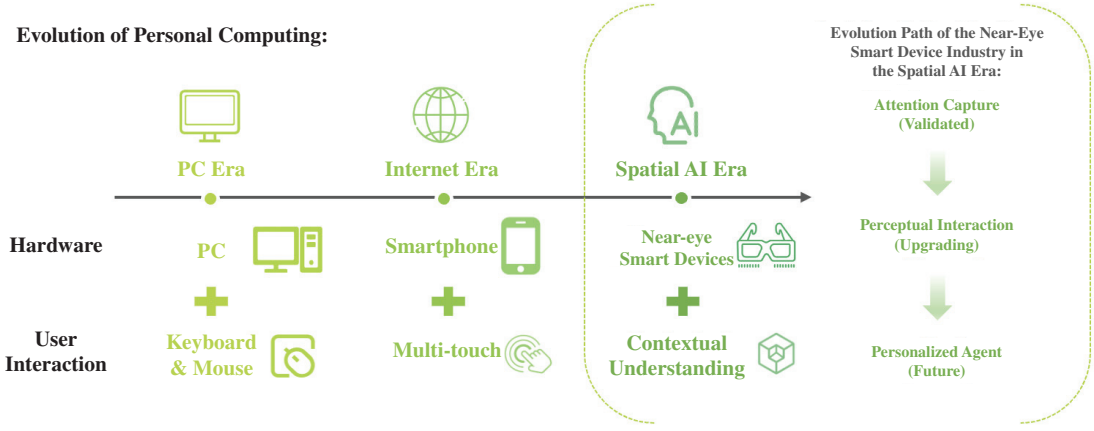
The information and statistics set out in this section and other sections of this Document were extracted from the report prepared by iResearch, which was commissioned by us, and from various official government publications and other publicly available publications. We engaged iResearch to prepare the iResearch report, an independent industry report, in connection with the [**REDACTED**]. *The information from official government sources has not been independently verified by us, the Joint Sponsors, the Overall Coordinators,* [**REDACTED**] *or any of our or their respective directors, senior management, representatives or any other person involved in the* [**REDACTED**] *and no representation is given as to its accuracy. The relevant information and statistics may not be consistent with such other information and statistics compiled within or outside China.*

OVERVIEW

Background: Evolution of Personal Computing Platform

Over the past three decades, personal computing platform has evolved through three pivotal eras: the Personal Computer (PC) era characterized by graphical user interface (GUI) and keyboard-mouse interaction, the Mobile Internet era driven by multi-touch and app ecosystems, and the current Spatial AI era built on multimodal understanding and AI-enabled collaboration. Each computing platform iteration reshapes interaction paradigms, new hardware forms and ecosystems.

In earlier computing eras, including PC era and Internet era, users primarily interacted with digital systems by actively issuing commands through screens, apps and input devices. By contrast, the next stage of computing is increasingly shifting from attention capture to perceptual interaction, in which devices are expected to perceive environmental, visual and voice inputs in real time and support more collaborative and contextual execution. As AI capabilities continue to advance, human-computer interaction is expected to move beyond single-point command input toward more continuous, multimodal and adaptive forms of interaction.

