2	26,255	5.7	26,130	8.8	74,999	13.6
<b>Other industries<sup>(3)</sup></b> . . . . .	<b>18,216</b>	<b>49.0</b>	<b>97,173</b>	<b>42.4</b>	<b>85,706</b>	<b>18.5</b>	<b>65,909</b>	<b>22.2</b>	<b>79,117</b>	<b>14.3</b>
<b>Total</b> . . . . .	<b>37,208</b>	<b>100.0</b>	<b>229,141</b>	<b>100.0</b>	<b>462,324</b>	<b>100.0</b>	<b>297,639</b>	<b>100.0</b>	<b>553,015</b>	<b>100.0</b>

Notes:

(1) Others mainly include textile manufacturing, food production, communication equipment manufacturing and other verticals in manufacturing industry.

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- (2) Others mainly include asset management, securities and other verticals in financial services industry.  
(3) Other industries mainly include retail, information technology and other industries excluding manufacturing and financial services industries.

The following table sets forth our gross profit both in absolute amounts and as percentages of revenue, or gross margin, by industry verticals for the periods indicated:

	Period from February 6, to December 31, 2018		Year ended December 31, 2019				Nine months ended September 30, 2020				2021	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
(RMB in thousands except for percentages)												
<b>Manufacturing</b>	<b>8,290</b>	<b>60.8</b>	<b>30,506</b>	<b>38.9</b>	<b>65,018</b>	<b>33.7</b>	<b>30,989</b>	<b>38.7</b>	<b>94,813</b>	<b>33.7</b>		
Automotive equipment	138	58.0	1,261	64.5	1,143	48.0	382	38.9	42,841	36.8		
High-tech/3C	1,638	39.6	8,323	47.6	12,383	33.9	6,049	53.0	25,855	33.2		
OLED panel manufacturing	—	—	—	—	10,904	29.9	—	—	1,482	10.9		
Engineering and construction	—	—	1,652	87.5	797	19.7	483	24.5	710	37.8		
Iron and steel metallurgy	—	—	2,360	45.7	10,272	32.7	129	68.6	6,278	36.2		
Energy and power	—	—	—	—	3,983	20.7	3,907	20.5	1,734	37.2		
Others	6,514	70.4	16,910	32.6	25,536	40.5	20,039	43.0	15,913	32.2		
<b>Financial Services</b>	<b>4,194</b>	<b>78.3</b>	<b>16,513</b>	<b>30.8</b>	<b>51,192</b>	<b>27.9</b>	<b>41,596</b>	<b>27.4</b>	<b>55,261</b>	<b>28.7</b>		
Banking	—	—	3,916	22.6	9,581	23.9	1,588	15.5	22,762	22.7		
Insurance	2,849	78.4	9,136	31.8	39,678	33.9	38,201	33.2	10,116	57.1		
Others	1,345	78.0	3,461	46.5	1,933	7.4	1,807	6.9	22,383	29.8		
<b>Other industries</b>	<b>10,901</b>	<b>59.8</b>	<b>24,594</b>	<b>25.3</b>	<b>18,411</b>	<b>21.5</b>	<b>12,687</b>	<b>19.2</b>	<b>20,850</b>	<b>26.4</b>		
<b>Total/Overall</b>	<b>23,385</b>	<b>62.9</b>	<b>71,613</b>	<b>31.3</b>	<b>134,621</b>	<b>29.1</b>	<b>85,272</b>	<b>28.6</b>	<b>170,924</b>	<b>30.9</b>		

### By Type of Products/Services

The table below sets forth our revenue breakdown by type of products/services in absolute amounts and as percentages of our total revenues for the periods indicated:

	Period from February 6, to December 31, 2018		Year ended December 31, 2019				Nine months ended September 30, 2020				2021	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
(RMB in thousands except for percentages)												
Sales of products and solutions	36,545	98.2	224,408	97.9	451,726	97.7	291,403	97.9	541,927	98.0		
Services of data solutions	663	1.8	4,733	2.1	10,598	2.3	6,236	2.1	11,088	2.0		
<b>Total</b>	<b>37,208</b>	<b>100.0</b>	<b>229,141</b>	<b>100.0</b>	<b>462,324</b>	<b>100.0</b>	<b>297,639</b>	<b>100.0</b>	<b>553,015</b>	<b>100.0</b>		

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The following table sets forth our gross profit both in absolute amounts and as percentages of revenue, or gross margin, by type of products/services for the periods indicated:

	Period from February 6, to December 31,		Year ended December 31,				Nine months ended September 30,			
	2018		2019		2020		2020		2021	
	Amount	%	Amount	%	Amount	%	Amount (unaudited)	%	Amount	%
(RMB in thousands except for percentages)										
Sales of products and services . . . . .	22,895	62.6	68,772	30.6	126,847	28.1	80,783	27.7	163,091	30.1
Services of data solutions . . .	490	73.9	2,841	60.0	7,774	73.4	4,489	72.0	7,833	70.6
<b>Total/Overall . . . . .</b>	<b>23,385</b>	<b>62.9</b>	<b>71,613</b>	<b>31.3</b>	<b>134,621</b>	<b>29.1</b>	<b>85,272</b>	<b>28.6</b>	<b>170,924</b>	<b>30.9</b>

### By Customer Type

The table below sets forth our revenue breakdown by customer type in absolute amounts and as percentages of our total revenues for the periods indicated:

	Period from February 6, to December 31,		Year ended December 31,				Nine months ended September 30,			
	2018		2019		2020		2020		2021	
	Amount	%	Amount	%	Amount	%	Amount (unaudited)	%	Amount	%
(RMB in thousands except for percentages)										
System integrators . . . . .	5,705	15.3	136,407	59.5	351,428	76.0	214,105	71.9	407,277	73.6
End-users . . . . .	31,503	84.7	92,734	40.5	110,896	24.0	83,534	28.1	145,738	26.4
<b>Total . . . . .</b>	<b>37,208</b>	<b>100.0</b>	<b>229,141</b>	<b>100.0</b>	<b>462,324</b>	<b>100.0</b>	<b>297,639</b>	<b>100.0</b>	<b>553,015</b>	<b>100.0</b>

The following table sets forth our gross profit both in absolute amounts and as percentages of revenue, or gross margin, by customer type for the periods indicated:

	Period from February 6, to December 31,		Year ended December 31,				Nine months ended September 30,			
	2018		2019		2020		2020		2021	
	Amount	%	Amount	%	Amount	%	Amount (unaudited)	%	Amount	%
(RMB in thousands except for percentages)										
System integrators . . . . .	4,577	80.2	37,724	27.7	109,619	31.2	68,126	31.8	125,149	30.7
End-users . . . . .	18,808	59.7	33,889	36.5	25,002	22.5	17,416	20.5	45,775	31.4
<b>Total/Overall . . . . .</b>	<b>23,385</b>	<b>62.9</b>	<b>71,613</b>	<b>31.3</b>	<b>134,621</b>	<b>29.1</b>	<b>85,272</b>	<b>28.6</b>	<b>170,924</b>	<b>30.9</b>

Our revenue was RMB37.2 million, RMB229.1 million, RMB462.3 million and RMB553.0 million in 2018, 2019, 2020 and the nine months ended September 30, 2021, among which our revenue generated from customers (excluding SOEs) amounted for 99.9%, 96.2%, 88.5% and 82.6% of our total revenue in 2018, 2019, 2020 and the nine months ended September 30, 2021, respectively.



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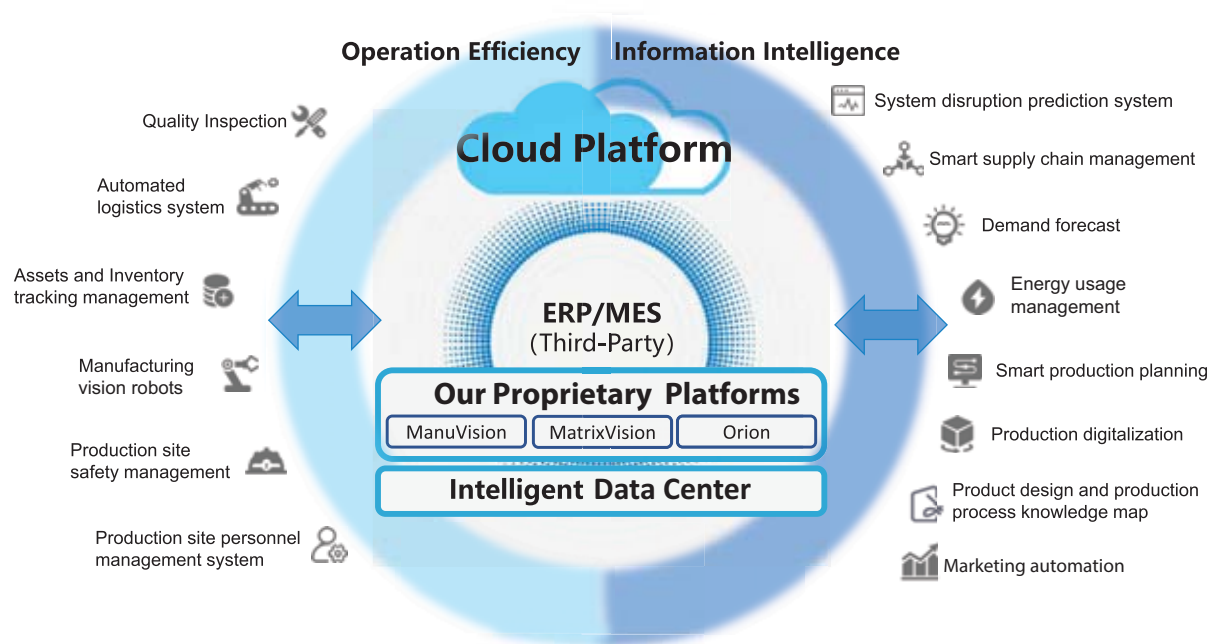
### OUR SOLUTIONS

Leveraging our proprietary AI technologies and AI algorithms, we offer full-stack AI-based products and solutions to customers in manufacturing, financial services and other industries to realize intelligent transformation of their business operations and decision-making process.

#### AI + Manufacturing

Combined with our industry know-how, our AI capabilities can be infused in the operations of enterprises in the manufacturing industry through our AInnovation Intelligent Manufacturing System. We primarily provide customers with a wealth of AI-based products and solutions for customers in verticals including iron and steel metallurgy, energy and power, automotive equipment, OLED panel and semiconductor, high-tech/3C, and engineering and construction. Our AI-based products and solutions can optimize business or production process, reduce costs, and improve operational efficiency through intelligent transformation of our customers’ business operations and information management.

The following diagram illustrates the AInnovation Intelligent Manufacturing System we developed to cover to the intelligent transformation of our customers in the manufacturing industry:



Our AInnovation Intelligent Manufacturing System offer customers the following modules as categorized into operation efficiency and information intelligence:

#### *Operation Efficiency*

- **Quality inspection** – auto-detection of defects

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- **Automated logistics system** – automated transportation of raw materials and products between production lines and sites
- **Assets and inventory tracking management** – intelligent tracking of equipment and inventory materials, and management of production cycle
- **Manufacturing vision robots** – integrated precise vision and AI technology with industrial robots to achieve highly precise and intelligent production processing
- **Production site safety management** – full-time production site surveillance to discover potential safety hazards in real time
- **Production site personnel management system** – fully automated personnel access and authorization management

### *Information Intelligence*

- **System disruption prediction system** – data acquisition via IoT and big data analytics to predict the potential disruptions. For instance, this module is deployed in our Intelligent Wind Power Operation and Maintenance solution. Employing computer vision algorithms and prediction technology, it is equipped with the ability to analyze the monitoring videos and combines the traditional video monitoring and on-site inspection to automate detection of abnormality and alerts
- **Smart supply chain management system** – optimization of the procurement, logistics, inventory management plan, improve production efficiency and product turnover rate
- **Demand forecast system** – prediction of the demand and geographic distribution of various products, and optimization of production plans and distribution plans
- **Energy usage management system** – collection of energy-related data via IoT to intelligently manage factories and other high-energy-consuming entities through prediction models to increase energy efficiency and reduce energy consumption
- **Smart production planning** – optimization of the production plan, and improvement of equipment utilization rate
- **Production digitalization** – use of cloud-based IoT technology to digitalize the production process, and big data analytics technology to manage production process
- **Product design and production process knowledge map** – use of big data analytics for product design
- **Marketing automation** – application of machine learning and data analytics to multiple data sources from enterprise information systems, such as CRMs, to automatically match products with potential customers and to recommend personalized marketing and sales plan

During the Track Record Period, we applied these modules and built specific applications for our customers:

<u>Industry</u>	<u>Industry Verticals</u>	<u>Selective Applications</u>	<u>Representative End-Users</u>
AI + Manufacturing	• Iron and steel metallurgy	• Intelligent Molten Iron Transportation	• Steel manufacturers

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Industry	Industry Verticals	Selective Applications	Representative End-Users
	<ul style="list-style-type: none"> <li>Engineering and construction</li> <li>Energy and power</li> <li>OLED panel manufacturing</li> <li>Automotive equipment</li> <li>High-tech/3C</li> </ul>	<ul style="list-style-type: none"> <li>Intelligent Engineering Radar Inspection</li> <li>Intelligent Wind Power Operation and Maintenance</li> <li>Intelligent Defect Detection</li> <li>Intelligent Automotive Equipment Manufacturing</li> <li>Intelligent Liquid Crystal Semiconductor Production</li> </ul>	<ul style="list-style-type: none"> <li>Construction companies</li> <li>Power plant operators</li> <li>OLED panel manufacturers</li> <li>Automobile and motorcycle manufacturers</li> <li>Electronic products manufacturers</li> </ul>

### *Intelligent Molten Iron Transportation*

In the traditional iron and steel production, many processes, such as route planning and tank allocation, are completed manually, which are labor intensive and lack systematic management and control, imposing significant safety risks. In addition, information barriers, such as delays and inaccuracy in information, are common issues that affect cost and efficiency. These major pain points can be addressed by our AI-based solution for molten iron transportation that automates both the transportation vehicles with dispatch and routing optimization.

According to Frost & Sullivan, we built the world’s first intelligent molten iron transportation application with one of our customers, which was a groundbreaking change in automation for iron and steel industry. The automated transportation vehicles are enabled by our machine vision, machine learning, autonomous driving, and big data technologies.

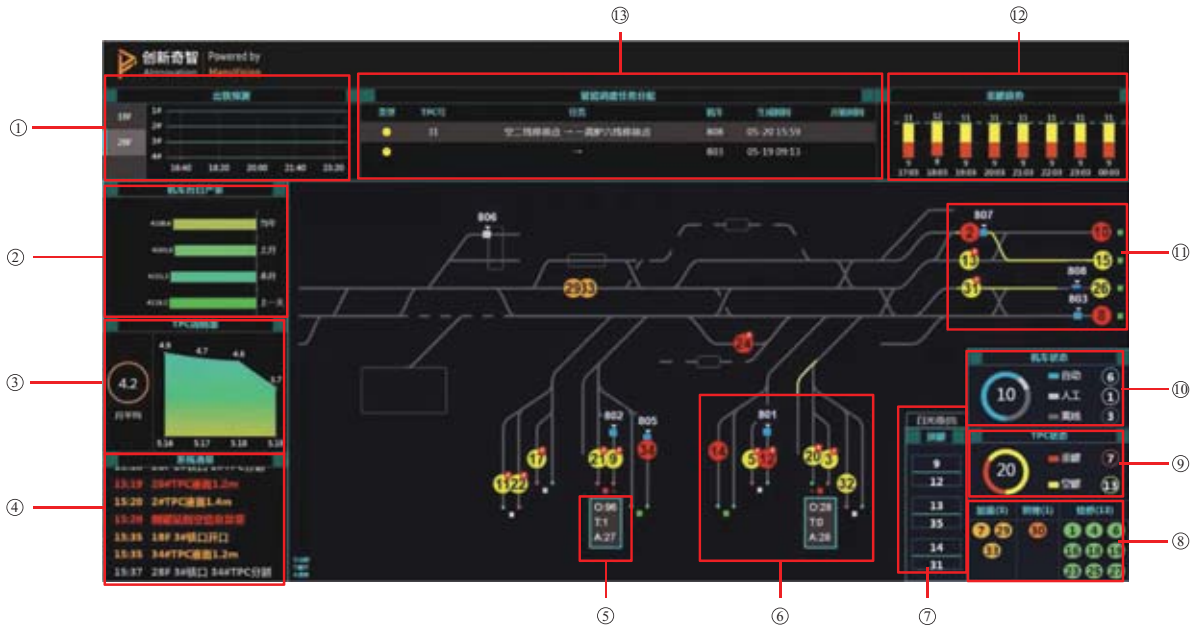
Further, we developed the real-time intelligent transportation management application paired with automated dispatch and routing optimization. It is constructed based on algorithm and model scheduling. It helped our customers in the iron and steel industry to streamline their management of factories. The system assigns dispatch tasks to the automated transportation vehicles without manual input, ensures optimal utilization of the vehicles and capacity, and intelligently designs routing for each vehicle to improve delivery efficiency. Equipped with accurate tracking and monitoring functions, the system automatically tracks the real-time locations of the vehicles and intelligently recommends alternative routing options based on real-time traffic information. Our solutions in intelligent molten iron transportation have provided our end-users with a management model that proved to improve various key performance indicators, such as molten iron dispatch and routing efficiency, turnover rate and temperature drop. Such solutions enhance the market competitiveness of our end-users by reducing production cost and enhancing production safety.

In 2020, we upgraded the platform control model through logic algorithm optimization, so that the real-time intelligent transportation management system is equipped with more complex scheduling capabilities. It allows automated routing and dispatch of vehicles up to 92% of the operation, and

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automated transportation of vehicles up to 97%. The system also simplifies management process by intelligent tracking, which reduces labor cost.

The following is a screenshot of the user interface of our AI-based solution for intelligent molten iron transportation:



### Notes:

- ① Prediction of the tapping frequency of the blast furnace in the next eight hours
- ② Statistics of vehicle usage (yearly, monthly, and daily) by output per day or fuel consumption per ton of steel
- ③ Statistics of production by monthly average data in turnover rate and temperature drop
- ④ Key information for iron and steel production
- ⑤ Operating status of the tap hole
- ⑥ Red and green signals to indicate the status of route
- ⑦ Prompt for the number of abnormal signals
- ⑧ Offline tank status
- ⑨ Operating tank status
- ⑩ Vehicle status
- ⑪ Operational status of the steel-making end
- ⑫ Prediction of tank utilization in the next eight hours
- ⑬ Current scheduling task

### Intelligent Engineering Radar Inspection

With the continued development of infrastructure in China, railway and highway tunnels are built every year. However, defects that are discovered in the construction process pose significant risks and underpin quality control issues of ground penetrating radars that has been widely used in the quality inspection of tunnel engineering. Our engineering radar inspection system has undergone on-site exploration, result verification and algorithm optimization to analyze and detect tunnel geological radar waveform map. Based on the ManuVision Intelligent Machine Vision Platform, it has effectively resolved gaps in the missing data samples and imageries undermined by factors such as temperature, humidity, geological structure. The automated assessment of indicators, such as voids, thickness and number of reinforcements, reduces manual interventions and improves inspection efficiency. In addition, the automated process also alleviates the issues of having a shortage of technical specialists in this field. The solution in engineering radar Inspection demonstrated an improvement in accuracy of analyzing radar wave imagery by 20 times as compared to manual

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inspection. This solution has enhanced the market competitiveness of our end-users by reducing the inspection cost and efficiency in tunnel construction and subsequent annual inspection.