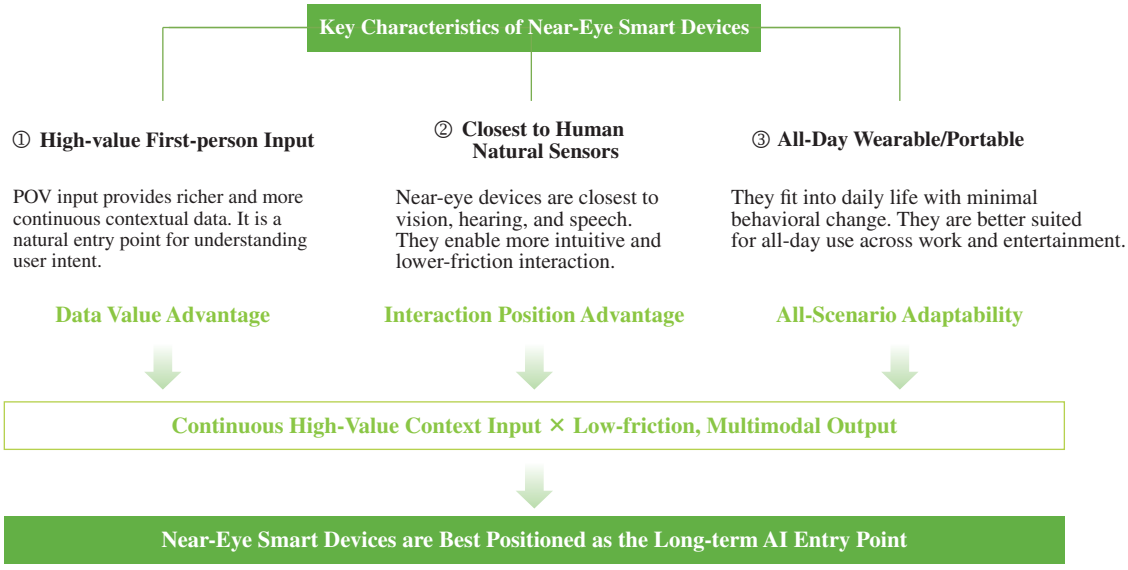


Source: iResearch

Against this backdrop, near-eye smart devices are emerging as an increasingly important hardware form factor in the next computing platform transition. Positioned close to users' natural FoV, such devices are well suited to support hands-free interaction, continuous contextual input and low-friction access to digital information. As the industry evolves from screen-based interaction toward more seamless integration between digital systems and the physical world, near-eye smart devices are expected to serve as a key interface in enabling more natural and context-aware computing experiences.

Near-Eye Smart Devices Are Emerging as a Key Interaction Platform in Spatial AI Era

Near-Eye smart devices leverage a first-person POV form factor to support continuous multimodal perception, hands-free operation and spatial understanding, positioning them as a key hardware entry point for integrating AI into everyday life. By capturing first-person data and providing continuous contextual input, they support more context-aware AI experiences. At the same time, by aligning naturally with core human sensors—vision, hearing and speech—near-eye smart devices can facilitate low-latency multimodal interaction. Combined with their lightweight and unobtrusive design, which further reduce friction in human—machine interaction, they enable AI to provide more persistent assistance during all-day wear while continuously sensing the surrounding environment. As a result, near-eye smart devices are well positioned to support the broader adoption of AI-enabled personalized services across a wide range of use cases.



Source: iResearch

Classification of Near-Eye Smart Devices

Near-Eye smart devices can generally be classified into two major segments: Smart Eyewear and XR Headsets:

Smart eyewear refers to lightweight, eyewear-shaped near-eye devices designed for more portable and potentially all-day use. It can be further divided into AR eyewear and non-display eyewear. AR eyewear integrates digital information with the physical environment through optical see-through (OST) technologies, supported by optical solutions such as Birdbath and waveguide. By contrast, non-display eyewear does not include a visual display and primarily provides functions such as audio interaction, photography and translation.

XR headsets refer to near-eye display devices based on VR and MR technologies. These devices typically provide stronger immersion, higher display intensity and more enclosed visual experiences, and generally rely on video see-through (VST) solutions.

Classification of Near-Eye Smart Devices		Key Products Characteristics	Representive Products
Smart Eyewear	AR Eyewear	Typically weighing 70-100g, AR eyewear adopts OST technologies and supports real time AR overlay with full-color or monochrome display solutions. It can serve all-day immersive entertainment needs while also providing real-time visual prompts in daily scenarios.	 XREAL One Pro 2025  Ray-Ban Meta Display 2025
	Non-display Eyewear	Non-display smart eyewear mainly integrates audio and imaging functions, supporting features such as voice translation, navigation and photography. It is visually similar to ordinary optical glasses and suitable for all-day wear.	 Meizu MYVU 2023  Xiaomi AI Glasses 2024
XR Headsets		XR headsets mainly refer to VR/MR headsets. Typically weighing 350-600g, they adopt VST display technologies and are primarily used for immersive entertainment and industrial scenarios.	 Meta Quest 3 2023  Apple Vision Pro 2024