The following is a screenshot of the user interface of the solution in engineering radar inspection:



### Notes:

- ① Inspection information and project status
- ② Statistics of defects by six major categories
- ③ Statistics of manual labor and system operation by hours
- ④ Information on tunnels under inspected
- ⑤ Data of detection progress, including files, test reports and waveforms
- ⑥ Mileage information (yearly, monthly, weekly or daily)
- ⑦ Project construction status of each province in pictorial format

### Intelligent Wind Power Operation and Maintenance

Since 2020, we have mapped the layout of intelligent operation and maintenance in the field of wind power by recruiting industry experts with rich experience in this area and establishing the energy and power business unit. Such expertise combines with our AI algorithms to form our core competence in the industry. As traditional methods of operation and maintenance in the wind power vertical are purely based on the observation, analysis and decision-making of technicians, there are pain points in the delayed response to various production safety problems, which leads to high costs in resolving such issues.

Based on our AI-based technologies, including the MatrixVision and Orion platforms and know-how in the power energy vertical, we developed an AI-based solution for intelligent wind power operation and maintenance application in 2021. Employing computer vision algorithms and prediction technology, it is equipped with the ability to analyze the monitoring videos and combines the traditional video monitoring and on-site inspection to automate detection of abnormality and alerts. Through round the clock monitoring of engine cabins, the intelligent inspection of the equipment and environment does not require any on-site operations. As such, we believe our AI-based solution not



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only can reduce the workload of on-site operation, but also monitor the wind farm in real-time to improve the inspection alarm timely rate. We believe this solution can significantly improve the reliability of wind farm operation, reduce operation maintenance costs, as well as the safety of personnel and equipment, which ultimately improve the market competitiveness of our end-users.

The following is a screenshot of the user interface of our intelligent wind power operation and maintenance:



### Notes:

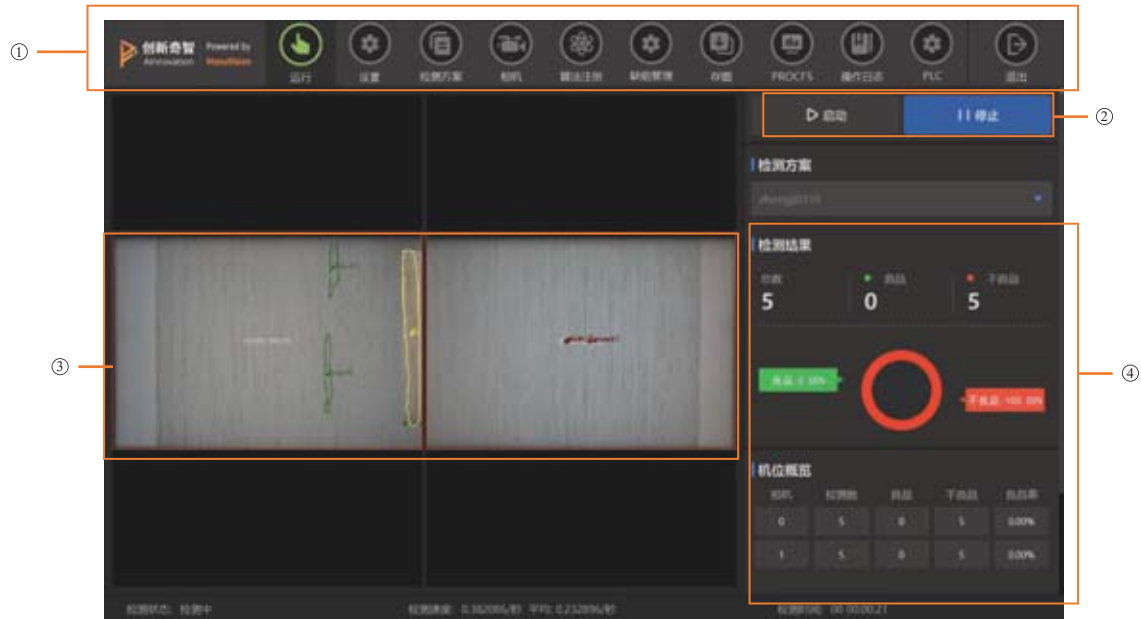
- ① Safety-related statistics
- ② Total number of intelligent alarms
- ③ Production-related statistics
- ④ Real-time monitoring of generator sets
- ⑤ Work order data
- ⑥ Intelligent recognition related statistics

### Intelligent Defect Detection

Quality control issues are common pain points in the manufacturing industry, manual inspection by on-site personnel cannot ensure consistency in the assembly line and thus causing disruptions during production process. Based on our ManuVision Intelligent Machine Vision Platform, our deep learning and computer vision technologies were paired with industrial-grade high resolution camera and lighting equipment to perform automated inspection process, and continue to refine its detection capabilities. This solution ensured an accurate detection and classification of defects in each production up to 99.9% accuracy. We provide analysis reports with details that contribute to achieving the intelligent management of product quality and intelligent decision-making. The automation in the quality control process reduced labor cost, and the high accuracy rate improved product quality, which ultimately enhanced the market competitiveness of our end-users.

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The following is a screenshot of the user interface for defect detection:



*Detection of cracks wider than 0.5mm on a film coil*

### Notes:

- ① Main menu, including operating status, device settings, camera adjustment, algorithm options, running log and other operation and processing information
- ② Start/Stop button
- ③ Real-time detection screen, the pictures of products and defects taken by industrial cameras are displayed in real time
- ④ Inspection results, showing the number of defective products

### ***Intelligent Automotive Equipment Manufacturing***

In the motorcycle engine manufacturing process, quality control issues, such as ensuring consistency in its power engine assembly line are common pain points. The root cause primarily stems from human errors in the operation. Leveraging our ManuVision Intelligent Machine Vision Platform, we developed two intelligent inspection devices that monitored product assembly in real time to resolve the issues in each situation. One of the devices is aimed to detect whether the timing points are aligned, and the other ensured the retaining rings for piston pins were assembled correctly. The installation of these devices significantly improved quality of the engines produced and production efficiency, which ultimately enhanced the market competitiveness of our end-users.

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The following is a screenshot of the user interface of our solution in intelligent automotive equipment manufacturing:



*Defect detected in the production line as timing point not aligned*

### Notes:

- ① Detailed display of current engine detection results; while the current engine are put through the testing equipment, the system will produce a detailed detection result schematic diagram.
- ② Display of detection results as OK or NG.
- ③ List of historical detection results; all detection results are recorded. Click on any option, the detailed pictures and result analysis can be viewed.
- ④ Thumbnail of the original picture of the current engine; click on this picture to zoom in to the central display area, the original details can be checked.

### **Intelligent Liquid Crystal Semiconductor Production**

We offer a full range of solutions for liquid crystal semiconductor manufacturing, covering various manufacturing processes of liquid crystal semiconductors from AI industrial automation equipment, automated production lines, panel production equipment, tooling fixtures such as clamps, 5G intelligent three-dimensional warehousing and logistics, information products to total system integration. We combined full-process automation equipment with deep learning technology to achieve automated completion of the production process from pixel matrix to packaging and testing, and established a complete monitoring system.

We are differentiated from traditional automation solution providers, as our proprietary ManuVision Intelligent Machine Vision Platform can provide customers with greater flexibility in complex scenarios that are difficult to solve with traditional vision. As our solutions automate the manufacturing process of liquid crystal semiconductors, our defect detection capabilities are infused and applied at various stages, so as to ensure product quality. See “—AI + Manufacturing—Intelligent Defect Detection”.

Our solutions in liquid crystal semiconductor production provide two key advantages to our end-users, which ultimately enhanced their market competitiveness. Specifically:

- **Intelligence.** We have accumulated a wealth of AI algorithm models in various complex scenarios through our ManuVision platform. Given the stability and reliability in the AI

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capabilities, they are particularly useful in the complex production scenarios and stringent requirements in liquid crystal semiconductor production, which improves production quality.

- **Automation.** Our solutions are comprehensive and targeted at the pain points experienced by our end-users, as they address both software and hardware compatibility. This ensures that production equipment and systems function efficiently round the clock, which enhance production capacities and cost savings in employee training and error.

The following is a screenshot showing the analysis results in the liquid crystal semiconductor production:



### Notes:

- ① Display of inspection results (OK/NG), defect type and corresponding quantity, and other related details.
- ② Inspection imagery and results of the four corners of the glass with defects (if any) marked.
- ③ Main information display bar to select test/stop operation, and display the current inspection information of glass.
- ④ Display of a schematic diagram of the glass with display of detailed information of such defect, and the location of such defect can be automatically located in the detection picture on the right after clicking on such defect information.
- ⑤ Display of the operating status of the current camera and external communication interface, and an alarm will be triggered in event of abnormality.
- ⑥ Display of the actual image of the glass under inspection, which show the coordinates, and identify the location and type of any defect.
- ⑦ System function menu, which allow users to switch the function screen.
- ⑧ Display of information about current equipment, including the production line and site where this equipment is located, and display of the current use of industrial personal computer, which can be intuitively verified once the resource is insufficient.

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### *Case Studies*

The following are case studies of our AI + Manufacturing related solutions offered to our customers during the Track Record Period:

#### Intelligent Engineering Radar Inspection

Company A is a wholly-owned subsidiary of a leading engineering and construction company in China. It undertakes a large number of heavy infrastructure construction projects, employing traditional means of quality inspection. Although geological radar has been widely used in tunnel quality inspection, there remained a series of issues such as misinterpreted data, slow response, low efficiency, insufficient detection capacity, and the inability to trace and analyze data. Leveraging our ManuVision Intelligent Machine Vision Platform, we developed the solution in tunnel geological radar wave inspection. We conducted several rounds of field inspection, result verification and algorithm optimization, resolved the errors caused by temperature, humidity and geological structure. In the end, we developed a solution to intelligently detect radar information and to count the arches, cavities and hollows in tunnels, equipped also with a quality traceability function. The solution was delivered to the customer in March 2020. Based on the feedback from Company A, the application results showed that the AI-based solution in tunnel geological radar wave inspection exceeded the average level of expert opinion by 37% in terms of standard consistency, operational efficiency, and detection accuracy. In light of the success of this project, we established a joint venture to apply our solution offerings to reach more market players in the same industry. We plan to expand application of this solution from tunnel construction to construction of bridges, highways and railways to explore more market opportunities.

#### Intelligent Molten Iron Transportation

CISDI Group has a leading position in the iron and steel metallurgical vertical in China and has established business relationships with 40 of the top 50 steel plants globally by revenue, according to Frost & Sullivan. We cooperated with CISDI Group in 2018 for AI-based solutions in the steel vertical, including one for molten iron transportation management. In March 2019, we established a joint venture, CISAI Tech, combining the expertise of our R&D team and that of CISDI Group’s experts in the steel vertical. The traditional molten iron transportation requires intensive manual labor, resulting in substantial human resource costs and safety risks.

According to Frost & Sullivan, our project created the world’s first intelligent molten iron transportation system based on artificial intelligence vision algorithm and automatic driving technology. It helps locomotives and torpedo tank cars to automatically detect and avoid obstacles on the track, identify locomotive tails and hooks, and achieve fully automated hook removal. By implementing the AI-based solution in intelligent molten iron transportation, a leading steel manufacturer in China provided feedback that it improved its locomotive efficiency by 13% and increased speed of its locomotives by 10%, while reduced manual labor by 50%, significantly improving its operational efficiency and reducing its human cost.

In 2020, we optimized this solution through data reinforcement learning on our Orion platform, to allow the system to handle more complex dispatching operations. This solution reduced the risks imposed to the health and safety of the on-site personnel, and that safety accidents dropped to zero for the year of 2020. The manpower cost for one of our customers, based on their feedback, was reduced by nearly 70%, saving over RMB 4.0 million a year for one furnace site. In addition, our end-users also



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achieved substantial cost-savings by reducing the loss from iron temperature reduction and equipment depreciation.

### Intelligent Defect Detection

Company B is a leading manufacturer of continuous fiber reinforced thermoplastic (CFTR) materials in China. Given that a roll of CFRT material is approximately 3,500 meters long, defect detection proved to be a challenge for manual inspection. The conventional quality assurance process is highly time-consuming and labor intensive, and fails to record types and locations of defects. Leveraging on our ManuVision Intelligent Machine Vision Platform, we provided solutions in defect detection in the quality control process. Our deep learning and computer vision technologies were paired with industrial-grade high resolution camera and lighting equipment which enabled an accurate detection and classification of defects in each production line up to 99.9% accuracy based on the feedback from Company B. We provide analysis reports with details that contribute to achieving the intelligent management of product quality and intelligent decision-making.

### **AI + Financial Services**

Our AI-based products and solutions for financial services are primarily in intelligent data center infrastructure and operation, intelligent hybrid cloud management, and intelligent data governance and application.

Our major AI-based products and solutions applied in the financial services industry are able to offer customers the following functionalities:

- **IRC.** Intelligent resource center (IRC) provides a full range of resource management capabilities that maximize the utilization of computing power and storage resources for fulfilling different types of tasks. IRC is a resource management platform designed for data centers and provide pooling function and management of heterogeneous resources, as well as resource allocation, intelligent optimization and other capabilities. Such capabilities allow financial institutions to achieve data center-level comprehensive resource management at low cost and high efficiency.
- **DAC.** Data automation center (DAC) is a multi-source heterogeneous data management system that allows data automation and realizes intelligent data fusion management. DAC provides data life cycle management services that encompass AI-based data analytics, data association, data derivation (via feature engineering), data fusion and data visualization. It augments digital infrastructure for financial institutions and simplifies business insights retrieval from a large volume of data.
- **AutoML.** Automated machine learning (AutoML) is an intelligent application development platform that can independently define a business problem and build a business application to address it. As a machine learning platform designed for enterprises, AutoML automates all stages of building and deploying models, from data collection and preprocessing, to model training and tuning, to model deployment and model performance monitoring, while allowing customers to customize certain steps to fit their specific business needs. Scenario specific know-how we have accumulated from past project experience have also been built into AutoML to enhance model quality it generates for customers.

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As of the Latest Practicable Date, our major industry-specific AI-based solutions for financial services industry include:

Industry	Industry Verticals	Selective Applications	Representative End-Users
AI + Financial Services	• Insurance	<ul style="list-style-type: none"> <li>Intelligent Data Center Infrastructure and Operation</li> <li>Intelligent Data Governance and Application</li> </ul>	• Insurance companies
	• Banking	<ul style="list-style-type: none"> <li>Intelligent Hybrid Cloud Management</li> <li>Intelligent Data Governance and Application</li> </ul>	• Commercial banks

### *Intelligent Data Center Infrastructure and Operation*

The AI-based solution for intelligent data center infrastructure and operation is centered around the AI-driven efficiency management and drives the transformation of data center in terms of monitoring, statistics, intelligent analytics, decision-making optimization, and self-learning optimization, so as to ensure an intelligent, efficient and safe operation and maintenance of infrastructure. It encompasses a complete set of tools from data collection, data analytics management, functional application management, data interactive correlation, helping development and operations personnel to ensure high availability and accessibility of resources in its data center infrastructure. The improved reliability, accessibility and serviceability of data centers enhance market competitiveness for our end-users.

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The following is a screenshot of the user interface for our solution in intelligent data center infrastructure and operation:



### Notes:

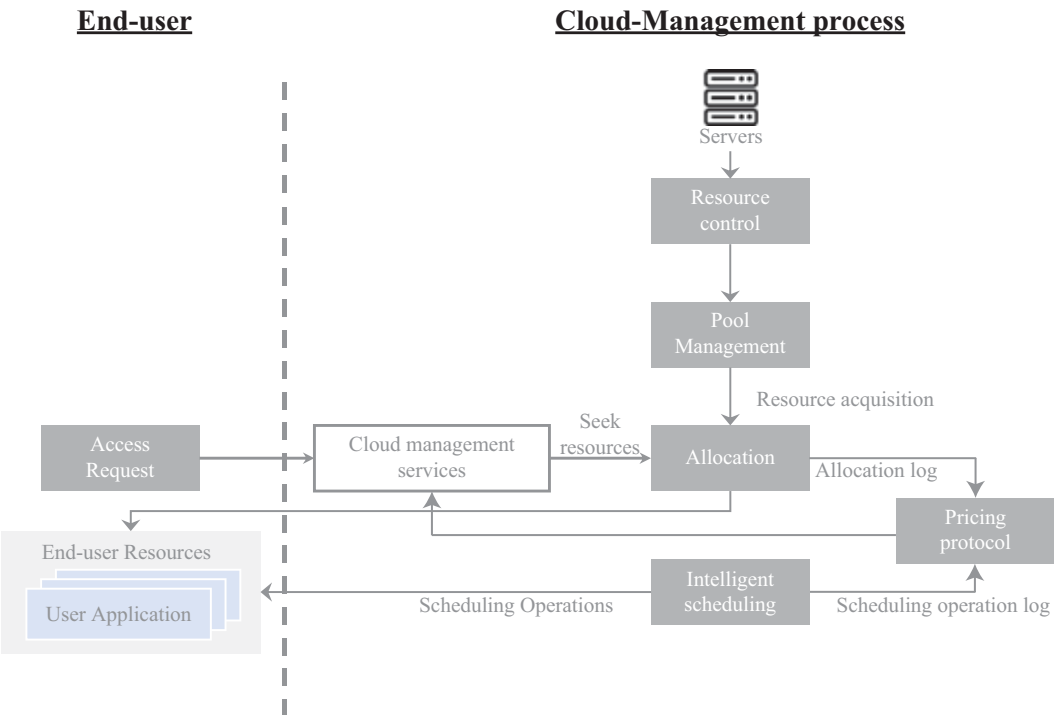
- ① Overview of system
- ② Overview of basic IT equipment
- ③ Overview of intelligent computing power
- ④ Analysis of incident occurrence (reminder, warning and severe)
- ⑤ Team efficiency
- ⑥ Overview of server clusters
- ⑦ Analysis of incident status
- ⑧ Overview of efficiency

### Intelligent Hybrid Cloud Management

Our solution in intelligent hybrid cloud management is a leading IaaS + PaaS dual-mode private cloud platform in China that enables our enterprise customers to reach the “last mile” in its transformation of cloud infrastructure. We utilize intelligent resource pooling technologies provided by Orion-IRC to realize intelligent allocation, scheduling and maintenance of computing power, especially GPUs, and storage resources, with the ability for flexible scaling and automatic recovery. Specifically, the centralized management of multiple types of heterogeneous computing power clusters allows the allocation of specific types of GPU cards, single-card fine-grained multi-tasking, multi-card collaborative computing and supports real-time monitoring of intelligent resources, including on-demand allocation and recollection of unused resources. The improved usage efficiency of compute resources will reduce IT cost for our end-users, which enhances their market competitiveness.

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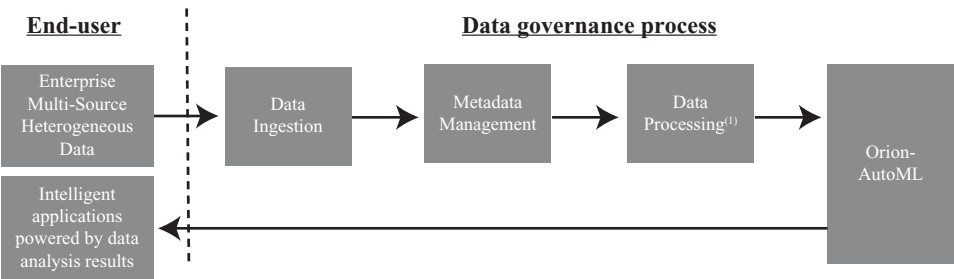
The following is the workflow of our solution in intelligent hybrid cloud management:



Intelligent Data Governance and Application

The AI-based solution in intelligent data governance and application comprises our intelligent data management system and our ABC appliance. The intelligent data management system is a comprehensive management platform tailored for the use in financial services. It uses big data and machine learning technologies to ingest multi-source heterogeneous data, intelligently extract and manage metadata and analyze data resources of our enterprise customers, especially those untapped data from the business operations and key decision processes within financial institutions. It establishes a dynamic and solid digital infrastructure for capabilities of risk-related modeling. The intelligent inference from big data allow our end-users to make business decisions, which enhances their market competitiveness.

The following are screenshots of the workflow of our Intelligent Data Governance and Application:



Note:

(1) Data processing protocols include: data visualization, data lineage, feature extraction, data structuring and multimodal analysis.

Our ABC appliance is an integrated intelligent solution for enterprises providing large-scale AI, big data and cloud computing capabilities. The software component of our ABC appliance comprises

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our ABC Software Stack, whereas the hardware components of ABC appliance are custom-designed super fusion servers that are optimized for heterogeneous parallel computing and compatible with multiple domestic chips and operating systems. It comprises the following core components:

- **AI:** Our AI platform is embedded in the machine which enables enterprises to develop AI applications efficiently;
- **Big Data:** A distributed big data architecture supports PB level data storage and processing;
- **Cloud Computing:** Our proprietary hybrid cloud computing framework acts as the base computing unit for heterogeneous computing resources scheduling and management in an enterprise hybrid cloud environment.

### *Case Studies*

The following are case studies of our AI + Financial services related solutions offered to our end-users during the Track Record Period:

#### Intelligent Data Center Infrastructure and Operation

Company C is a major insurance company with coverage across China and 160 countries and regions. We provided comprehensive AI-based data center solutions to address pain points. Our intelligent cloud management platform allowed Company C to migrate up to 95% of its IT infrastructure to become cloud-based, which improved the utilization of smart resources by 20% and brought a cost saving in equipment procurement in the millions. Based on the feedback from Company C, the implementation of our solutions improved the efficiency of technicians, which reduced human error and labor costs of approximately RMB3 million a year. The automated fault detection empowered by our AI technologies reduced the occurrence of severe malfunction incidents by 10% and intervened 30% of potential incidents, which translated into savings in terms of repair costs.

#### Intelligent Data Governance and Application

Company D is a commercial bank listed on the Shenzhen Stock Exchange with approximately 1,700 operating entities onshore and offshore. As of the Latest Practicable Date, Company D has issued over 60 million credit cards. Leveraging on our Orion Distributed Machine Learning Platform, we provided comprehensive automated management solutions, which are applied to facilitate the full cycle of risk assessments for loans and to enhance in-depth datamining value. This effectively reduced the construction time required for building the risk analytics model and improved the labor-intensive consuming process. Testing on the same set of data in a scenario simulation for Company D, model performance provided by our solutions improved by 36.1% based on the Kolmogorov-Smirnov statistical analysis.

### **AI + Others**

We aim to help customers in other industries including the retail and information technology industries. For instance, in relation to the retail industry, our solution offerings enable our customers to reduce costs and increase efficiency through supply chain management.



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As of the Latest Practicable Date, our major industry-specific AI-based solutions for other industries included:

Industry	Industry Verticals	Selective Applications	Representative End-Users
AI + Other industries	<ul style="list-style-type: none"> <li>Retail</li> <li>Telecommunications</li> </ul>	<ul style="list-style-type: none"> <li>Smart Supply Chain Management</li> </ul>	<ul style="list-style-type: none"> <li>Retailers</li> <li>Mobile telecommunications corporations</li> </ul>
	<ul style="list-style-type: none"> <li>Others</li> </ul>	<ul style="list-style-type: none"> <li>Intelligent Data Center Infrastructure and Operation</li> </ul>	<ul style="list-style-type: none"> <li>Data center operators</li> </ul>

### *Smart Supply Chain Management*

Our solution in smart supply chain management is a system management solution that brings value to our customers by way of cost savings and efficiency enhancement. It covers four key functions, namely demand planning, production capacity planning, intelligent inventory replenishment, and intelligent logistics. It is utilized to improve inventory planning, accelerate supply and demand turnover, reduce inventory cost, and optimize the return-on-investment of the overall supply chain performance. In effect, it enables enterprises to shift from the traditional rigid supply chain to a flexible supply chain. Such cost savings and efficiency enhancement improve the market competitiveness of our end-users.

### *Intelligent Data Center Infrastructure and Operation*

This solution has been adapted from AI + Financial Services to also apply to the operations of data centers. See “– Our Solutions – AI + Financial Services – Intelligent Data Center Infrastructure and Operation.”

### *Case Study*

#### Smart Supply Chain Management

Company E is one of the largest mobile telecommunications corporation in China, which has large-scale IT asset management needs and statistics analysis. In 2020, we were engaged to improve IT asset management KPIs for its Heilongjiang provincial subsidiary, so as to enhance its IT asset management efficiency. We implemented software programs to assist in IT asset inventory image comparison and statistical analysis. During the Track Record Period, we were also engaged to provide Company E with procurement supply chain system solution in Guangdong province, and AI platform expansion development services in Shandong province so as to establish its smart middle station operations.

## OUR AI TECHNOLOGY

### **Deep Learning**

Machine Learning is a fundamental part of AI studying how computers can improve their perception, knowledge, thinking, or actions based on experience or data. It is the cornerstone for our

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development in computer vision and machine learning. As a specific approach of machine learning, deep learning is the use of large multi-layer (artificial) neural networks that compute with continuous (real number) representations, which is similar to the hierarchically organized neurons in human brains. We have accomplished much success in each of the three key factors that underpin the development of our deep learning capabilities, namely, computing power, AI algorithm and data.

- ***Computing Power empowered by Orion – IRC.*** Our proprietary computing power platform empowered by intelligent resource center, one of the key functionalities of Orion, mainly includes two sub-platforms, namely GPU computing power platform and CPU computing power platform. Among them, the GPU computing power platform supports the realization of various upper-level AI applications by virtualizing and pooling the underlying heterogeneous intelligent computing resources. It is built to monitor the usage of various computing resources and AI applications at all times and adjust the resource allocation of AI application tasks in real time to achieve automatic scaling. On the other hand, the CPU computing power platform is a central management system of the computing resources (host, database, web application) of the hybrid cloud (public and private cloud) and provides different strategies for resource allocation in terms of availability, concurrency and performance in various application scenarios. With regards to data storage, our distributed storage system performs regular backups of key data and supports remote recovery. Our system architecture comes with a sufficient redundancy design, ensuring 99.9% overall Service Level Agreements (SLA).
- ***Proprietary Deep Learning AI algorithms.*** Algorithms are the core of our capabilities. We have accumulated a large volume of proprietary AI algorithms, including both generic and scene-oriented ones. In the field of computer vision, we have developed expertise in FSL, panoramic segmentation, industrial product defect simulation based on AI models, target tracking, behavior recognition, model quantification, pruning and compression in the field of machine learning, we have accumulated profound expertise in intelligent recommendation, intelligent decision-making, operational research and optimization, and AutoML. We have obtained a number of invention patents for the above-mentioned algorithms and have produced a wide range of applications in commercial practice.
- ***Data Pre-processing and Labeling for Deep Learning.*** Data are an important source for building datasets, which are our technology assets that we continue to accumulate. Data need to be pre-processed by our operators and labeled by our algorithms, which are also our technology assets. We have built a proprietary full-process multi-tool labeling platform with our patented technologies to perform tasks such as automatic pre-labeling, labeling and auditing, which greatly reduces the workload of manual labeling and reviewing, accelerates the delivery process and improves the labeling quality. We continue to accumulate a large amount of actual scene data in key industries in order to support the continued optimization of our technology and solutions.

### Computer Vision

Computer vision is a field of AI that enables computers to interpret and understand the visual world. Our intelligent computer vision capability is fundamentally empowered by our deep learning capabilities. Using digital images from cameras and videos and AI models, machines can accurately identify and classify objects. However, two key obstacles of computer vision lie in capturing clear images and videos, and deciphering the images and videos. The first obstacle can be overcome by a

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specially designed light source and camera system to capture clear imagery, while the latter relates to detection of the subject(s) in the images or videos and what is happening in the images or videos. Our AI vision-based products and solutions resolve these two obstacles in a systematic way, by building platforms to integrate our technology assets and reusing them in different projects and scenarios. Our computer vision technologies are award-winning and won in the Multiple Object Tracking (MOT) Challenge 2020 and the GOT-10K 2020.

ManuVision Intelligent Machine Vision Platform is a machine optical inspection software system based on our deep learning technology, designed to resolve common issues with machine vision such as positioning, measurement, detection and recognition in industrial setting. The solution is formulated by the three components, namely, Trainer, Designer, and Runtime, and provide a one-stop solution from image annotation, deep learning model training, model testing and customized inspection protocols and online analysis. It effectively improves efficiency, reduces costs and enhances delivery quality.

MatrixVision Intelligent Edge Video Platform deploys an intelligent analysis box with built-in AI algorithm models at the edge to complete structured analysis of the scenario and synchronize the analysis results to a public/on-premise industrial cloud platform for processing. The AI algorithm at the edge mainly relies on image analysis technology, which includes few-shot learning, cross-mirror tracking (Re-ID), behavior recognition, target detection and classification.

### Orion Distributed Self-Learning Machine Learning

Our distributed self-learning machine learning technology is a scenario based AutoML technology that we developed to cover the entire process of machine learning applications. It integrates the technology and experience of machine learning experts as part of its processes and parameters and combines the distributed and distributive and parallel engineering technology to help users achieve code-free, automated, high-quality modeling and implementation. It supports the entire process of large-scale AI development through three primary functionalities, namely intelligent resource center (IRC), data automation center (DAC), and automated machine learning (AutoML).

The main technical features of the three primary functionalities include the following:

- ***Automated feature engineering.*** Our automated feature engineering is part of the Orion-DAC and covers the complete process of machine learning feature engineering from feature selection, feature construction to feature extraction. The process also takes into account the allocation of computing power resources and optimizes efficiency in generating feature data analyzing large-scale data sets.
- ***Automated model selection and integration.*** Our automated model selection and integration are both part of Orion-AutoML. In terms of model selection, the end-user may select manually or opt for an automated selection by algorithm recommendations, which is based on an analysis of objectives, feature types, data volume, business requirements, and matched to the various scenarios and models library screening and matching are performed in the process, and the model set suitable for the application scenario is output, providing efficient and accurate model selection capabilities.

In terms of model integration training, different base models are automatically trained by stacking integration learning technology, and the prediction results of each base model are fed into the meta model as new training data. This stacking integration achieves the

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integration of multiple machine learning algorithm models and reduces the variance and deviation of the final algorithm results, thereby improving the prediction results.

- ***Automated hyper-parameter tuning.*** Our automated hyper-parameter tuning is also part of the Orion-AutoML. In terms of hyper-parameter tuning, the automatic tuning technology automatically generates the optimal parameter configuration based on the built-in multiple automatic hyper-parameter search algorithms and optimization algorithms, combined with the model developed based on historic data. It effectively fine-tunes the parameters to the ideal optimal, and negates the need for manual tuning and avoids the instability and inefficiency of repeated testing.
- ***Automatic resource scaling.*** Our automatic resource scaling capabilities are part of the Orion-IRC. It enables Orion to monitor the usage of various resources, such as computing power. When tasks are to be performed with minimal manual operations, such as at night, it adjusts the resource allocated to AI application tasks in real time. This capability is also applied to our data storage, as our distributed storage system performs regular backups of key data and supports remote recovery.

## RESEARCH AND DEVELOPMENT

As AI technology continues to evolve rapidly, our ability to develop new technologies, design new solutions and enhance existing solutions is critical for maintaining our market position. As a result, we have invested significant resources in our R&D activities. Our core AI technologies are all self-developed. Our R&D staff comprise algorithm engineers, software engineers, hardware design engineers, data engineers, product managers, user experience engineers, testing engineers, researchers and scientists. As of September 30, 2021, our R&D team consisted of 195 members, accounting for 52.8% of our total number of employees. We incurred RMB28.7 million, RMB113.3 million, RMB181.5 million and RMB176.5 million in R&D expenses in 2018, 2019, 2020 and the nine months ended September 30, 2021, respectively, representing 77.1%, 49.4%, 39.3% and 31.9% of our total revenue during the same periods.

### ***Early stages of R&D***

Our success in self-developing our proprietary AI technologies lies in three crucial elements that were already in place at the early stage of our development, namely (1) R&D personnel with extensive experience, (2) established R&D process, and (3) contracts with enterprise customers, including a renowned electronics manufacturer and a multinational retailer.

At the early stage of development since our inception, we assembled our core R&D team comprising Mr. Zhang Fa'en, our CTO, and approximately 40 algorithm engineers. Mr. Zhang Fa'en has approximately 15 years of experience in software, big data, machine learning and deep learning technology research, development and management and was the chief architect for Baidu AI Cloud. At that time, the team of 40 algorithm engineers already had at least 1.5 years of experience in commercial applications of AI technologies in computer vision and machine learning. The team executed the technical and product development strategy and R&D plan. Within ten months from the date of inception, we obtained our first copyrights and applied for a series of patents in machine learning and computer vision, respectively. Our achievements in various prestigious international computer vision competitions during the Track Record Period have proven our technical prowess.

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Under the supervision of our chief technology officer and our technology committee and products committee, we developed our technical and products development strategy and R&D plan. Our R&D team continued to expand throughout the Track Record Period, and we have attracted more R&D talents that are with approximately 10 years of R&D experience. With rich research, development and management experience, our R&D team developed an internal best practice and maintained a mature and established process for the development, evaluation and validation of our products and solutions.

Our contract with the renowned electronics manufacturer in early 2018 was one of our milestone project that utilized machine vision in defect detection. We conducted pre-research analysis based on our on-site observations, where the customer’s operations are heavily labor-intensive with hundreds of thousands of workers. During the process of developing our solutions for the customer, we accumulated insights on the pain points experienced by market players in the manufacturing industry and developed certain technology assets in computer vision. Similarly, we also worked with other customers in the retail industry, and developed solutions in intelligent recommendation algorithms. In the process, we further developed certain technology assets in machine learning. Such AI Technology Assets became the cornerstone to our development of proprietary AI technologies.

### *Contributions of industry know-how*

A successful research outcome may or may not yield commercial success, and our philosophy is to offer AI technology to empower the business with commercially viable products and solutions. Therefore, we focus not only on technical capabilities but also the viability in commercialization. Given the enterprise experience of our core R&D minds and the project experience from our early contracts in 2018, we recognized the necessity of industry know-how in the process of our product development. As such, we recruited industry experts in manufacturing industry, and their active participation proved to be crucial in putting our resources into right direction. Without contribution of industry know-how, the products may be with high technology but no business value. The industry know-how we possess helps to avoid such outcome, which would save our resources and time. Our industry know-how is derived from the industry experts in our team and the joint ventures we formed with industry leaders in their respective fields and further accumulated from our past project experience.

To accelerate our R&D processes, we use our industry know-how to evaluate (i) the commercial viability of our research, (ii) the competitiveness of our technology and products, and (iii) the costs and returns of R&D activities as measured by research efficiency. Input from our industry know-how has focused our R&D efforts in areas with potential commercialization opportunities, lower competitive barrier and cost savings such that our resources are best optimized. Accordingly, our R&D expenses as percentage of our total revenue decreased steadily over the Track Record Period from 77.1% in 2018 to 49.4% in 2019 and further to 39.3% and 31.9% in 2020 and the nine months ended September 30, 2021.

The efficacy of our R&D process has given us the first mover advantage in offering AI-based products and solutions designed for the manufacturing industry. As a result, we have established our brand in the enterprise AI solutions industry in China despite our short operating history. According to Frost & Sullivan, in 2020, we were the third largest AI technology driven solution provider in the enterprise AI market in China in terms of revenue; and we were the largest AI technology driven solution provider in China’s AI solutions market in the manufacturing industry in terms of revenue.



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### Major R&D projects

During the Track Record Period, we conducted nine major R&D projects. The table below sets forth the breakdown of R&D expenses by major R&D project, with details, status and expected completion date of each R&D project.

		2018		2019		2020		Nine months ended September 30, 2021	
		Research expense (RMB in million)	Status	Research expense (RMB in million)	Status	Research expense (RMB in million)	Status	Research expense (RMB in million)	Status
1	<b>R&amp;D of Orion Distributed Machine Learning Platform and relevant application</b>	1.8	Phase I completed	32.9	Phase II completed	80.3	Phase III completed	65.1	Phase IV ongoing
2	<b>R&amp;D of machine vision applications in retail scenarios</b>	20.0	Phase I completed	21.6	Phase II completed	9.5	Phase III completed	3.9	Phase IV ongoing
3	<b>R&amp;D of machine vision manufacturing in quality inspection scenarios</b>	6.8	Phase I completed	50.2	Phase II completed	—	—	—	—
4	<b>R&amp;D of edge-based machine vision inspection environmental awareness application in multiple scenarios</b>	—	—	2.2	Completed	—	—	—	—
5	<b>Development of information platform for engineering development and business management</b>	—	—	6.4	Phase I completed	18.8	Phase II completed	7.4	Phase III ongoing
6	<b>R&amp;D of ManuVision Intelligent Machine Vision Platform and relevant applications</b>	—	—	—	—	48.9	Phase I completed	54.7	Phase II ongoing
7	<b>R&amp;D of MatrixVision Intelligent Edge Video Platform and relevant applications</b>	—	—	—	—	19.0	Phase I completed	31.0	Phase II ongoing
8	<b>R&amp;D of advanced AI technologies in new research areas</b>	—	—	—	—	4.9	Phase I completed	10.8	Phase II ongoing
9	<b>Development of central control system based on AI-based IoT for automated transportation robots</b>	—	—	—	—	—	—	3.6	Ongoing

During the Track Record Period, we entered into agreements with our third-party technical service providers, which primarily relate to (i) technician personnel, (ii) software application development, and (iii) data labeling. Such subcontracting enhances our cost effectiveness and delivery

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efficiency. In 2018, 2019, 2020 and the nine months ended September 30, 2021, we entered into agreements with three, 12, 16 and 21 third-party technical service providers, respectively.