Source: iResearch

Market Trends of Near-Eye Smart Devices

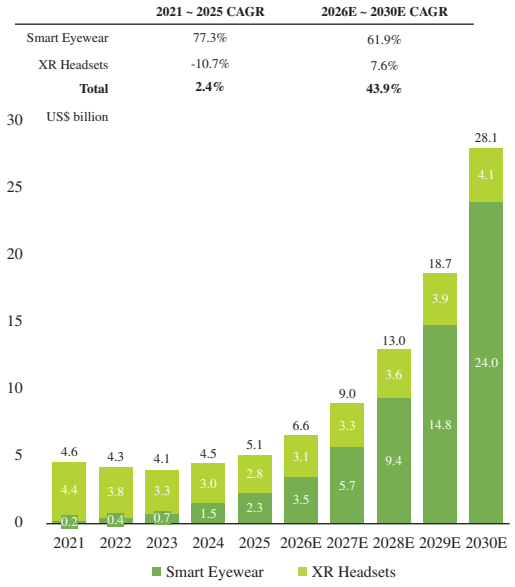
The global near-eye smart devices market is increasingly shifting toward the smart eyewear segment in terms of both sales volume and sales revenue.

From 2021 to 2025, market revenue size increased from US$4.6 billion to US$5.1 billion, representing a CAGR of 2.4%. This mild growth was underpinned by smart eyewear's explosive revenue expansion fully offsetting the XR headsets segment's contraction. The CAGR of smart eyewear sales revenue during this period was 77.3%, driven by its lightweight, user-friendly operation and smartphone-aligned mature supply chains. In contrast, the XR headsets saw a negative CAGR of -10.7%, a decline rooted in cumbersome designs, high prices, and limited consumer application scenarios.

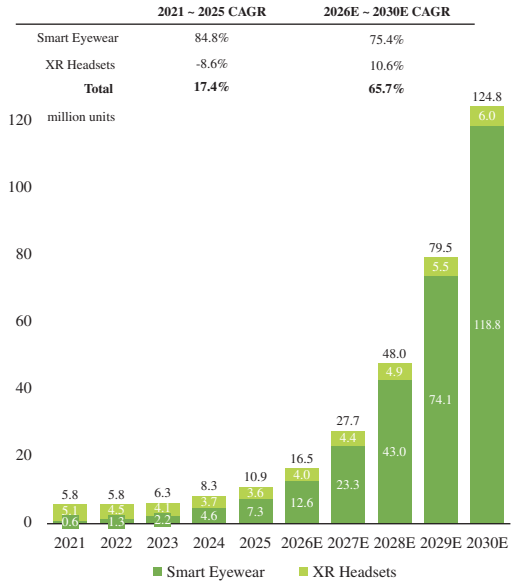
From 2026 to 2030, the market is expected to enter a higher-growth phase, driven by further product light-weighting, improved multimodal capabilities, and deeper integration of spatial computing functions into higher-frequency daily scenarios.

On the one hand, by virtue of portability and consumer-oriented adaptability, smart eyewear will maintain at a high growth rate with a CAGR of 75.4% in volume and reach 118.8 million units by 2030. While XR headsets will maintain mild sales volume growth at a CAGR of 10.6%, as the segment further penetrate immersive scenarios such as industrial simulation and professional training. Within this broader trend, part of the future growth of AR eyewear is expected to come from the migration of certain users from XR headsets toward lighter and more versatile devices better suited to daily use. At the same time, as multimodal capabilities continue to improve, AR eyewear is expected to deliver a broader range of interaction and information output than non-display smart eyewear, which may support a meaningful shift in the product mix within smart eyewear over time. While non-display eyewear currently accounts for the larger share of the market, AR eyewear is expected to increase its share significantly as hardware capabilities, optical technologies and daily use cases continue to evolve.

Global Near-eye Smart Devices Market Size by Sales Revenue, 2021 ~ 2030E



Global Near-eye Smart Devices Market Size by Sales Volume, 2021 ~ 2030E



Note: "sales volume" refers to the total number of units sold during the relevant period, excluding returned products.