- **Technician personnel.** Technician personnel performs non-critical tasks, such as hardware/software testing, data labeling, programming and maintenance.
- **Software application development.** We outsourced basic software programming in tasks, such as user interface, design and bridging software to integrate with end-users’ existing IT infrastructure.
- **Data labeling.** See “— Suppliers and Procurement — Procurement of Data Labeling Services” for details.

### **Key Terms of Technical Services Agreements**

The salient terms of agreements with our technical service providers generally include:

- **Term.** Contract basis.
- **Service scope.** Generally varies based on our R&D project requirements.
- **Pricing.** We typically agree with such suppliers on a fix price, which depends on the extent of work, such as volume of data to be labeled, number of days the technical personnel required to be onsite, hours needed to complete the software programming.
- **Confidentiality.** Except as otherwise provided by laws and regulations or with the prior written consent of the other party, each party shall maintain the confidentiality of information obtained in the performance of the relevant agreement and its contractual terms. In some cases, our R&D staff are required to sign confidentiality agreements.
- **Payment term.** We usually pay by milestones defined in the contract.
- **Termination.** The contract is terminated upon the completion and/or fulfillment of our services, or the agreement by all parties.

Our R&D team is led by our chief technology officer, Mr. Zhang Fa’en. In addition, we have established our technology committee and products committee, which are responsible for formulating our technical and products development strategy and R&D plan and reviewing and evaluating our R&D activities. We also have R&D teams based at our headquarter and regional offices, which are responsible for conducting R&D and reporting to our chief technology officer. Our R&D team focuses on development of deep learning platforms and underlying AI technologies. Our R&D team has an established process for the development, evaluation and validation of our products and solutions. Our R&D teams also cooperate with product implementation team in launching new products and solutions.

The development of our AI platforms and AI-based products and solutions are underpinned by our strong R&D capabilities and our industry know-how. Our industry know-how is derived from the industry experts in our team and the joint ventures we formed with industry leaders in their respective fields and further accumulated from our past project experience. To accelerate our R&D processes, we use our industry know-how to evaluate (i) the commercial viability of our research, (ii) the competitiveness of our technology and products, and (iii) the costs and returns of R&D activities as measured by research efficiency. Input from our industry know-how has focused our R&D efforts in areas with potential commercialization opportunities, less competitive barrier and cost savings such

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that our resources are best optimized. For instance, our R&D has produced solutions in intelligent molten iron transportation and defect detection, which are well received by our customers and end users in the manufacturing industry. Our continuous investments in R&D activities result in a wealth of intellectual properties. As of the Latest Practicable Date, we have applied for 634 AI-related patents, and successfully registered 126 AI-related patents, including 79 invention patents. Since the beginning of 2018, we have won the first places in prestigious international computer vision competitions including the PASCAL Visual Object Classes Challenge 2019 for physical objects detection, the Cityscapes 2019 for image segmentation, the Multiple Object Tracking (MOT) Challenge 2020, and the MIT Scene Parsing Benchmark. A number of our academic papers were published by the world’s prestigious industry conferences and journals such as CVPR, ICCV and ECCV. In particular, our research papers on Few-shot Learning and Zero-Shot Instance Segmentation demonstrated our R&D effort to reduce the restriction on the amount of sample data on deep learning technology. We believe such research has high practical value in traditional manufacturing industry where samples are generally limited. Going forward, we plan to focus our research mainly on below technologies:

***Self-supervised contrastive learning.*** Self-supervised contrastive learning generates pseudo labels and builds representations by learning to encode what makes two things similar or different. It enables the model to automatically extract hidden information from unlabeled dataset in manufacturing with high efficiency, which is then used in downstream tasks. Self-supervised contrastive learning techniques will therefore substantially improve our data labeling efficiency and accelerate the overall project delivery.

***Few-shot learning (FSL).*** Unlike the typical machine learning process where the model trains as much data as it can take, Few-shot learning techniques enable AI models to recognize new patterns with a limited amount of labeled data. They are particularly useful in industrial scenarios where very few data are available for model training, often in defect detection process in manufacturing.

***Multi-object Tracking.*** Multi-object tracking (MOT) tasks aim to train the model to track multiple moving objects utilizing computer vision technology. We aim to apply MOT techniques to tackle higher-level computer vision tasks in manufacturing scenarios, such as activity recognition and anomaly detection.

***Low-power deep learning in computer vision.*** We aim to deploy our latest Deep neural networks (DNNs) on low-power systems and mobile devices, which are widely applied in manufacturing scenarios, so as to run common visual tasks quickly and accurately on low-power smart devices.

***Multimodal machine learning (MML).*** Multimodal machine learning builds models that can process and relate information from multiple modalities, including linguistic, acoustic and visual messages. MML can overcome challenges in complex manufacturing processes, such as activity recognition and alarming system. Together with our contrastive learning and FSL research, our products and solutions equipped with MML can quickly adapt to new scenarios.

## DATA PRIVACY AND PROTECTION

In providing our solutions, we may come into contact with certain data of our customers and their individual consumers. We typically agree in contract that our customers shall provide raw data

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and information, which include statistics and images, so that we can analyze the scenarios. Our customers generally retain ownership of such data and information, and we undertake to the proper use of such data and information. While we do not agree to a permitted retention period of any customer data or information in our sales contracts, our internal policy requires that such retention period shall not exceed the term of the sales contract, which ranges from one to three years. Our database administrator will set alarm on any third-party data upon saving into our internal server. When the internally permitted retention period lapses, our database administrator will submit a written application to the Information Security Committee for data destruction, and perform such tasks upon approval. Certain types of data may fall within the scope of personal information under applicable laws and regulations. We have designed strict data protection policies to ensure that the collection, usage, storage, transmission and dissemination of such data comply with applicable laws and prevailing industry practices.

### Data Collection and Processing

In order to conduct algorithm model training, we primarily acquire raw data from our own collection and public datasets or simulated data. During the Track Record Period, we collected the following types of data: namely, (a) images and videos of real-world scenes and specific objects, and (b) certain personal information, such as individual consumers’ legal names, social media usernames and mobile phone numbers. We have ceased the collection of data that contains personal information since July 2021 and our Directors confirm that the collection of such personal information is not material to the Group’s business operations. Sources of our data include (i) data simulated by our self-developed data labeling platform; (ii) on-site collected data by our customers or us with direct authorization; (iii) data from public datasets. Substantially all of our data are images and videos of various manufacturing scenarios and components. These data are used by our R&D team to train our AI algorithm models for our proprietary platforms.

In addition, we possess a very limited amount of data that contained personal information, such as legal names, social media usernames and mobile phone numbers that were collected with direct authorization to us in the smart vending machines offered to customers in the retail industry. During the Track Record Period, we offered smart vending machines with online payment method to certain customers in the retail industry, where a payment service provider is engaged to collect payment for the transactions and such equipment collected the legal names, social media usernames and mobile phone numbers of the end consumers (with express consent and direct authorization from relevant consumers for each retail transaction performed by a smart vending machine) in the process of performing the retail transaction. During the Track Record Period and up to the Latest Practicable Date, these smart vending machines were not equipped with facial recognition technologies. Such data were collected at the time for the purpose of verifying payments from the end-consumers for our customers, such that in event of non-payment, we may have further details to follow up. Save for the abovementioned, we did not offer any products and solutions that involved processing of any data containing personal information during the Track Record Period and up to the Latest Practicable Date. All such sensitive data was transferred and stored in the public cloud (namely, AWS cloud, where we are an enterprise customer of AWS cloud) in an encrypted form. We have ceased the collection of such personal information since July 2021 when our payment service provider became responsible for the verification and follow-up of payments, such that we no longer need to do so, and accordingly, we upgraded the system used for the smart vending machines. We have deleted such personal information from our database as of the Latest Practicable Date.

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In certain projects, we offered solutions to our customers with embedded facial recognition functions during the Track Record Period and up to the Latest Practicable Date. For example, in response to the COVID-19 outbreak, we developed a temperature measuring appliance that allows the non-contact and safe screening of multiple people to detect fever. All of such solutions are deployed on-site for our customers, and all data is processed on-site. As such, we did not possess any data containing facial information up to the Latest Practicable Date. Further, we did not possess any facial information to train our own facial recognition algorithm models during the Track Record Period and up to the Latest Practicable Date. In delivering those solutions to our customers, we used open-source facial recognition algorithm models or employ facial recognition SDK provided by our customers.

We have implemented our Data Protection Guidelines (“**Guidelines**”) to ensure that the source of data does not violate personal privacy and does not infringe third party’s rights. These measures include:

- We consider the degree of data openness and the collected party’s willingness. We are required to make a comprehensive judgment based on the circumstances. In the case that the user authorizes us to collect its data, we shall also specifically assess the content and reasonable expectations of the user’s authorization;
- We examine the type of data. Personal information, intellectual property content (including articles, pictures and videos) or trade secrets will not be acquired absent authorization;
- We strictly regulate the means of data collection. We are not allowed to break through the security policy of a website to obtain the necessary permissions, break the encryption rules, or bypass the mandatory authentication mechanism;
- We are required to limit the amount of data to be collected to a reasonable degree and take the public interest into account. We evaluate whether such data collection will subject us to PR risks and thus harming our reputation; and
- We are required to preserve relevant evidence for data collection, especially user consent authorizing the company to collect personal information.

We process data primarily to train algorithms, enhance technologies, and for our products and services in application scenarios as specified in the client’s contract. We do not sell, share or otherwise make available any information to the public or third parties. The Guidelines require that the purpose of data use must be legal and legitimate, and shall not be used in a way that harms social interests, public interests, national interests or the rights and interests of third parties.

### **Personal data protection**

We strictly limit the scope of personal information we receive and ensure that access is commensurate with the legitimate business needs of our customers. For the majority of the solutions we provide to our customers, we do not have access to any personal information of individual consumers. In the cases when solutions we offer involve continuous data processing, we require confirmation from the customer that the access and use of the data provided by the customer comply with relevant rules and regulations. In addition, we evaluate the data use scenario, and require the customer not to disclose or advertise to the public the content of cooperation with us on data processing without our prior consent. For a limited number of our solutions, we collect the individual consumers’ legal names, social media usernames and mobile phone numbers. In such cases, we require



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our customers to comply with applicable data protection laws and regulations. Our customers are restricted to use the data for the purpose of verifying the identity of registered end-users on our customers’ platforms only. Such restrictions are stipulated in the agreements we enter into with our customers that obtain personal data via the provision of products and service we provide.

We adopt various measures to ensure the security of the personal information we collect. The information has been technically de-identified and anonymized. Our database is operated on intranet where only qualified personnel can access, and only through the servers which support that particular solution. We have also adopted internal policies to ensure that authorization is tailored to employee seniority and department function, so that such information can only be obtained on an as-needed basis. As of the Latest Practicable Date, we did not experience any information leakage or loss of our user data.

We do not sell, share or otherwise provide any personal information we receive while providing our solutions to any third party, nor do we use such information for our algorithm model training.

### **Data Storage and Destruction**

Data that are for training our AI algorithm models and in the form of images and videos are stored on our private cloud. Data that contained personal information was generated from the retail transactions at the smart vending machines offered to our customers in the retail industry, and was stored in the public cloud (namely, AWS cloud, where we are an enterprise customer of AWS cloud). All such data containing personal information has been duly destructed in July 2021 when we upgraded the relevant product and solutions. Based on the due diligence work and as confirmed by our Company, nothing has come to the attention of the Joint Sponsors which would cast doubt on whether our Company has destructed all personal information in July 2021.

The Guidelines require that the data shall be stored in accordance with the principle of minimum necessity and security protection. For example, personal information shall not be kept for a period longer than the time necessary to achieve the purpose for which the subject of personal information is authorized to use it, and shall be deleted or anonymized after the above period. Principle of security protection requires that data containing personal information shall be stored with encryption and other security measures, namely the MD5 Message-Digest Algorithm, to avoid plaintext transmission. We have also implemented an information system security management framework to protect our data security. See “—Risk Management and Internal Control—Information System Risk Management” for details.

Under the Guidelines, when data retention period expires, the data shall be deleted using a set of technical means such as physical deletion and anonymization, to prevent unauthorized employees or users from recovering data information with residuals. In relation to the destruction of data containing personal information, our database administrator will submit a written application to the Information Security Committee for data destruction, and perform such tasks upon approval. Under the supervision of the Information Security Committee, the relevant data will be destructed permanently with all historical back-up of relevant data deleted. The data administrator will submit an internal report to the Information Security Committee upon completion of such process with confirmation that the destructed data is not recoverable.

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### Internal Control Measures in Relation to Data Protection

Our data privacy and protection measures are an integral part of our internal control system. We have adopted a comprehensive data privacy and protection policy, implemented by our IT operation and maintenance department. Our data protection policies include: (i) no personal privacy data, such as ID number, cell phone number, name, birth date or image information, shall be acquired or purchased, apart from a limited number of services as mentioned above, where express consent of the person is required before collecting the data; and (ii) the collected data (including industry know-how) will not be used for any other purpose, nor will they be provided to any third parties, and the data collected by each of our customers are separately stored and processed.

We strictly enforce our data protection policies. Access to and operation of data will be recorded and subject to review. When processing and analyzing our customers’ data, we also strictly adhere to the terms of authorization and scope of use as set forth in our agreements with our customers. Furthermore, if any employee unlawfully collects, misuses or discloses our data, or causes any damage to us or our customers, we have the right of dismissal and may initiate further legal proceedings.

We procure from third-party personnel, namely the after sales servicing personnel from our suppliers of network equipment and computing equipment, a signed security responsibility provision or confidentiality agreement before providing access to any information system resources. In addition, approval of written application is required for third-party personnel to access restricted areas, such as host rooms and important servers and equipment. They must be accompanied or supervised by authorized personnel throughout the process after approval, and visits will be kept on record.

Our Information Security Committee is headed by our Chief Technology Officer and comprises of three other members, namely, Ms. Yu Jin, Ms Yang Yan and Mr. Wang Kai. This committee oversees the information security and data protection, and ensures that our data sources and data usage comply with relevant laws and regulations. We plan to further improve our information security management by (i) engaging external counsels to advise on our data protection policies and ongoing compliance with applicable laws and regulations and regularly update our policies and procedures, (ii) promoting our data compliance system among our employees, (iii) enhancing employee awareness of data compliance via training, and (iv) collaborating across relevant departments to handle internal and external data compliance-related incidents. We plan to enhance our information system by upgrading the network security measures, anti-virus measures, and system change protocols. We intend to implement the upgrading plans by 2022.

The following table sets forth certain information of our Information Security Committee:

Name	Position in the committee	Position in the Group	Principal roles and responsibilities
Mr. Zhang Fa’en (張發恩)	Chairman	Chief Technology Officer	Responsible for management of technology R&D
Ms. Yu Jin (余瑾)	Member	Head of internal control	Responsible for supervising and implementing of internal control matters
Ms. Yang Yan (楊岩)	Member	Head of legal	Responsible for handling legal matters of the Group
Mr. Wang Kai (王凱)	Member	Head of information technology	Responsible for supervising our IT infrastructure, and developing IT Systems

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Based on the abovementioned measure, as confirmed by our PRC Legal Advisor, during the Track Record Period and up to the Latest Practicable Date, we have been in compliance with the Cyber Security Law of the PRC and other applicable PRC laws and regulations with respect to privacy and personal data protection in all material aspects.

### SALES AND MARKETING

#### Sales

We primarily sell our solutions through an experienced sales team. Through direct sales, we can understand customers’ technology and business development plan firsthand, propose technical solutions and product selection, and help customers solve problems efficiently. Our sales team is able to deliver value with an in-depth understanding of our customers’ businesses and industries. Our in-house sales teams work closely with our R&D team to propose suitable products and solutions to address the pain points faced by potential customers in the relevant industry verticals.

Our sales efforts are centered on the needs of our customers. We leverage on the collaborations among our sales team, customers and third-party system integrators to identify customers’ needs. To enhance and promote our solutions, particularly when we enter into a new market or industry vertical, we often cooperate with system integrators in that industry to demonstrate our technological capabilities and the advantages of our full-stack solutions. We then leverage such expertise for other customers in the same industry, thereby further penetrating the vertical.

As of December 31, 2020, our sales team consisted of over 60 employees who have extensive industry experience and in-depth expertise of our AI-based products and solutions. Our sales employees are first organized into multiple regional teams covering different regions of China. As of the Latest Practicable Date, we had 15 sales subsidiaries located in 11 cities, including Beijing, Shanghai, Guangzhou, Shenzhen, Chongqing, Chengdu, Xi’an, Qingdao, Nanjing, Hefei and Jiaxing. We motivate our sales teams by setting specific key performance targets for each team and adopting a commission incentive mechanism tied to sales performance. Our in-house direct sales team and effective marketing strategies contribute to our success in commercializing our technologies.

#### *Key Terms of Sales Agreements*

The salient terms of agreements with our customers generally include:

- *Service scope.* We usually provide both software development services and hardware equipment for one project. For our software development services, we collect original data generated in the customers’ process of production or daily business, and develop customized software based on customers’ needs. For hardware equipment sales agreement, we are responsible for manufacturing or purchasing, packaging, storage, delivery, insurance, installation, testing and after-sales service. We provide operational training to our customers’ personnel, and offer our customers options to separately purchase product upgrade and maintenance services after the initial service period expires.
- *Pricing.* We charge our customers for the price of hardware equipment and software development services. For more details, see “ – Sales and Marketing – Pricing”.
- *Confidentiality.* Except as otherwise provided by laws and regulations or with the prior written consent of the other party, each party shall maintain the confidentiality of information obtained in the performance of the relevant agreement and its contractual terms. In some cases, our R&D staff are required to sign confidentiality agreements.

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- *Payment term.* Our customers usually pay us upon delivery, or by milestones defined in the contract such as contract signing, delivery of solutions, customer’s written acceptance and end of warranty period. The credit term varies from 30 to 180 days.
- *Product warranty.* We typically agree with our customers on certain key performance indicators of our products and solutions, such as accuracy which are verified with our customers upon delivery. Further, we provide maintenance period of one year for selected contracts.
- *Termination.* The contract is terminated upon the delivery of our products and/or fulfillment of our services, or the agreement by all parties.

During the Track Record Period and up to the Latest Practicable Date, we did not have any material sales returns or refunds.

### Pricing

We have developed a standardized pricing reference for our sales team, with different pricing policies for (i) full-stack solutions and (ii) provision of services. Specifically:

- *Full-stack solutions.* We price such solutions primarily with cost-based method. In particular, as we procure certain elements of our full-stack solutions, such as hardware components and certain software products from our suppliers, we will evaluate the relevant procurement costs and adopt the cost-based method. As we also develop some other customization components in house, we will assess the complexity of such customization. For cloud-based products and services, we design different types of usage-based pricing models, such as subscription fee for fixed term, and pay as you go, which charge our customers per transaction.
- *Provision of services.* As the scope of services are typically evaluated based on customers’ specific needs, we typically evaluate and provide the statement of work and fee quote accordingly. In particular, as we procure certain software products from our suppliers, we will evaluate the relevant procurement costs and adopt the cost-based method. As we also develop some other customization components in house and provide the provision of services, we will assess the complexity of such customization and scope of service.

If there is any request for customization, adjustment or need for on-site delivery on top of the standard products and solutions, we will evaluate and provide the statement of work and quote based on the work scope. Our sales and marketing team will liaise with customers and provide quotations for their consideration.

We believe it is crucial to provide our AI-based products and solutions at competitive prices for the continued success of our Group. It is one of our pricing strategies to conduct market research and evaluate the existing competitors in the markets, comparable products/solutions and assess the technical advantages of our own products and solutions. For instance, we typically review the base price of ABS and RDP with such market information on a quarterly basis.

We charge our customers for the price of hardware equipment and software development services. Sales of products and solutions primarily represent our sales of software and hardware integrated solutions. The revenue of such integrated products and solutions is recognized when our

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customers accept the products and solutions after the completion of required installation or when our customers obtain the control of the products and solutions if no installation is required. In addition, a small part of our revenue comes from providing services of data solutions to customers, which primarily represent sales of our software-based solutions. Revenue from data solutions is recognized when we have provided the relevant services to our customers.

### Marketing and Branding

We have established a marketing and public relations department that is responsible for enhancing our brand awareness, promoting our new and existing products and solutions, maintaining our relationships with business partners, managing public relations, and building and maintaining our ecosystem. We promote the brand awareness of our company in specific industries to penetrate into niche markets. Our marketing team collaborate with sales teams to explore business opportunities in niche areas through integrated marketing. We deploy a comprehensive strategy for our marketing efforts, including:

- ***Brand awareness building.*** We have developed an overall trademark strategy to manage the trademark registration and usage. We routinely maintain and update our official website and social media accounts in order to build brand awareness, engage and retain customers. We also established our corporate visual identity.
- ***Public relationship management.*** We have established the practice of having press officers communicate with the media on behalf of the Company. Our team has been committed to maintaining friendly relations with the mass media and market analysts.
- ***Demand generation.*** We conduct market research and studies and engage in various marketing campaigns to effectively reach target customers. We summarize our experience of working with our customers and use it as case materials for marketing campaigns. Furthermore, we held and participated in a series of AI summits to promote our products and solutions and seek business opportunities.
- ***Business partnership and ecosystem establishment.*** We have committed to building and maintaining our relationships with ecosystem participants, including associations, industry alliance, upstream and downstream businesses and other stakeholders. In addition, we have entered into strategic cooperation with leading software companies in manufacturing industry, including Dassault Systems (Shanghai) Information Technology Co., Ltd.. We have collaborated with world-leading universities to run research projects as part of our efforts to cultivate talents in the AI industry. In addition, we cooperate with local governments and schools to establish various institutions for AI study in manufacturing industry, including vocational training centers, laboratories and business incubators.

### Our Market Entry Strategy

We adopted a three-step market entry approach to engage, grow and repeat when we expand into a new industry. We evaluate the feasibility that our AI-based products and solutions are able to effectively address the pain points of a particular industry and create value for our customers, the potential market size of the addressable market, our competitive strengths and technological capabilities. We believe we have adopted an effective market entry strategy in the past. Our market entry strategy has been to establish engagements with industry leaders across multiple industries, starting from presenting our AI-based products and solutions for a single scenario in their business

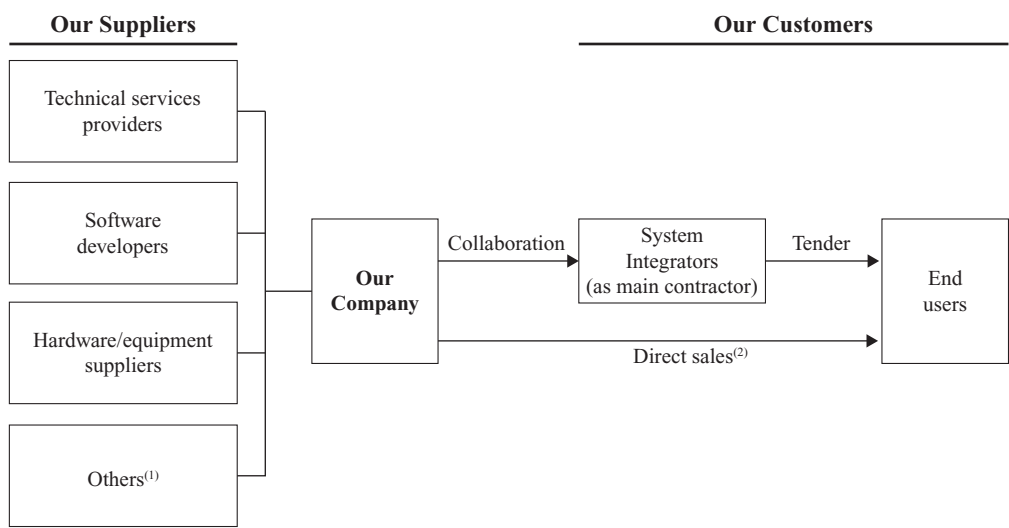
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operations and information management. The success of the first project will set a good example, which encourages the customer to continue AI transformation by addressing different scenarios, creating customer stickiness, and exploring more opportunities with the same customer. We regard this as the “1+N” cooperation. Once we have built our portfolio of AI-based products and solutions with the customer, we will penetrate into the industry by engaging similar companies in the industry. Given the reusability of our ABS and RDP, our solutions are highly replicable in any new customer’s existing infrastructure. We regard this as the “1\*N” expansion, enabling a network effect with our AI-based products and solutions.

Furthermore, to further leverage industry leaders’ expertise and resources, we established joint ventures with them taking advantage of the combined resources of both parties. For example, we partnered with CISDI Group, a leading engineering and construction conglomerate in steel industry, to establish CISAI Tech in March 2019. CISDI Group has been researching and developing industrial intelligence solutions with industry expertise accumulated in the past 60 years. On the other hand, we are specialized in AI technologies and are able to cultivate and attract talents to constantly grow AI algorithms and solutions for particular business scenarios. As of the Latest Practicable Date, CISAI Tech has been engaged to implement the AI-based solution for intelligent molten iron transportation with three leading steel manufacturers and is well known for its molten iron transportation system solution among customers in the PRC steel industry.

We consider the cooperation with industry leaders a prudent means when expanding into new industry vertical. We typically consider a few factors in selecting strategic partners, including (i) strong industry know-how and production experiences; (ii) industry connections, so as to efficiently acquire customers; and (iii) efficient delivery team that is able to adjust and transfer our AI technology into more products and solutions.

The following flowchart illustrates our relationships with our suppliers and our customers, including system integrators and end-users:



Notes:  
(1) Other suppliers may include server and database management system provider, and intelligent control system, and private cloud security system provider.  
(2) Our direct sales to end users as our customers may also be procured through tender process.



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Our sales team is located in 11 cities in China, which cover various industry verticals that our products and solutions are catered for. Our sales personnel actively explore new potential customers, as well as maintain business relationships with existing ones in implementation of our 1+N and 1\*N expansion strategies. We engage our customers through two ways, namely direct sales with end-users and collaboration with system integrators. During the Track Record Period, we provided products and solutions directly to the end-users as our customers, when we can meet the vendor selection criteria of such customers and conduct direct sales. The vendor selection criteria for the end-users typically include registered capital, time of establishment, and past project experience and technical expertise, which may differ from project to project.

Our overall tender success rate for direct sales was 60.6% in 2020 and the nine months ended September 30, 2021. For illustration purpose, the following table sets out the number of tenders submitted by and awarded to us, and the overall tender success rate in 2020 and the nine months ended September 30, 2021:

	<u>Year ended December 31,</u>	<u>Nine months ended September 30,</u>	
	<u>2020</u>	<u>2021</u>	<u>Overall</u>
Number of tender submitted .....	40	92	132
Number of contracts awarded .....	26	54	80
Tender success rate .....	65.0%	58.7%	60.6%

We collaborate with system integrators primarily when the scope of services are beyond our usual provision of products and services. Many end-users engage the service of system integrators when selecting suppliers or service providers, instead of negotiating with a large number of different suppliers and service providers. According to Frost & Sullivan, it is an industry norm for end users to engage system integrators to implement their projects, particularly when the projects are of high contract value and involve complex system implementation. While system integrators do not specialize in developing their own integrated solutions, they procure hardware and software solutions from companies like us, and implement integrated solutions for end users with uniform standards.

We are usually engaged by, and sometimes proactively approach, the system integrators that meet the vendor selection criteria for potential engagements with end-users. The system integrators will participate in the tender processes with the end-users as the main contractor, and engages subcontractors for the end-users. They are responsible for integrating hardware components, such as machine system and computer hardware, with software and applications, sourced from companies like us. On the other hand, we typically do not participate directly in the tender process with the system integrator, rather, our products and services are included to meet the tender requirements as part of our subcontracting services. As we negotiate with and enter into contract with system integrators for our service fees, such system integrators are recognized as our customers, rather than the relevant end users. As a result, there is no material disparity in contract terms and the scope of our services in direct sales and sales to the system integrators.

We achieved significant revenue growth from our provision of products and services to system integrators who have extensive industry resources and know-how, with strong ability to sell products and industry solutions. As our business footprint expands in mainland China and large enterprises tend to engage the services of system integrators to implement large-scale projects, there was an increase in the number of customers that are system integrators. According to F&S, it is an industry trend that large enterprises are more inclined engage the services of system integrators to implement large-scale projects. During the Track Record Period, we collaborated with 5, 39, 56 and 46 system integrators in

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2018, 2019, 2020 and the nine months ended September 30, 2021, respectively. Our revenue generated from sales to system integrators increased significantly from RMB5.7 million to RMB136.4 million in 2019, and further increased to RMB351.4 million in 2020, accounting for 15.3%, 59.5% and 76.0% of our total revenues in the respective periods. Our revenue generated from sales to system integrators further increased by 90.2% from RMB214.1 million in the nine months ended September 30, 2020 to RMB407.3 million for the same period in 2021.

In light of the growing customer base and increasing number of system integrators therein, we are not reliant on any particular system integrators for our revenue growth. We evaluate the specific requirements of the project deliverables and provide our products and services accordingly to the system integrators as designated by the end users. To the knowledge of our Directors, save for CISDI Group and China Railway No. 4, with whom we established joint ventures, CISDI Engineering Co., Ltd. and Sinovation Ventures, none of the system integrators and the respective end-users had any past or present relationships with us.

## CUSTOMERS

We have a broad and diverse customer base, which has expanded rapidly over the Track Record Period. We have built an experienced team that is knowledgeable about both the technology advancements as well as the pain points faced by participants in the relevant industries, allowing us to provide AI-based products and solutions that directly address the needs of our end-users. For information as to customers for each of the solutions, see “—Our Solutions.”

The following table sets forth the number of customers by industries we served during the Track Record Period:

	Period from February 6 to December 31,	Year Ended December 31,		Nine months ended September 30,	
	2018	2019	2020	2020	2021
Manufacturing .....	16	62	93	66	71
Financial services .....	2	16	18	12	12
Others <sup>(1)</sup> .....	32	79	54	41	48
<b>Elimination:</b> <sup>(2)</sup>					
Cross-industry customer .....	—	7	8	8	1
<b>Total</b> .....	<b>50</b>	<b>150</b>	<b>157</b>	<b>111</b>	<b>130</b>

Notes:

(1) Others mainly include retail, information technology, among other industries.

(2) Some of the customers represent end-users from different industry verticals.

Our major customers include both end-users and system integrators in manufacturing, financial services and other industries. We primarily conduct our sales and marketing activities through our in-house sales team. We source our customers through both direct sales and collaboration with system integrators, where system integrators may participate in the tender process with the end-users. However, we directly enter into sales contracts with such system integrators. System integrators are primarily information technology service providers engaged by the end-users to procure IT products or services/integration and management services. Many end-users of our AI-based products and solutions engage the service of system integrators when selecting suppliers or service providers, instead of negotiating with a large number of different suppliers and service providers. Accordingly, we acted as

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the subcontractors of these system integrators. As a result, during the Track Record Period, majority of our top customers include both end-users and system integrators. During the Track Record Period, we had a total of 50, 150, 157 and 130 customers in 2018, 2019, 2020 and the nine months ended September 30, 2021, respectively. The number of our customers in the manufacturing industry increased significantly from 16 in 2018 to 93 in 2020, and further from 66 in the nine months ended September 30, 2020 to 71 in the nine months ended September 30, 2021. The number of our customers in the financial services industry increased from two in 2018 to 18 in 2020, and remained at 12 in the nine months ended September 30, 2020 and 2021.

The following table sets forth the number of premium customers, total revenue of our premium customers, percentage of revenue contribution by premium customers, premium customer dollar based repeating rate, total number of our customers and total revenue of our customers during the Track Record Period:

	Period from February 6 to December 31,	Year Ended December 31,		Nine Months Ended September 30,
	2018	2019	2020	2021
Number of premium customers .....	—	13	23	N/A <sup>(1)</sup>
Premium customer revenue (RMB in thousands) .....	—	114,163	381,255	N/A <sup>(1)</sup>
Percentage of revenue contribution by premium customers ...	—	49.8%	82.5%	N/A <sup>(1)</sup>
Premium customer dollar based repeating rate .....	N/A	N/A	112.7%	N/A <sup>(1)</sup>
Total number of customers .....	50	150	157	130
Total revenue (RMB in thousands) .....	37,208	229,141	462,324	553,015

Note:

(1) As premium customers are defined as customers with revenue contribution of RMB4.5 million or more in a financial year, the metrics around premium customers for the nine months ended September 30, 2021 are not available.

### Top Customers

Revenue generated from our largest customer for 2018, 2019, 2020 and the nine months ended September 30, 2021 accounted for approximately 9.8%, 7.2%, 11.6% and 14.0%, respectively, of our total revenues during those periods. Revenue generated from our five largest customers in each of 2018, 2019, 2020 and the nine months ended September 30, 2021 accounted for approximately 38.8%, 29.3%, 42.1% and 44.3%, respectively, of our total revenue during those periods. The five large customers of our Group are different in each year of the Track Record Period. We assess the credit worthiness of our five largest customers from time to time based on payment records and public news search. To our best knowledge, it is of the view that our five largest customers during the Track Record Period have credit worthiness.

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The following table sets forth the details of our five largest customers for 2018:

Customer	Major products and services sold	Revenue (thousands)	% of our total revenue	Registered capital (RMB in million)	Background and principal business activities	No. of full time registered employees	Industry vertical of end user	Commencement year of business relationship
Customer A . . . . .	OCR and Intelligent Data Governance	3,632	9.8	4.0	System integrator providing technology promotion and application services for insurance businesses	Less than 50	Financial services (insurance)	2018
Customer B . . . . .	Data Pre-processing	3,302	8.9	20.0	Technology promotion and application services for I50 - 99T businesses	50 - 99	Manufacturing (retail)	2018
Customer C . . . . .	Intelligent Data Governance	2,762	7.4	5.0	Software and IT services for Less than 50 manufacturing businesses	Less than 50	Manufacturing (high-tech/3C)	2018
Customer D . . . . .	Intelligent Inventory management system	2,427	6.5	10.0	Commercial services for retailing businesses	*	Manufacturing (retail)	2018
Customer E . . . . .	Intelligent Data Governance	2,292	6.2	10.0	Technology promotion and application services for mechanical businesses	Less than 50	Manufacturing (others)	2018
<b>Total . . . . .</b>		<b>14,415</b>	<b>38.8</b>					

Note:

\* The information is unavailable based on publicly available information.

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The following table sets forth the details of our five largest customers for 2019:

Customer	Major products and services sold	Revenue (thousands)	% of our total revenue	Registered capital (RMB in million)	Background and principal business activities	No. of full time registered employees	Industry vertical of end user	Commencement year of business relationship
Customer F	ABC server and intelligent cloud management platform	16,430	7.2	37.5	Technology promotion and application services for transportation equipment businesses	Less than 50	Manufacturing (others)	2019
Customer A	Intelligent Data Governance	14,235	6.2	5.0	System integrator providing technology promotion and application services for insurance businesses	Less than 50	Financial services (insurance)	2018
Customer G	Intelligent Community	13,909	6.1	2.0	System integrator providing software and IT services for industrial parks	Less than 50	Others	2019
Customer H	ABC server and intelligent cloud management platform	11,208	4.9	23.3	System integrator providing computer application and technology services for banks	Less than 300	Manufacturing (others)	2019
Customer I	ABC server	11,171	4.9	20.0	Computer hardware and software design and sales services for IT businesses	Less than 50	Others	2019
<b>Total</b>		<b>66,953</b>	<b>29.3</b>					

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The following table sets forth the details of our five largest customers for 2020:

Customer	Major products sold	Revenue (thousands)	% of our total revenue	Registered capital (RMB in million)	Background and principal business activities	No. of full time registered employees	Industry vertical of end user	Commencement year of business relationship
Customer J	ABC server and intelligent cloud management platform	53,645	11.6	337.58	System integrator providing software development and technical services for insurance businesses	500-599	Financial services (insurance)	2019
Customer K	Intelligent Liquid Crystal Semiconductor Production	45,522	9.8	50.0	System integrator providing hardware components development and sales services for manufacturing businesses	Less than 50	Manufacturing (OLED panel and semiconductor)	2020
Customer H	Intelligent Data Governance	41,132	8.9	2,493.2	System integrator providing computer application and technology services for electric appliance businesses	100-199	Manufacturing (others)	2019
CISDI Group <sup>(1)</sup>	Intelligent Molten Iron Transportation System	32,106	6.9	50.0	System integrator providing intelligent molten iron transportation system for manufacturing businesses	400-499	Manufacturing (iron and steel metallurgy)	2019
Customer M	ABC appliance	22,873	4.9	109.7	System integrator providing computer, telecommunication and electronic equipment manufacturing for banks	100-199	Financial services (banking)	2020
<b>Total</b>		<b>195,278</b>	<b>42.1</b>					

Note:

(1) CISDI Group is a substantial shareholder of our major subsidiary CISAI Tech.