Source: iResearch

SMART EYEWEAR MARKET ANALYSIS

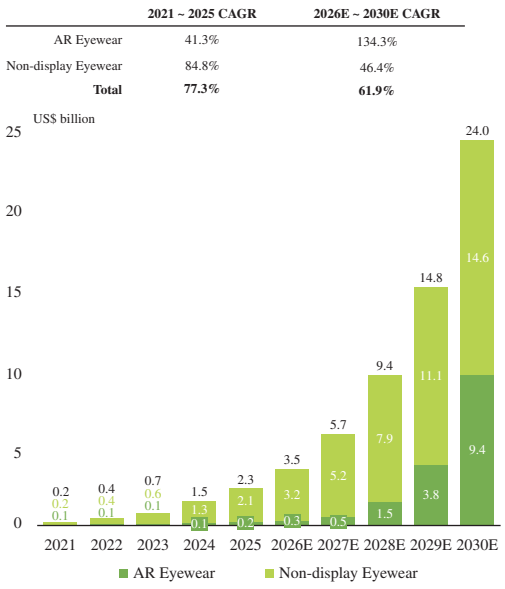
Smart Eyewear Market Size

AR eyewear segment has emerged as the fastest-growing pillar of the global smart eyewear market. From 2021 to 2025, AR eyewear recorded a CAGR of 41.3% by sales revenue and 48.9% by sales volume, despite still being in a relatively early stage of market education and commercialization. From 2026 to 2030, the segment is expected to accelerate further, with a projected CAGR of 134.3% by sales revenue and 130.9% by sales volume. This acceleration is expected to be particularly pronounced in the period from 2028 to 2030, with 2028 representing an important inflection point, supported by further improvements in core AR hardware technologies, including custom SoCs, optical solutions, display panels and manufacturing yields. As these improvements make AR eyewear lighter, more capable and better suited to all-day use, the segment is expected to become increasingly relevant to broader consumer demand for next-generation intelligent terminals. By 2030, AR eyewear is expected to reach US$9.4 billion in sales revenue and 22.2 million units in sales volume.

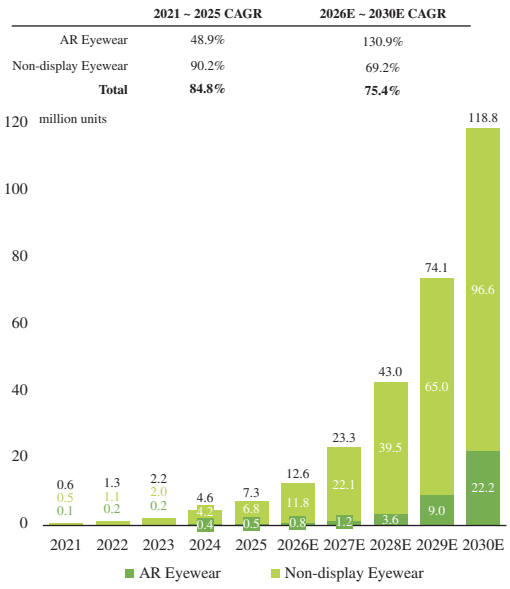
Non-display eyewear segment dominated the early-stage smart eyewear market from 2021 to 2025, recording a CAGR of 84.8% by sales revenue and 90.2% by sales volume. Its early growth was driven in part by the entry of global software and smartphone industry participants, which were able to leverage mature supply chains, established brand influence and large installed user bases to scale quickly. From 2026 to 2030, however, the segment's growth is expected to moderate, with a projected CAGR of 46.4% by sales revenue and 69.2% by sales volume. This moderation is expected to reflect both the relatively limited scope for hardware differentiation in non-display products and the increasing willingness of users to adopt products with richer visual output and broader application scenarios. By 2030, non-display eyewear is expected to reach 96.6 million units in sales volume, while revenue growth is expected to moderate as average selling prices decline.