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The following table sets forth the details of our five largest customers for the nine months ended September 30, 2021:

Customer	Major products sold	Revenue (thousands)	% of our total revenue	Registered capital (RMB in million)	Background and principal business activities	No. of full time registered employees	Industry vertical of end user	Commencement year of business relationship
Customer N	ABC server and Intelligent Inventory management system	77,337	14.0	117.0	System integrator providing computer, telecommunication and electronic equipment manufacturing for banks	Less than 50	Manufacturing (engineering and construction)	2021
Customer M	ABC appliance	58,088	10.5	109.7	System integrator providing computer, telecommunication and electronic equipment manufacturing for banks	100-199	Financial services (banking)	2020
Customer O	Intelligent quality assurance system, database analytics	45,028	8.1	200.0	System integrator providing defect detection service, intelligent management system and IT system integration	50-99	Manufacturing (automotive equipment)	2021
Customer P	ABC appliance and intelligent cloud management platform	39,447	7.1	100.0	System integrator providing computer hardware and software design, development and consultancy services	200-299	Financial services (insurance)	2019
Customer Q	Storage system and related services	25,310	4.6	500.0	System integrator providing computer application and technology services	3,500-4,000	Financial services (insurance)	2019
<b>Total</b>		<b>245,210</b>	<b>44.3</b>					

Note:

\* The information is unavailable based on publicly available information.

As of the Latest Practicable Date, none of our Directors, their respective associates or any of our shareholders (which, to the knowledge of Directors owns more than 5% of our issued share capital) had any interest in any of our five largest customers.

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### **SUPPLIERS AND PROCUREMENT**

Our suppliers primarily consist of (i) suppliers of hardware components, (ii) suppliers of software, (iii) contract manufacturers and (iv) data labeling services.

#### **Suppliers of Hardware Components**

We arrange the delivery and assembly of hardware products to our customers that are compatible with our products and solutions. The key components include servers, industry cameras and sensors. We engage leading suppliers in the market so as to ensure the high quality of our hardware products. We typically aim to procure at least two suppliers for each type of component, in order to strategically ensure supply stability and optimal cost control. However, for components that are easily substituted, we may source them from single suppliers.

We typically enter into framework agreements with suppliers for our key components. Each framework agreement sets forth the general terms of conditions, pursuant to which we place separate purchase orders and negotiate prices and volumes for each purchase order. We typically pay a fixed fee as set forth in the purchase order and settle the payments within 90 business days upon receipt of each invoice.

#### **Suppliers of Software**

We outsource the development of certain software products to optimize our use of resources, so we can focus on our core products and services. We typically purchase management software that is widely used in the industry and has a user-friendly interface to supplement our intelligent products and solutions. We select software suppliers based on their industry-specific expertise, reputation and their technical capabilities and reliability.

We typically enter into software subscription agreements with suppliers with a term of one year that may be extended upon agreement by both parties. We usually pay the fixed subscription fee as set forth in the contract in the form of prepayment, and are generally entitled to provide the access to software to our customers as end-users. The suppliers are responsible for the delivery of software and providing after-sale services through the software company. Where the solutions provided to our customers include the use of software sourced from such suppliers, we typically provide access to the software to the end-users for a fixed term that is within validity period of our own software subscriptions granted by our suppliers of software. Upon expiry of such fixed term, end-users may extend the subscription through us, or procure directly from such suppliers.

#### **Contract Manufacturers**

We engage contract manufacturers to produce our devices such as smart vending machines, in order to focus our resources on technology innovation, product design, sales and customer support. We choose our contract manufacturers based on a variety of factors, including R&D capabilities, product quality, manufacturing capabilities, history of cooperation and price.

We usually enter into framework agreements with our contract manufacturers, which set out the general terms and conditions of cooperation. We then issue separate purchase orders. Our purchases from contract manufacturers are made on a payment-on-delivery basis, together with a fixed advance payment, and we are typically granted a credit term of 30 days after receipt of each invoice. Our

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contract manufacturers must meet our specified quality requirements and are responsible for liabilities resulting from product defects. Framework agreements typically have a term of one year and will automatically renew, subject to written notice of termination.

### **Procurement of Data Labeling Services**

We have established business relationships with third-party service providers to label the massive amount of data we use to train our algorithms and enhance our technologies. Such data are usually acquired or collected from our customers with consent in the form of photos and videos in specific application scenarios so as to train AI models. The data to be labeled by third-party service providers do not contain personal information. Sources of our data include (i) data simulated by our self-developed data labeling platform; (ii) on-site collected data by our customers or us with direct authorization; (iii) data from public datasets. We generally own the intellectual property of these data.

We typically enter into separate agreements with each data service provider for data labeling services and pay service fees, which are calculated based on volume of the data labeled. The standard credit period given by such data service providers is 10 to 15 business days upon receipt of each invoice. Prior to entering business relationships with such data service providers, we typically review their relevant business licenses and other credentials to ensure that they are legitimate professional service providers. During the Track Record Period, we engaged a total of eight data service providers.

### **Top Suppliers**

Our major suppliers are suppliers of hardware components, technical services providers and contract manufacturers. For each of 2018, 2019, 2020 and the nine months ended September 30, 2021, our five largest suppliers contributed a total of 75.8%, 30.6%, 32.9% and 43.9% of our total purchases for the same periods, respectively. Our largest supplier accounted for 21.0%, 8.3%, 13.0% and 18.5% of our total purchases for each of the same periods, respectively. The five largest suppliers of our Group are different in each year of the Track Record Period.

The percentage of purchases contributed by our top five suppliers fluctuated during the Track Record Period, primarily because we strategically procured a wide range of types of hardware components from different suppliers, and such components are procured to address the diversified needs of our customers. As our AI-based solutions are highly adaptable to devices and existing infrastructure of our customers, we did not rely on any single supplier during the Track Record Period.

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The following table sets forth the details of our five largest suppliers for 2018:

Supplier	Major products/services procured	Purchase amount (thousands)	% of our total purchases	Background	Principal business activities	Year of commencement of business relationship
Supplier A . . . . .	Technical services	2,291	21.0	A private company in the PRC	Computer Software developer	2018
Supplier B . . . . .	Equipment	2,042	18.7	A private company in the PRC	Software and information technology services provider	2018
Supplier C . . . . .	Technical services	1,934	17.7	A private company in the PRC	Software and information technology services provider	2018
Supplier D . . . . .	Technical services	1,226	11.2	A private company in the PRC	Software and information technology services provider	2018
Supplier E . . . . .	Software development	792	7.2	A private company in the PRC	Electronic equipment manufacturer	2018
<b>Total . . . . .</b>		<b><u>8,285</u></b>	<b>75.8</b>			

The following table sets forth the details of our five largest suppliers for 2019:

Supplier	Major products/services procured	Purchase amount (thousands)	% of our total purchases	Background	Principal business activities	Year of commencement of business relationship
Supplier F . . . . .	Hardware components	13,867	8.3	A private company in the PRC	Data center operator	2019
Supplier G . . . . .	Software development	11,815	7.1	A private company in the PRC	Informational technical services provider	2019
Supplier H . . . . .	Hardware components	8,861	5.3	A private company in the PRC	Financial services data analysis service provider	2019
Supplier I . . . . .	Equipment	8,581	5.1	A private company in the PRC	Industry IT solution provider	2019
Supplier J . . . . .	Hardware components	8,062	4.8	A private company in the PRC	Software service provider	2019
<b>Total . . . . .</b>		<b><u>51,186</u></b>	<b>30.6</b>			

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The following table sets forth the details of our five largest suppliers for 2020:

Supplier	Major products/services procured	Purchase amount (thousands)	% of our total purchases	Background	Principal business activities	Year of commencement of business relationship
Supplier K . . . . .	Hardware components	43,135	13.0	A public company in the PRC listed on Shenzhen Stock Exchange	Cloud service provider	2020
Supplier L . . . . .	Equipment	21,871	6.6	A private company in the PRC	Data integration service provider	2020
Supplier M . . . . .	Contract manufacturer	21,361	6.4	A private company in the PRC	Smart hardware equipment manufacturer	2019
Supplier N . . . . .	Software services	11,504	3.5	A private company in the PRC	Software provider	2020
Supplier O . . . . .	Hardware components	11,268	3.4	A private company in the PRC	IT solution provider	2020
<b>Total . . . . .</b>		<b>109,139</b>	<b>32.9</b>			

The following table sets forth the details of our five largest suppliers for the nine months ended September 30, 2021:

Supplier	Major products/services procured	Purchase amount (thousands)	% of our total purchases	Background	Principal business activities	Year of commencement of business relationship
Supplier K . . . . .	Hardware components	68,092	18.5	A public company in the PRC listed on Shenzhen Stock Exchange	Cloud service provider	2020
Supplier P . . . . .	Server and database management system	28,206	7.7	A private company in the PRC	Software and IT services provider	2020
Supplier Q . . . . .	Storage system	23,065	6.3	A private company in the PRC	Software and IT services provider	2019
Supplier R . . . . .	Server	20,832	5.7	A private company in the PRC	Computer information system integration, computer hardware and software, technology development	2020
Supplier S . . . . .	Server and intelligent control center	20,801	5.7	A private company in the PRC	Software and IT services provider	2021
<b>Total . . . . .</b>		<b>160,996</b>	<b>43.9</b>			

As of the Latest Practicable Date, none of our Directors, their respective associates or any of our shareholders (which, to the knowledge of Directors owns more than 5% of our issued share capital) had any interest in any of our five largest suppliers.



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### **LOGISTICS AND INVENTORY MANAGEMENT**

#### **Logistics**

We do not engage third-party logistics service providers for delivery services. Hardware components for our AI-based products and solutions are typically directly delivered by the hardware components vendors to the venue specified by our customers. As our AI-based products and solutions are customized to meet the customers’ requirements and delivered on a project-specific basis, we conduct the assembly process for our software and hardware components on-site. We are sometimes required to engage third-party logistics service providers to distribute certain components from our Company to our customers. To the best of our knowledge and belief, all of these logistics service providers are Independent Third Parties.

#### **Inventory Management**

Our inventories mainly include RDPs, ABS required hardware and work in progress. Our inventories amounted to RMB3.0 million, RMB32.3 million, RMB55.3 million and RMB43.4 million as of December 31, 2018, 2019, 2020 and September 30, 2021, respectively. We adopt a strict inventory control policy in place to monitor our stock levels and minimize obsolete inventory, while keeping the inventory of RDP components at a level necessary to fulfill customers’ orders from time to time. We do not engage any third-party warehouse service providers as we source our hardware components specifically for each project and assembly of such hardware components is conducted on site.

### **QUALITY CONTROL**

We are committed to maintaining the highest level of quality in our AI-based products and solutions. We have designed and implemented a quality management system that provides the framework for continuous improvement of products and processes, and we closely monitor the implementation of our quality management procedures and measures.

#### **Software, hardware and services procurement**

We procure software, hardware components and data labeling services used in our product and solution development process only from approved suppliers. All approved suppliers are managed by our COE team, which conducts supplier qualification evaluation on shortlisted suppliers and examines their technological expertise. Furthermore, we also conduct site visits to our existing and new suppliers of hardware components to examine their product samples with respect to the relevant technical requirements, and manufacturing capacity. We conduct thorough examinations of product samples and each of their components at the product testing stage to make sure they satisfy the relevant technical requirements. With respect to our existing hardware products, our quality control team establishes, communicates and monitors quality standards by product category.

#### **Installation and maintenance**

As hardware components are delivered to project sites for assembly, we typically conduct our testing on site before project handover to our customers. Given the highly customized nature of our projects, we do not have a one-size-fits-all quality control policy, but rather rely on the expertise of our team to ensure quality. Our customers typically provide a signed acknowledgement upon project completion. We typically offer a one-year warranty on our software and hardware products. Our

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customer success team provides remote customer service 24 hours a day, and our engineers provide both remote and on-site technical support depending on the complexity of the issue. We also provide system maintenance for all of our cloud-based solutions. During the Track Record Period and as of the Last Practicable Date, we have not experienced any complaints that have had any material adverse effect on our brand, our business or our results of operations.

### BUSINESS SUSTAINABILITY

We have experienced robust growth during the Track Record Period. Our revenue grew from RMB37.2 million in 2018 to RMB229.1 million in 2019 and further to RMB462.3 million in 2020 with a CAGR of 252.5%, and from RMB297.6 million in the nine months ended September 30, 2020 to RMB553.0 million in the nine months ended September 30, 2021 with a year-on-year revenue growth rate of 85.8%. Our gross profit margin was 62.9% in 2018 and has been able to maintain a stable level at 31.3% in 2019, 29.1% in 2020, and 30.9% in the nine months ended September 30, 2021. Benefiting from the solid foundation we have built and the momentum we have achieved, our Directors believe we are able to maintain sustainability and growth of our business.

On the other hand, we incurred operating losses during the Track Record Period. In 2018, 2019 and 2020 and the nine months ended September 30, 2021, we recorded net losses of RMB71.2 million, RMB248.4 million, RMB360.6 million and RMB438.0 million, respectively. Eliminating impact of items including share-based payment expenses, finance cost of financial liabilities of redeemable shares and [REDACTED] expenses, we generated an adjusted net losses of RMB45.4 million, RMB160.0 million, RMB144.5 million and RMB81.0 million in 2018, 2019, 2020 and the nine months ended September 30, 2021, respectively. Adjusted net loss is a non-IFRS measure. See “Financial Information—Non-IFRS Measure” for more details.

Our net losses were primarily due to the significant amounts of general and administrative expenses and R&D expenses incurred during the Track Record Period. While the absolute dollar amounts of these expenses increased throughout the Track Record Period, which is in line with our business expansion, we plan to implement prudent measures to manage these expenses. As a result, the general and administrative expenses as percentage of our total revenue generally decreased from 133.6% in 2018 to 55.4% in 2019, and further to 42.2% in 2020, with a slight increase to 56.3% for the nine months ended September 30, 2021. The R&D expenses as percentage of our total revenue also generally decreased from 77.1% in 2018 to 49.4% in 2019, and further to 39.3% and 31.9% in 2020 and the nine months ended September 30, 2021. As a result of our continuous expansions and investments in R&D activities, we expect to remain loss-making in the near future.

We have a healthy cash balance to support our business operations and future expansion. During the Track Record Period, we had historically funded our cash requirements primarily with capital contribution from shareholders and financing through the issuance of redeemable shares in Pre-[REDACTED] Investments. We had cash and cash equivalents of RMB74.4 million, RMB605.6 million, RMB1,042.5 million and RMB1,654.6 million as of December 31, 2018, 2019 and 2020 and September 30, 2021, respectively. Furthermore, as of September 30, 2021, our total cash balance was RMB1,654.8 million, including RMB1,654.6 million in cash and cash equivalents and RMB0.2 million in restricted cash. Our total cash balance is sufficient to cover our net cash flows used in operating activities, providing adequate liquidity for our expanding business operations. As such, we believe that we possess sufficient working capital, including sufficient cash and liquidity assets, and taking into account the financial resources available to us, without the estimated net [REDACTED] from the [REDACTED]

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[REDACTED]. As such, as of the Latest Practicable Date, other than the funds raised from the [REDACTED], we did not expect to conduct additional fundraising activities to sustain our operations before we reach profitability.

Going forward, we plan to achieve profitability primarily (i) maintaining our scalable and efficient business model enabling sustainable growth; (ii) growing our customer base and their repeated spending; (iii) enriching and expanding our AI-based products and solutions; and (iv) improving our results of operations; and (v) improving cashflow position. These will allow us to increase our revenue and manage our cost and expenses to reach profitability and positive operating cashflows.

### **Scalable and efficient business model enabling sustainable growth**

We are well-positioned to effectively expand and capture opportunities in the manufacturing industry in China, in which we operate our scalable business model. In light of the reusability of our ABS and RDP, it is our “1\*N expansion” strategy to replicate our solutions, which are highly adaptable to existing infrastructure of any new customers. This has enabled our AI-based products and solutions to efficiently achieve scalability and we believe that it would enable sustainable growth. In particular, we developed our AIInnovation Intelligent Manufacturing System that covers a variety of needs for the intelligent transformation of our customers in the manufacturing industry ranging in both operation efficiency and information intelligence. AI-based products and solutions within such system can be selectively deployed by customers in various verticals in the manufacturing industry including iron and steel metallurgy, energy and power, automotive equipment, OLED panel and semiconductor, high-tech/3C, and engineering and construction. Such solutions and products they can be easily utilized individually or in combination by new customers with optimal flexibility.

Leveraging our research capabilities in deep learning, we developed our proprietary AI platforms, namely ManuVision Intelligent Machine Vision Platform, MatrixVision Intelligent Edge Video Platform, and Orion Distributed Machine Learning Platform. The integration of AI technologies with industry insights enabled us to design AI-based products and solutions to help businesses reduce costs, improve operational efficiency, increase business values through intelligent transformation of business operations and information management. Since our inception, our R&D activities resulted in a wealth of intellectual properties. As of September 30, 2021, we had approximately 255 employees engaged in AI and technical functions, accounting for 69.1% of our total employees, and approximately 35.7% of our employees held master’s or higher degrees. As of the Latest Practicable Date, we have applied for 634 AI-related patents, and successfully registered 126 AI-related patents, including 79 invention patents.

Given that we are a first mover in offering AI-based products and solutions designed for the manufacturing industry, we have established our brand in the enterprise AI solutions industry in China. According to Frost & Sullivan, in 2020, we were the third largest AI technology driven solution provider in the enterprise AI market in China in terms of revenue; and we were the largest AI technology driven solution provider in China’s AI solutions market in the manufacturing industry in terms of revenue. We will continue to explore new solutions and broaden our solution offerings to further unleash the monetization potential of our AI platforms and technologies, and capture more growth opportunities, while deriving additional insights and uncovering new areas to explore, improve and optimize.

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### Robust growth of customer base and increased spending of our customers

During the Track Record Period, our customer base continued to grow and diversify as we expand our business and our service offerings. The number of customers in manufacturing industry increased from 16 in 2018 to 93 in 2020. The number of customers in financial services increased from two in 2018 to 18 in 2020. The total number of customers increased from 50 in 2018 to 157 in 2020. Furthermore, the number of our premium customers increased from 13 in 2019 to 23 in 2020. The percentage of revenue contribution by premium customers increased from 49.8% in 2019 to 82.5% in 2020.

The following table sets forth the number of premium customers, total revenue of our premium customers, percentage of revenue contribution by premium customers, premium customer dollar based repeating rate, total number of our customers and total revenue of our customers during the Track Record Period:

	Period from February 6 to December 31,	Year Ended December 31,		Nine Months Ended September 30,
	2018	2019	2020	2021
Number of premium customers	—	13	23	N/A <sup>(1)</sup>
Premium customer revenue ( <i>RMB in thousands</i> )	—	114,163	381,255	N/A <sup>(1)</sup>
Percentage of revenue contribution by premium customers	—	49.8%	82.5%	N/A <sup>(1)</sup>
Premium customer dollar based repeating rate	N/A	N/A	112.7%	N/A <sup>(1)</sup>
Total number of customers	50	150	157	130
Total revenue ( <i>RMB in thousands</i> )	37,208	229,141	462,324	553,015

Note:

(1) As premium customers are defined as customers with revenue contribution of RMB4.5 million or more in a financial year, the metrics around premium customers for the nine months ended September 30, 2021 are not available.