Looking ahead, the product mix within smart eyewear is expected to continue evolving. Non-display eyewear currently accounts for the larger share of the market and is expected to remain important, particularly in lightweight and entry-level use cases. At the same time, AR eyewear is expected to increase its share significantly as optical technologies, hardware capabilities and multimodal interaction continue to improve. Part of this growth is expected to be driven by users seeking richer visual interaction and more versatile functionality than non-display eyewear can provide, as well as by certain users shifting from XR headsets toward lighter and more portable devices better suited to daily use. As a result, the smart eyewear market is expected to move gradually toward a more display-enabled product mix over time.

Global Smart Eyewear Market Size by Sales Revenue, 2021 ~ 2030E



Global Smart Eyewear Market Size by SalesVolume, 2021 ~ 2030E



Source: iResearch

AR Eyewear Market Driving Factors

The growth of the global AR eyewear industry is driven by a combination of multiple trends on both demand side and supply side.

Demand Side

- ***Increasing demand for hands-free and context-aware interaction***: As artificial intelligence becomes more deeply integrated into daily life, users are increasingly seeking devices that can provide convenient, hands-free and context-aware access to information and services without interrupting ongoing activities. AR eyewear is well suited to meet this demand by enabling users to access digital content, navigation, translation, communication and other functions while maintaining awareness of their surroundings. As a result, AR eyewear is increasingly positioned as a natural hardware form for more seamless and low-friction interaction in daily use scenarios.

- ***Broadening consumer adoption***: The AR eyewear market is moving beyond early adopters and technology enthusiasts toward a broader range of consumer groups. As products become lighter, more affordable and easier to use, AR eyewear is increasingly attracting users across different age groups and occupations. Entertainment users are drawn to immersive viewing and gaming experiences, while productivity-oriented users are adopting AR eyewear for portable work and multi-screen applications. This broadening user base is expected to support the transition of AR eyewear from a niche category toward a larger consumer market.

- ***Expansion of application scenarios***: The application scenarios of AR eyewear are continuing to expand. In addition to entertainment use cases such as gaming and video, AR eyewear is increasingly being adopted in areas such as office collaboration, education, industrial operation and maintenance, healthcare support and tourism-related guidance. The widening range of use cases enhances the practical value of devices, improves user engagement and supports more diversified demand for both hardware and related services. This expansion of scenarios is expected to remain an important driver of market growth.

Supply Side

- ***Advances in multimodal capabilities***: Continued progress in multimodal understanding, contextual processing, memory and task orchestration is improving the ability of AR eyewear to support more adaptive and collaborative user experiences. As these capabilities improve, AR eyewear is expected to evolve beyond passive display devices into more capable computing terminals that can better understand user context, support richer interaction and coordinate tasks across applications and services. These developments are expected to enhance both user value and product differentiation.

- ***Hardware iteration and cost reduction***: Advances in optical display technologies, dedicated chips, power efficiency and end-cloud collaboration architectures are contributing to thinner form factors, longer battery life, improved performance and lower costs. Improvements in Micro OLED displays, Birdbath modules, optical design, chip efficiency and manufacturing yields are helping AR eyewear products become more practical for daily use while reducing consumer adoption barriers. These developments are expected to support larger-scale commercialization over time.

- ***Improvement on ecosystem***: As AR operating systems, developer tools, SDKs and content ecosystems continue to improve, the AR eyewear industry is expected to become more attractive to developers, content providers and ecosystem partners. Improvements in software toolchains and application support can reduce development barriers, enrich available content and services, and strengthen the interaction between hardware adoption and ecosystem growth. Over time, a broader and more mature ecosystem is expected to support user acquisition, usage frequency and long-term market expansion.

AR EYEWEAR MARKET COMPETITIVE LANDSCAPE

Global Competitive Market Share

The global AR eyewear market remained relatively concentrated in 2025, with the top five brands accounting for a combined 80.3% of total sales revenue. XREAL ranked first in the global AR eyewear market by sales revenue in 2025, with a market share of 27.0%. In terms of sales volume, XREAL also ranked first globally in the AR eyewear market in 2025, with a market share of approximately 24.8%, while the top five companies in aggregate accounted for 83.3% of the market. With share of market revenue being higher than that of market volume, XREAL and company D exhibit their position in the premium segment. Leading participants in the AR eyewear market typically benefit from independent R&D capabilities in core components, supply chain integration, hardware-software coordination and global sales capabilities.

The Global Top 5 AR Eyewear Companies (2025)

By Sales Revenue					By Sales Volume[1]				
Rank	**Company name**	**Location of Headquarters**	**Year of Foundation**	**Market Share (%)**	**Rank**	**Company name**	**Location of Headquarters**	**Year of Foundation**	**Market Share (%)**
1	**XREAL**	**China**	**2017**	**27.0%**	**1**	**XREAL**	**China**	**2017**	**24.8%**
2	Company A[2]	China	2021	16.1%	2	Company C	China	2021	23.1%
3	Company B[3]	China	2014	14.4%	3	Company A	China	2021	16.3%
4	Company C[4]	China	2021	13.4%	4	Company B	China	2014	13.9%
5	Company D[5]	United States	2004	9.4%	5	Company D	United States	2004	5.2%
		Total of Top 5 Companies		**80.3%**			**Total of Top 5 Companies**		**83.3%**
		Total of Others		19.7%			Total of Others		16.7%
		Market Total		**100.0%**			**Market Total**		**100.0%**

Notes:

(1) "sales volume" refers to the total number of units sold during the relevant period, excluding returned products

(2) Company A: Founded in 2021. Its core layout focuses on consumer markets in Europe and America, with a focus on ultra-clear display, comfortable wearing experience and privacy optical design. Its major smart eyewear product type (refers to the product type that accounted for the majority share of sales volume within the company's smart eyewear business in the full year 2025) is AR eyewear.

(3) Company B: Founded in 2014. It targets the mid-to-high-end market and relies on self-developed edge AI and the operating system. Focusing on intelligent interaction, spatial perception and multimodal experiences. Its major smart eyewear product type is AR eyewear.

(4) Company C: Founded in 2021. It focuses on the entry-level AR eyewear market, with core strengths in high cost-performance and large-screen projection experiences. Its major smart eyewear product type is AR eyewear.

(5) Company D: Founded in 2004. A world-leading giant in social and AI software ecosystems. Leveraging the inherent advantages of self-developed AI, social ecosystems and software interaction, it has made a cross-industry layout in the near-eye smart devices track. Its major smart eyewear product type is non-display eyewear.

Source: iResearch

Within the broader smart eyewear market, the top five players account for 65.0% of total sales revenue and 63.0% of total sales volume. Most of the top-ranking participants in the broader smart eyewear market primarily focused on non-display eyewear products. Against this backdrop, XREAL, as an AR eyewear company, secured second position in the broader smart eyewear market in terms of sales revenue and fifth position in terms of sales volume. This position reflects the strength of XREAL's market standing within the AR eyewear segment, despite competing in a broader market that includes much larger software and smartphone industry participants focused on non-display eyewear.

The concentration of the broader smart eyewear market reflects, in part, the advantages of large software and smartphone companies in brand recognition, installed user base and supply chain maturity. Many leading non-display eyewear products are supported by software, hardware and supply chain capabilities that are highly adjacent to those of mature smartphones. By contrast, AR eyewear market is more concentrated, because this type of devices generally requires deeper capabilities across optics, dedicated processors, algorithms and system integration. As a result, leadership within the AR eyewear segment may depend more heavily on product integration and technology accumulation than leadership in the smart eyewear market.

The Global Top 5 Smart Eyewear Companies (2025)

By Sales Revenue					By Sales Volume				
Rank	**Company name**	**Location of Headquarters**	**Year of Foundation**	**Market Share (%)**	**Rank**	**Company name**	**Location of Headquarters**	**Year of Foundation**	**Market Share (%)**
1	Company D	United States	2004	56.8%	1	Company D	United States	2004	53.8%
2	**XREAL**	**China**	**2017**	**2.6%**	2	Company E	China	2010	3.0%
3	Company E[1]	China	2010	2.3%	3	Company C	China	2021	2.4%
4	Company C	China	2021	1.7%	4	Company F	China	1987	2.0%
5	Company F[2]	China	1987	1.6%	**5**	**XREAL**	**China**	**2017**	**1.8%**
		Total of Top 5 Companies		**65.0%**			**Total of Top 5 Companies**		**63.0%**
		Total of Others		35.0%			Total of Others		37.0%
		Market Total		**100.0%**			**Market Total**		**100.0%**

Notes:

(1) Company E: Founded in 2010. It is a global leading consumer electronics and smart manufacturing company with smartphones, smart hardware, and an IoT platform at its core. Its major smart eyewear product type is non-display eyewear.