Our growing customer base reflects not only the strength of our AI-based products and solutions, but our distinguished ability to understand and implement our AI capabilities in various scenarios of our customers’ business process. Leveraging our market entry strategy, we could cost-effectively expand our customer base and increase our service engagement with customers over time by offering various AI-based products and solutions for their different business scenarios. The premium customer dollar based repeating rate was 112.7% in 2020, which demonstrated our ability to deepen existing customer base. It is our “1+N cooperation” strategy to promote repurchases from existing customers by addressing other pain points experienced in different scenarios. As our customers realize the benefits of the products and services we provide, they would become more inclined to use and purchase our products or services, thereby increasing their spending. As such, our expanding customer base and increasing customer spending shall be the key drivers for our revenue growth, contributing towards reaching profitability.

Our number of customers increased from 111 in the nine months ended September 30, 2020 to 130 in the nine months ended September 30, 2021. In the future, we plan to further grow our customer base and premium customer base, as well as deepen our customer relationships. We expect to attract new customers in the manufacturing and financial service industries leveraging our “1\*N expansion” strategy and increase average revenue per customer by implementing our “1+N cooperation” strategy. In particular, we have established our market position in verticals in the manufacturing industry which is still in the relatively early stage of adoption of AI technologies.

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We currently mainly offer AI-based products and solutions to be applied in manufacturing and financial service industries, encompassing eight verticals, namely iron and steel metallurgy, energy and power, automotive equipment, OLED panel and semiconductor, high-tech/3C, engineering and construction, banking and insurance. We have been actively and successfully expanding into new industry verticals during the Track Record Period. For instance, our AI-based products and solutions for customers in the manufacturing industry expanding from automatic equipment and high tech/3C in 2018 to engineering and construction and iron and steel metallurgy in 2019, and further to OLED panel manufacturing and energy and power in 2020. We plan to further penetrate to the current verticals and explore more verticals in the manufacturing industry, such as chemicals materials and food and beverage, with our scalable AI platforms and past project experiences serving the customers in the manufacturing industry, as the enterprises in this industry increasingly digitalize their business operations. We believe this will further strengthen our market position in offering AI technology driven solutions in China’s AI solutions market in the manufacturing industry and acquire greater market shares.

### **Enriching and expansion of our AI-based products and solutions**

Revenue generated from the sales of AI-based products and solutions witnessed significant growth during the Track Record Period. See “Financial Information—Description of Major Components of Our Results of Operations—Revenue” and “Financial Information—Period-to-Period Comparison of Results of Operations” for a detailed explanation of our revenue growth during the Track Record Period. In addition, according to Frost & Sullivan, the market size of China enterprise AI market has reached approximately RMB139.4 billion in 2020 and is expected to reach approximately RMB836.6 billion by 2025, representing a CAGR of 43.1%. In 2020, the enterprise AI market in China accounts for approximately 75.0% of China’s overall AI market, and is expected to expand to approximately 80.0% by 2025. Moving forward, with more extensive adoption of digital and intelligent technologies, China’s AI solution market in manufacturing industry is expected to reach approximately RMB64.9 billion by 2025, representing a CAGR of 48.3% between 2020 and 2025. We ranked first in the AI-technology driven solutions provided by third-party service providers for manufacturing industry in 2020 with a market share of 6.3%, which indicated our strengths in serving manufacturing industry compared to other industry peers. As such, we believe we are well positioned to capitalize these industry trends and significant growth opportunities leveraging our market position.

We believe our AI-based products and solutions business will maintain sustainable growth. We will continue to concentrate our efforts to constantly expanding our customer base and our AI-based products and solutions offerings. We regularly enhance our AI platforms with continuous upgrades and the number of technology assets as well as algorithm models developed on our ManuVision platform and MatrixVision platform continues to increase, enabling us to develop more AI-based products and solutions for customers in various business scenarios. For example, the number of technology assets accumulated increased from more than 1,600 by the end of June 2021 to more than 1,800 by the end of September 2021. The algorithm models we developed for our ManuVision platform on defect detection and for our MatrixVision platform on scene inference increased from 215 types and 277 types by the end of June 2021 to 282 types and 352 types by the end of September 2021, respectively. We expect that the algorithm models developed for both AI platforms would continue to grow, contributing to the enriching and expansion of our AI-based products and solutions. We believe the headroom for growth is significant given that (i) we expect strong growth of China’s enterprise AI market and China’s AI solution market in manufacturing industry; (ii) we are still expanding our offerings for more industry verticals and rolling out more AI-based products and solutions to cater to customers’ pain points in



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different business scenarios across industry verticals; and (iii) awareness of the value of our offerings among our existing and potential customers continues to grow as AI solutions have become increasingly popularized due to quality consistency, management efficiency, cost-efficiency and other benefits through using AI solutions, according to Frost & Sullivan. Taking into account the reasons above, we believe that we are well-positioned to continuously grow our AI-based products and solutions business and increase our revenue.

### **Our ability to further improve our results of operations**

Our gross profit experienced significant growth from 2018 to 2020 as well as from the nine months ended September 30, 2020 to the nine months ended September 30, 2021. In 2018, 2019, 2020 and the nine months ended September 30, 2021, our gross profit amounted to RMB23.4 million, RMB71.6 million, RMB134.6 million and RMB170.9 million, respectively, corresponding to gross profit margin of 62.9%, 31.3%, 29.1%, and 30.9%, respectively. The decrease of our gross profit margin was primarily because (i) our AI-based products and solutions sold in 2018 were mostly software-based solutions, whilst our AI-based products and solutions sold since 2019 were primarily software and hardware integrated solutions involving more hardware components according to customers’ requirements, which generally entailed comparatively lower gross margins than our software-based solutions, and (ii) we offered competitive pricing in 2019 to expand our customer base in manufacturing and financial services industries. Our gross profit and gross profit margin continued to improve after the Track Record Period. Our gross profit increased from RMB85.3 million in the nine months ended September 30, 2020 to RMB170.9 million in the nine months ended September 30, 2021, with a year-on-year growth rate of 100.4%. Our gross profit margin remained relatively stable at 28.6% in the nine months ended September 30, 2020 and 30.9% in the nine months ended September 30, 2021.

We expect our overall gross margin to improve steadily in the near term, primarily due to the following factors: (i) we expect to enhance bargaining power against our suppliers alongside our business growth. We believe we can negotiate with suppliers for more favorable pricing terms when we continue to scale and make bulk purchase of materials for our AI-based products and solutions. Our cost of sales as a percentage of our total revenue decreased from 70.9% in 2020 to 69.1% in the nine months ended September 30, 2021. (ii) our long-term strategy to diversify our product mix to include more software-based solutions which entail comparatively higher gross profit margin; (iii) we expect to expand our customer base to include small to medium-sized customers in the industry verticals such that we enjoy better pricing negotiation position; and (iv) economies of scale resulting from product standardization and improved delivery efficiency.

Furthermore, we intend to optimize our operating expenses by achieving increasing economies of scale and cost-efficiency as our business continues to grow. We believe that our operating expenses could decrease as a percentage to our total revenue in the near term with the following bases: (i) with respect to our selling and distribution expenses, we expect to continue to benefit increasingly from the network effect of our extensive customer base, the strong word-of-mouth referrals that it generates, as well as leveraging our effective go-to-market strategy and our resource of joint venture partners to penetrate into market; and (ii) with respect to general and administrative expenses and R&D expenses, we expect to enhance our level of centralized management, streamlining our internal workflows, and implementation of the robust measures to manage our operating expenses as detailed below.



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During the Track Record Period, we were able to achieve enhanced operating leverage:

- Our selling and distribution expenses as a percentage of our revenue declined from 55.6% in 2018 to 33.2% in 2019, and further declined to 13.1% in 2020. In the nine months ended September 30, 2021, our selling and distribution expense accounted for 16.5% of our revenue during the same period. We expect selling and distribution expenses to grow alongside our business growth due to the expected increase in the employee compensation expenses and share-based payment expenses. However, we expect it, as a percentage of our total revenue, to continue to decline as a result of our improved operating efficiency.
- Our general and administrative expenses as a percentage of our revenue declined from 133.6% in 2018 to 55.4% in 2019, and further declined to 42.2% in 2020. In the nine months ended September 30, 2021, our general and administrative expense accounted for 56.3% of our revenue during the same period. We expect general and administrative expenses to gradually decrease alongside our business growth due to the expected decrease in the employee compensation expenses and share-based payments expenses. Furthermore, we expect it, as a percentage of our total revenue, to continue to decline as a result of our improved operating efficiency.

We plan to effectively control our general and administrative expenses through (i) prudently monitoring the growth and the necessity of new administrative staff; (ii) closely monitoring our cost structure and effectively managing administrative expense and streamlining organizational structure to enhance the operational efficiency of administrative management; and (iii) improving information systems to enhance our operational efficiency.

- Our R&D expenses as a percentage of our revenue declined from 77.1% in 2018 to 49.4% in 2019 and further to 39.3% in 2020. In the nine months ended September 30, 2021, our R&D expense accounted for 31.9% of our revenue during the same period. We expect R&D expenses to grow alongside our business growth driven by our continual investment in R&D activities on AI technologies to roll out more AI-based products and solutions to cater to customers’ pain points in different business scenarios across industry verticals. However, we expect it, as a percentage of our total revenue, to continue to decline as a result of our improved operating efficiency.

We plan to effectively control our R&D expenses through (i) effectively managing R&D cost to enhance the cost-efficiency of our R&D activities by establishing annual R&D project planning, which stipulates relevant budgets; (ii) outsourcing non-critical aspects of our R&D activities, such as data labeling and technical service, to third-party service providers at lower cost; and (iii) continuously optimizing the structure of our R&D team by adjusting the composition of various specialist engineers.

Going forward, we expect to continuously evaluate and monitor the efficacy and efficiency of our R&D expenses in a sustainable manner. We expect to effectively commercialize our R&D outcomes to bring more customers and revenue to us and enhance our operating leverage. Despite our expected significant investments in R&D, we believe the sustainable revenue growth attributable to the increasingly diverse products and services and the expanding customer base would dilute and eventually offset increases in the operating expenses.

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We expect the absolute amounts of our selling and distribution expenses and R&D expenses will continue to increase along our business growth in the future. However, as we expand the scale and scope of our business and AI-based product and service offerings, we expect to benefit from various economies of scale to improve our operational efficiency such that the aggregate amount of our operating expenses as a percentage of our revenue are expected to decline in the near future. Despite the increase in the operating expenses during the Track Record Period, we believe the sustainable revenue growth from our product and service offerings would dilute and eventually offset increases in the operating expenses, leading to profitability. In particular, we believe our operating expenses are measurable and controllable and are spent in accordance to our strategies for long term success. Going forward, we expect to continuously evaluate and monitor the efficacy and efficiency of our operating expenses in a sustainable manner.

### **Solid track record in asset position and continue to improve cash flow position**

We had net current assets as of December 31, 2018, 2019, 2020 and September 30, 2021. As of December 31, 2018, 2019, 2020 and September 30, 2021, our net current assets were RMB80.0 million, RMB662.4 million, RMB1,129.7 million and RMB1,833.3 million, respectively, primarily due to the growth of cash and cash equivalents, financial assets at fair value through profit or loss, and trade receivables, driven by our business expansion. See “Financial Information—Discussion of Key Items Form of Consolidated Statements of Financial Position” for more details. We expect to maintain our net current assets position in the near term in light of our balance of cash and cash equivalents, financial assets at fair value through profit or loss, as well as operating cash inflow. In 2018, 2019, 2020 and the nine months ended September 30, 2021, we had net operating cash outflow of RMB2.9 million, RMB189.0 million, RMB174.2 million and RMB174.4 million, respectively. See “Financial Information—Liquidity and Capital Resources” for more details. We expect to optimize our net operating cash outflows position by taking advantage of (i) increasing revenue growth of our AI-based products and solutions offerings in manufacturing and financial services industries; (ii) increasing revenue per customer leveraging our effective go-to-market strategy; and (iii) improving operating efficiency leveraging our economies of scale as we expect our selling and marketing expenses, R&D expenses and general and administrative expenses would not increase proportionately to the growth of our total revenue, which will further improve our net operating cash outflows position.

## COMPETITION

The AI solutions industry in which we operate is highly competitive. We primarily compete with other companies that focus on developing and commercializing AI products and solutions for enterprises. With respect to each industry vertical that we have entered into, we also compete against existing traditional solution providers which are not AI-driven in such vertical. We may also in the future face competition from new entrants that will increase the level of competition. For example, more established technology companies that possess substantial financial resources, sophisticated technological capabilities and broad sales channels may develop solutions that directly compete with ours. See “Industry Overview” for more details of the competitive landscape of the industry in which we operate.

For risks relating to our competitiveness in the industry, see “Risk Factors—Risks Related to Our Business and Industry—The AI solution industries in which we operate are highly competitive, and we face competition in several major aspects of our business. If we fail to compete successfully

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against our current or future competitors, our business, financial condition and results of operations may be materially and adversely affected.”

### INTELLECTUAL PROPERTY

Intellectual property is the foundation of our business, and we have invested significant time and resources in developing and protecting it. We rely on a combination of patent, trademark, copyright, domain name, trade secret and other proprietary rights protection laws, as well as confidentiality procedures and contractual provisions, in China and other jurisdictions to protect our intellectual property.

As of the Latest Practicable Date, we had 125 patents registered with the State Intellectual Property Office of the PRC and 457 pending patent applications. We had 273 trademarks registered with the China Trademark Office and seven registered trademarks in other jurisdictions. In addition, we have 86 pending trademark applications in China and four pending trademark applications in other jurisdictions. We also had 138 software copyrights and owned 30 registered domain names.

For details of our material intellectual property rights, see “Appendix VII—Statutory and General Information—B. Further Information about Our Business—2. Intellectual Property Rights”.

We have implemented a set of comprehensive measures to protect our intellectual property, in addition to making trademark and patent registration applications. Leveraging our technical committee and branding team, we employ designated staff to oversee and manage our intellectual properties. Our employees are generally required to enter into a standard employment contract that includes a clause acknowledging that all inventions, trade secrets, developments and other processes generated by them during their employment with us are our properties, and assigning to us any ownership rights that they may claim in those works. During the Track record Period and up to the Latest Practicable Date, we did not have any material disputes or any other pending legal proceedings of intellectual property rights with third parties.

### EMPLOYEES

As of September 30, 2021, we had 369 employees. The following table sets forth a breakdown of our employees by function as of September 30, 2021:

<u>Function</u>	<u>Number of Employees</u>	<u>Percentage (%)</u>
Senior management .....	5	1.4
Project implementation and customer success .....	46	12.5
Technology platform and product R&D .....	195	52.8
Sales and marketing .....	76	20.6
General and administrative .....	47	12.7
<b>Total</b> .....	<b>369</b>	<b>100%</b>

Our success depends on our ability to attract, retain and motivate qualified personnel, and we believe that our high quality talent pool is one of the core strengths of our company. We adopt high standards and strict procedures in our recruitment to ensure the quality of new hiring and use various methods for our recruitment, including campus recruitment, online recruitment, internal recommendation and recruiting through hunting firms or agents, to satisfy our demands for different types of talents.

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As required by PRC laws and regulations, we participate in various employee social security schemes organized by municipal and provincial governments, including pension, unemployment insurance, maternity insurance, work-related injury insurance, medical insurance and housing provident funds. We are required under PRC laws and regulations to make contributions to employee social security schemes at specified percentages of the salaries, bonuses and certain allowances of our employees, up to a maximum amount specified by the local government from time to time. We enter into standard contracts and agreements regarding confidentiality, intellectual property, employment, commercial ethics and non-competition with our employees.

We enter into confidentiality and non-competition agreements with our employees. Such agreements typically include a non-competition provision effective during our employees’ employment with us and up to two years after termination, and a confidentiality provision that remains in effect until the protected information becomes public knowledge. We have the right to take legal action against any violations of the agreement. As of the Latest Practicable Date, we were not aware of incidents of breaches of these provisions.

None of our employees are currently represented by labor unions. 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.

## **INSURANCE**

We consider our insurance coverage to be adequate as we have in place all the mandatory insurance policies required by PRC laws and regulations and in accordance with the commercial practices in our industry. Our employee-related insurance consists of pension insurance, maternity insurance, unemployment insurance, work-related injury insurance, 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 keyman 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. See “Risk Factors—Risks Relating to Our Business and Industry—We may not have sufficient insurance coverage to cover our potential liability or losses and, as a result, our business, financial conditions, results of operations and prospects may be materially and adversely affected should any such liability or losses arise.”

## **ENVIRONMENT, SOCIETY AND GOVERNANCE**

We are committed to social responsibility and believe that Environmental, Social and Governance (“ESG”) is essential to our sustainable development. We aim to create and enhance a positive impact on our employees, customers and business partners and to improve our environmental responsibility and public responsibility.

Under the oversight of our management, we actively identify and monitor the actual and potential impact of environmental, social and climate-related risks on our business, strategy and financial performance, and incorporate the considerations for these issues into our business, strategic and financial planning. Our management will assess the likelihood of such risks occurring and the estimated magnitude of any potential impact. Since our business operations do not involve the

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manufacturing of products, we do not currently have any material liabilities relating to health, work safety and environment, and do not expect that we will incur any material liabilities in this regard which could have any material adverse impact on our business and operating results. We have identified potential risks from climate change and other environmental issues that may have potential financial implications for us. For example, if we suffer from extreme weather conditions, our facilities may encounter disruptions and our operations may be directly impacted. Extreme weather may also cause disruptions for our suppliers, which may in turn adversely impact our ability to provide on-premise deployment, on-site meetings or technical support to our customers and end-users. During the Track Record Period, our business, results of operation and financial condition had not been materially adversely impacted by any climate-related incident.

We incorporate ESG-related considerations into our product development process and business decisions. Our AI + Manufacturing solutions help customers in the manufacturing industry optimize their business or production process, reduce costs and improve operational efficiency. For example, our intelligent wind power operation and maintenance application helps our customers to improve the reliability and stability of wind power generation process, and our intelligent transportation system substantially eliminates the safety risks in the transportation of molten iron while improving overall locomotive efficiency. In addition, we provide financial institutions with AI-based products and solutions that lower optimizes the utilization of resources, including computing resources and consumer data. For instance, our solution in intelligent hybrid cloud management realizes intelligent allocation, scheduling and maintenance of computing power, especially GPUs, and storage resources, substantially improving the energy efficiency for our customers.

Our management is regularly evaluating and managing business risks and opportunities. We aim to implement sustainable and economically friendly practices in our own operations, such as building energy-saving IT infrastructure, and developing AI models to assess the energy consumption and to assist in lower carbon emission. We also intend to develop AI-based products and services aiming to help improve energy efficiency across various industry verticals.