(2) Company F: Founded in 1987. It is a leading global provider of information and communications technology (ICT) infrastructure and smart devices, operating in over 170 countries and regions. Its major smart eyewear product type is non-display eyewear.

Source: iResearch

Global Competitive Trends

As competition in the AR eyewear market intensifies, the industry is shifting from hardware-only differentiation toward an integrated "Hardware + System + AI" model. This integration can enhance core product experience and accelerate installed-base growth. In turn, a larger installed base and a more mature global ecosystem may support incremental monetization opportunities, including software subscriptions and cloud services. Market participants with strong system integration and ecosystem orchestration capabilities may be better positioned to align technology development, commercialization and global expansion, creating reinforcing network effects and supporting sustainable competitive advantages over time.

- ***Competition is increasingly shifting from standalone hardware specifications to integrated capabilities across hardware, software and ecosystem.*** As the AR eyewear market develops, competition is increasingly extending beyond device-level specifications toward broader capabilities across hardware, operating systems, algorithms, developer ecosystems and services. The user experience of future AR eyewear products is expected to depend not only on displays, optics and industrial design, but also on how effectively hardware, software and multimodal capabilities are integrated. Companies with stronger integration capabilities across these layers may be better positioned to improve product experience and expand their installed user base over time.

- ***Global ecosystem development and installed user base are becoming more important.*** The competitive landscape is gradually shifting from regional fragmentation toward broader competition based on ecosystem depth, installed user scale and global commercial reach. In the early stage of market development, regional players may be able to compete through localized products and channels. Over time, however, participants with stronger global supply chains, broader sales networks and larger user bases may be better positioned to attract developers, enrich application ecosystems and strengthen cross-market scale effects. A larger installed user base may in turn improve product attractiveness and support further ecosystem growth.

- ***Monetization is evolving from one-time hardware sales toward a combination of hardware, software and services.*** As the category matures, industry monetization models are expected to expand beyond one-time hardware sales. In addition to hardware revenue, participants may increasingly seek to generate recurring revenue through software subscriptions, cloud-based services, digital content and other value-added services. The extent and timing of such monetization may vary by company and product category, but over time, the commercial model of the AR eyewear industry is expected to become more diversified.

SOURCE OF INFORMATION

We commissioned iResearch, an independent market research and consulting firm, to provide an analysis of, and to produce a report (the "iResearch Report") on global near-eye smart devices market. Founded in 2002, iResearch provides professional services including, among others, industry consulting and strategic consulting, and has accumulated extensive experiences in researching and monitoring the development of global near-eye smart devices market. We have agreed to pay a fee of RMB510,000 to iResearch for preparing the iResearch Report. The report was prepared independent of the influence of us and other interested parties. We have extracted certain information from the iResearch Report in this section, as well as elsewhere in this document, to provide our potential [**REDACTED**] with a more comprehensive presentation of the industry in which we operate.

During the preparation of the iResearch Report, iResearch performed both primary and secondary research, and obtained knowledge, statistics, information on and industry insights into global near-eye smart devices market. Primary research involved interviewing key industry experts and leading industry participants. Secondary research involved analyzing data from various publicly available data sources.

The market projections in the iResearch Report are based on the following assumptions: (i) the global overall social, economic, and political environment is expected to remain stable during the forecast period; (ii) relevant key drivers are likely to drive the continued growth of global near-eye smart devices market throughout the forecast period; and (iii) there is no extreme force majeure or unforeseen industry regulation in which the industry may be affected in either a dramatic or fundamental way. All forecasts in relation to market size are based on the general economic conditions as of the Latest Practicable Date.