We have implemented a number of environment-friendly internal policies to reduce the carbon emission arising from our business operations. For example, we encourage low-carbon and environmentally friendly travel. We have protocol to patrol all areas of the office throughout the day and turn off unnecessary air conditioning and power equipment in a timely manner to reduce waste of resources. We actively promote a paperless office. For documents that must be printed, we encourage double-sided printing. We also actively separate and recycle trash to reduce household and work waste. To ensure compliance with applicable laws and regulations, our human resources department would, if necessary, adjust our human resources policies from time to time to accommodate material changes to relevant labor and work safety laws and regulations.

During the Track Record Period and up to the Latest Practicable Date, we have not been subject to any fines or other penalties due to non-compliance in relation to health, work safety or environmental regulations and have not had any accident, or claim for personal or property damage made by our employees which had materially and adversely affected our financial condition or business operations. During the Track Record Period and up to the Latest Practicable Date, we had complied with the applicable PRC laws, regulations and rules relating to resources consumption and environmental protection in all material respects.

We are committed to social responsibilities. After the outbreak of COVID-19, we quickly took actions to help fight the pandemic. We organized donations within our Company, and donated a total



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amount of RMB0.6 million, among which RMB0.5 million was used to establish a dedicated fund with the Waterdrop Foundation (水滴匯聚基金會) in support of the efforts against the pandemic in regions most impacted by the COVID-19 crisis, and RMB0.1 million was used for the purchase of masks and other medical equipment to assist the infected areas.

We focus on areas where we can utilize our existing capabilities to empower our industry and society at large. For example, in support of the efforts against COVID-19 in China, we have used our expertise to help with the relief effort nationwide. For example, we made donations of our proprietary mobile temperature measuring nucleic acid sampling room to the disease control and prevention centers in cities such as Jiaxing, Qingdao and Guangzhou and Shanghai, which vastly enhanced the safety and efficiency of nucleic acid test processes and services in local communities and hospitals.

## PROPERTIES

As of the Latest Practicable Date, we did not have any self-owned property in China, and leased 14 properties with an aggregate gross floor area of 24,344.22 square meters for commercial use.

Pursuant to the applicable PRC laws and regulations, property lease contracts must be registered with the local branch of the Ministry of Housing and Urban Development of the PRC. As of the Latest Practicable Date, we had not yet completed the registration of 10 property lease contract we entered into in the PRC. As advised by our PRC Legal Advisor, failure to complete the lease registration will not affect the validity of the lease agreements according to PRC law, but we may have a maximum penalty of RMB10,000 imposed on us for each non-registered lease if we fail to complete the registration of any of our future lease agreements after we are requested to do so by the competent PRC government authorities. As of the Latest Practicable Date, we have not been ordered to make corrections by the competent local counterpart of Ministry of Housing and Urban Development.

As of the Latest Practicable Date, the actual usage of two leased properties was inconsistent with the usage set out in such title certificates or relevant authorization documents. With respect to these properties, our PRC Legal Advisor is of the view that we may not be able to lease, occupy and use such leased properties if the lease was challenged by any interested party or if the lessor was penalized by the competent government authority.

In addition, as of the Latest Practicable Date, lessors of three of our leased properties had not provided us with valid title certificates, relevant authorization documents or permissions evidencing their rights to lease the properties to us. As a result, these leases may not be valid, and there are risks that we may not be able to continue to use such properties.

According to the ownership certificates provided by the owner, one of our leased properties is located on allocated land and the use of such leased property is not consistent with the designated use of land stated on the ownership certificate. As of the Latest Practicable Date, our operation on the allocated land had not been disrupted nor were we forced to relocate our operations.

The following table sets forth the details of our leased properties with legal defects as of the Latest Practicable Date:

Number	Location	Current Usage	Expiry Date	Legal Defect
1. .	Qingdao, Shandong	Office	July 31, 2026	Unregistered lease contract
2. .	Shenzhen, Guangdong	Office	June 7, 2022	Valid property ownership certificate not provided



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Number	Location	Current Usage	Expiry Date	Legal Defect
3.	Guangzhou, Guangdong	Equipment installation and testing	June 30, 2023	Valid property ownership certificate not provided
4.	Jiaxing, Zhejiang	R&D and office	April 30, 2022	Unregistered lease contract
5.	Chengdu, Sichuan	R&D and office	February 27, 2023	Unregistered lease contract; inconsistent usage with the designated use of the allocated land
6.	Shanghai	Office	March 31, 2022	Unregistered lease contract
7.	Nanjing, Jiangsu	R&D and office	July 31, 2023	Unregistered lease contract; valid property ownership certificate not provided
8.	Chongqing	R&D and office	Non-fixed term	Unregistered lease contract; inconsistent usage with title certificates
9.	Hefei, Anhui	R&D and office	December 31, 2022	Unregistered lease contract; inconsistent usage with title certificates
10.	Beijing	Company registration	July 23, 2022	Unregistered lease contract
11.	Beijing	Office	January 31, 2022	Unregistered lease contract
12.	Beijing	Office	January 31, 2022	Unregistered lease contract

As of the Latest Practicable Date, we intended to renew lease agreements subject to subsequent negotiation with the relevant landlords. Our Directors confirmed that the abovementioned title defects would not materially and adversely affect our business operations. Pursuant to the relevant lease agreements with the local governments, our subsidiaries in Chengdu, Hefei and Chongqing received operation site support and rental subsidies, which cover the potential loss of rent as a result of potential relocation. As such, we expect any loss that we may incur due to the leased properties with inconsistent usage to be minimal. For any of our leased buildings with any of the aforementioned legal defects, if we have to terminate the leases or relocate from such leased properties with title defects, we are able to relocate to qualified alternative premises within a short period of time under comparable terms without incurring substantial additional costs.

As advised by the PRC Legal Advisor, considering that during the Track Record Period and up to the Latest Practicable Date, (i) the Group has not been asked by any lessor, third party or governmental agency to vacate the relevant leased properties, (ii) the Group has not received any administrative penalty relating to the leased properties, and (iii) the Group has not violated any terms of the relevant lease contracts, the likelihood that the Group will be asked to vacate the relevant leased properties is relatively low.

As of December 31, 2020, none of the properties leased by us had a carrying amount of 15% or more of our consolidated total assets. According to Chapter 5 of the Hong Kong Listing Rules and section 6(2) of the Companies Ordinance (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice, this document is exempt from the requirements of section 342(1)(b) of the Companies (Winding up and Miscellaneous Provisions) Ordinance to include all interests in land or buildings in a valuation report.

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### **LEGAL PROCEEDINGS AND COMPLIANCE**

#### **Legal Proceedings**

As of the Latest Practicable Date, we were not a party to, and we were not aware of any threat of, any legal, arbitral or administrative proceedings, which, individually or in the aggregate, in our opinion, is likely to have a material and adverse effect on our business, financial condition or results of operations. We may from time to time become a party to various legal, arbitral or administrative proceedings arising in the ordinary course of our business. Regardless of the outcome, such proceedings can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

#### **Compliance**

During the Track Record Period and up to the Latest Practicable Date, we had complied with the applicable laws and regulations in relation to our business in all material respects.

### **THE U.S. EXPORT CONTROL LAWS AND REGULATIONS**

We had transactions with certain companies on the Entity List (Supplement No. 4 to 15 CFR Part 744) since 2019. In order to comply with the EAR, 15 CFR parts 730-770, we conducted a review of the items we purchased from and services we provided to these companies after the Entity List restrictions went into effect.

#### **Procurement**

In 2019, 2020 and the nine months ended September 30, 2021, our procurement from the companies on the Entity List primarily included cameras, webcams and smart vending machines. In such periods, the actual transaction amount in relation to our procurement from such companies amounted to RMB1.0 million, RMB0.4 million and RMB0.5 million, respectively.

Under Section 744.16(a) of the EAR (15 CFR §744.16(a)), a license from the Bureau of Industry and Security of the US Department of Commerce (“**BIS License**”) would be required for any transactions involving the export, reexport, 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. Our transactions with the relevant suppliers did not involve any export, reexport, or in-country transfer of any items where each of the relevant company is a purchaser, intermediate consignee, ultimate consignee, or end-user. In addition, we contacted the relevant suppliers to confirm whether such items are in fact subject to the EAR. As of the Latest Practicable Date, there were three suppliers that are on the Entity List, and, all of such suppliers have confirmed that the relevant items are not subject to the EAR and such items were not involved in any actual or suspected violation of the EAR.

Our legal advisor is of the view that the items and scope of services 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, given that (1) such suppliers did not act as a purchaser, end-user, intermediate consignee, or ultimate consignee of such items and accordingly did not trigger the relevant Entity List restrictions under the EAR, and (2) our suppliers on the Entity List have confirmed that such items were not subject to the EAR, and accordingly were not subject to the applicable EAR restrictions in the first instance.

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### Provision of Service

In 2020, we entered into a contract with a company on the Entity List, which included provision of software compatibility testing service to such entity. The transaction was one-off and non-recurring in nature. The actual transaction amount in relation to the provision of such service amounted to RMB350,000. As the scope of the relevant contract did not involve any export, reexport, or in-country transfer of any items where any entity on the Entity List is a purchaser, intermediate consignee, ultimate consignee, or end-user, a BIS license would not have been required for such transactions. In addition, our provision of such service did not constitute any violation of the EAR.

Our legal advisor is of the view that the scope of services we provided to our customer 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, as the relevant provision of service did not require a BIS license and were not subject to the applicable EAR restrictions in the first instance.

As such, we believe that (i) the items or scope of services involved in the transaction between the Group and its customer who are listed on the Entity List are not subject to the EAR; and (ii) we did not violate the imposed restrictions under the EAR with respect to the transactions with the relevant suppliers on the Entity List during the Track Record Period and up to the Latest Practicable Date.

Recently, the U.S. Department of the Treasury has designated a number of Chinese companies as Chinese Military-Industrial Complex companies (“**CMIC**”) on the Non-SDN Chinese Military-Industrial Complex Companies List (“**NS-CMIC List**”) under Executive Order 13959, as amended by Executive Order 14032 (the “**Executive Order**”). The Executive Order prohibits United States persons, as defined in Section 4(d) of the Executive Order, beginning on the effective date of the relevant CMIC from “the purchase or sale of any publicly traded securities, or any publicly traded securities that are derivative of such securities or are designed to provide investment exposure to such securities, of any person listed” as a CMIC, unless licensed or authorized by the relevant US government authority. Our Directors are of the view that the NS-CMIC List has not had any material adverse impact on our business operations and financial performance because, as advised by our legal advisor, (i) the aforesaid restrictions only apply to the specific entity identified on the NS-CMIC List, and not to any entities that are not specifically listed; and (ii) the NS-CMIC List does not impose any restrictions on the business operations of the identified entity. As of the Latest Practicable Date, our Company has not been designated as a CMIC on the NS-CMIC List.

### LICENSES, APPROVALS AND PERMITS

Our Directors, as advised by our PRC Legal Advisor, confirm that, as of the Latest Practicable Date, we had complied with all relevant PRC laws and regulations in all material respects and have obtained all material licenses, approvals and permits from relevant regulatory authorities for our operations in China. Such business licenses had remained in full effect.

### RISK MANAGEMENT AND INTERNAL CONTROL

We have devoted ourselves to establishing and maintaining risk management and internal control systems consisting of policies and procedures that we consider to be appropriate for our business operations, and we are dedicated to continuously improving these systems. Furthermore, we continually review the implementation of our risk management policies and measures to ensure that our policies and implementation are effective and sufficient. We have adopted and implemented comprehensive risk management policies in various aspects of our business operations such as financial reporting, information system, compliance and intellectual property and human resources.

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### **Financial Reporting Risk Management**

We have adopted comprehensive accounting policies in connection with our financial reporting risk management, such as financial management, budget management and financial statement preparation. We also have procedures in place to carry out such accounting policies, and our finance department reviews our management accounts in accordance with such procedures. In addition, we provide ongoing training to our finance staff to ensure that these policies are well-observed and effectively implemented. As of the Latest Practicable Date, our finance department consisted of 16 employees headed by Mr. John Cao.

### **Information System Risk Management**

Sufficient maintenance, storage and protection of end-user data is critical to our success. We have implemented relevant internal procedures and controls to ensure the security of our IT infrastructure, that our data is protected and that leakage and loss of such data is avoided. During the Track Record Period and up to the Latest Practicable Date, we did not experience any material system failure in our IT infrastructure, or any material leakage or loss of end-user data.

We have established an information system security management framework, including relevant internal control and risk management mechanisms to manage network security, data security, anti-virus measures, approval procedure for system changes. Our data is stored in a centralized data center, back-up such data on a weekly basis in separate and various secured data back-up systems to minimize the risk of data loss or leakage. We have also established clear standards and requirements for data backup and archive to reduce the risk of data loss and conduct backup recovery tests regularly to examine the status of the backup. In addition, we implemented an asset of procedures such as regular system check, password policy, access control system, as well as data recovery test, to safeguard our information assets and ensure the proper management of our operational data.

We provide information security training to our employees from time to time. We also have an emergency response mechanism to evaluate critical risks, formulate disaster response plans and perform emergency drills on a regular basis. Our IT operation and maintenance department is responsible for maintaining our IT systems and infrastructure to ensure that the usage, storage and protection of user data are in compliance with our internal rules and the applicable laws and regulations.

### **Compliance and Intellectual Property Risk Management**

We have designed and adopted strict internal procedures to ensure the compliance of our business operations with the relevant rules and regulations, as well as the protection of our intellectual property rights. In accordance with these procedures, our in-house legal department performs the basic function of reviewing and updating the form of contracts we enter into with our customers and suppliers. Our legal department examines the contract terms and reviews all relevant documents for our business operations, including licenses and permits obtained by the counterparties or us to perform contractual obligations and all the necessary underlying due diligence materials, before we enter into any contract or business arrangements. There was no material and systemic non-compliance during the Track Record Period and as of the Latest Practicable Date.

We have in place detailed internal procedures to review our products and services, including upgrades to existing products, for regulatory compliance before they are made available to the general

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public. Our COE is responsible for obtaining any requisite governmental pre-approvals or consent, including preparing and submitting all necessary documents for filing with relevant government authorities within the prescribed regulatory timelines and ensuring all necessary application, renewals or filings for trademark, copyright and patent registration have been timely made to the competent authorities.

### Human Resources Risk Management

We have established internal control and risk management policies covering various aspects of human resource management such as recruitment, training, work ethics and legal compliance. We maintain high standards in recruitment with strict procedures to ensure the quality of new hires and provide specialized training tailored to the needs of our employees in different departments. We also conduct periodic performance reviews for our employees, and their remuneration is performance-based. We monitor the implementation of internal risk management policies on a regular basis to identify, manage and mitigate internal risks in relation to the potential incompliance with our code of conduct, work ethics, and violations of our internal policies or illegal acts at all levels of our Group.

### Anti-bribery and Anti-corruption Management

We have in place an anti-fraud policy to safeguard against any bribery, corruption and fraud within our Company. The policy explains potential bribery and corruption conduct and our anti-bribery and corruption measures. The Board has accordingly appointed an anti-fraud committee to administer the policy. We make our internal reporting channel open and available for our staff to report any bribery and corruption acts, which may be anonymous. Any reported incidents and personnel will be investigated and appropriate measures will be taken.

### Corporate Governance Measures

We are dedicated to the establishment and maintenance of a robust internal control system. We have established an Audit Committee on our Board, the primary duties of which are to assist our Board by providing an independent view of the effectiveness of the financial reporting process, internal control and risk management of our Group, overseeing the internal audit process and performing other duties and responsibilities as assigned by our Board. The Audit Committee consists of Mr. Xie Deren, Ms. Ko Wing Yan Samantha and Mr. Wang Hua.

In preparation for the [REDACTED], the Group has engaged an independent third party consultant (the “**Internal Control Consultant**”) to perform a review over selected areas of our internal controls over financial reporting in March 2021 (the “**Internal Control Review**”). The scope of the Internal Control Review performed by the Internal Control Consultant was agreed between the Company, the Joint Sponsors and the Internal Control Consultant, and no assurance or opinion on internal controls was expressed by the Internal Control Consultant. The selected areas of the Company’s internal controls over financial reporting that were reviewed by the Internal Control Consultant included entity level controls and business process level controls, including revenue and receivables, purchases and payables, inventory, cost, payroll, fixed assets, treasury, insurance, financial reporting, tax and general controls of information technology. The Internal Control Consultant performed the follow up reviews in June 2021 to review the status of the management actions taken by the Group to address the findings of the Internal Control Review (the “**Follow up Review**”). The Internal Control Consultant did not have any further recommendation in the Follow up Review.

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We also maintain an internal control and audit department which is responsible for reviewing the effectiveness of internal controls and reporting issues identified, improving our internal control system and procedures by effectively identifying internal control failures and weaknesses through regular interviews with the head of each department and responsible line managers, giving advice on overall risk assessment strategies and risk management solutions for our major projects, and reviewing the key indicators, such as our revenue, on an ongoing basis and report to sales and finance departments to ensure that any major issues identified are channeled on a timely basis.

We would adopt corporate governance measures to manage potential conflict of interests between our Group and the Single Largest Shareholders Group and its close associates upon [REDACTED]. See “Relationship with Our Single Largest Shareholders Group - Corporate Governance Measures.”

### AWARDS AND RECOGNITIONS

Some of the most prestigious international AI challenges our team has won during the Track Record Period and as of the Latest Practicable Date are set forth below:

- Multiple Object Tracking (MOT) Challenge 2020 for the multiple object detection task under MOT17Det dataset;
- PASCAL Visual Object Classes 2019, the world’s authoritative public evaluation datasets for object detection;
- Cityscapes 2019, the world’s authoritative public evaluation datasets for instance segmentation;
- MIT Scene Parsing Benchmark 2020, the world’s most authoritative and representative scene parsing evaluation sets; and
- GOT-10K 2020, the world’s authoritative evaluation datasets for generic object tracking.

In addition, we were also given some of the most prestigious recognitions in the industry during the Track Record Period and as of the Latest Practicable Date, including:

- Gartner 2021 Cool Vendor in AI for Computer Vision;
- Gartner 2021 Example Vendor for Global Machine Vision;
- Machine learning platform developer with the 4th largest market share in China 2020 and the first half of 2021 (IDC);
- Computer vision application solution and product provider with the 5th largest market share in China in the first half of 2021 (IDC);
- AI-powered industry quality control solution and product provider with the second largest market share in China 2019 (IDC);
- Forrester Midsize Machine Learning Enterprise in China 2020;
- MIT Technology Review 50 Smartest Companies 2020;
- FT Most Innovative Companies in China 2020;
- CB Insights AI 100 2020, a list of the 100 most promising AI startups across the globe;
- Harvard Business Review Ram Charan Management Practice Awards 2019; and
- Fast Company 50 Most Innovative Companies in China 2020.