# The future of vision technology: Trends shaping accessibility by 2025



In a comprehensive overview of the future of vision technology, Roland Mattern, Director of Sales at eSight by Gentex Corporation, has highlighted several emerging trends that are expected to shape the landscape by 2025. This potential transformation is primarily driven by the pressing need for greater independence and inclusivity for the approximately two million individuals in the UK living with visual impairments, a situation that is projected to worsen globally as the International Agency for the Prevention of Blindness anticipates an increase of roughly 600 million people facing sight loss over the next three decades.

Speaking to AT Today, Mattern discussed the significant advancements that have already marked a revolutionary phase in vision technology, especially during what has been dubbed the "year of vision" in 2024. Innovations such as the Apple Vision Pro VR headsets, cutting-edge augmented reality (AR) applications, and AI-powered wearables have paved the way for new digital accessibility technologies. A notable example is the eSight Go device, designed to empower individuals with sight loss and improve their interaction with the world around them.

Among the key technology trends expected to gain momentum in 2025, AI-powered assistive technology is identified as a game-changer. The integration of machine learning algorithms, natural language processing, computer vision, and predictive analytics is set to enhance the functionality of various accessibility tools, including screen readers and navigation aids. Mattern indicated that such developments are critical for improving the day-to-day experiences of users, allowing them to better engage with their surroundings and live more fulfilling lives.

Another significant trend is the advancement of augmented reality, which has seen considerable adoption in gaming and entertainment. Mattern pointed out that AR's potential to assist individuals with visual impairments will likely expand, especially through wearable technology capable of enhancing environmental awareness. The Meta Orion AR glasses serve as an example of this technology, as they provide interactive digital experiences and utilise contextual AI to dynamically interpret surroundings, directly addressing user needs.

Digital accessibility is also poised to evolve markedly by 2025, with increased focus on integrating accessible features across platforms, such as websites, applications, and digital services. This development is expected to strengthen the inclusion of individuals with visual impairments in essential sectors like healthcare and education. For instance, the rise of telehealth systems signifies a shift towards more comprehensive digital accessibility practices, which will facilitate better learning experiences for disabled students and streamline workflows for employees with impairments.

The integration of voice-controlled devices represents another critical advancement in vision accessibility technology. Smart speakers, smartphones, and wearable technology are increasingly incorporating voice recognition and natural language processing, thus allowing users with sight loss to navigate the digital landscape more effectively. Mattern emphasised that organisations need to adopt increasingly accessible technologies to foster inclusive workplaces that enable all employees to thrive, regardless of disability.

As the industry progresses towards 2025, personalisation in vision accessibility technology will take centre stage, driving innovations that adapt seamlessly to users' unique needs. This progressive shift, stemming from advancements in AI, AR, and smart wearables, is anticipated to enhance users' autonomy and confidence, ultimately unlocking new avenues for inclusion within society. This evolution in vision technology underscores a broader commitment to addressing the challenges faced by those with visual impairments, facilitating interactions with their environment and promoting independence across various life dimensions.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Discusses the future of vision technology, including AI-powered assistive technology, augmented reality, and digital accessibility, as highlighted by Roland Mattern.
2. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Mentions the projected increase in global sight loss and the significance of the 'year of vision' in 2024, including innovations like Apple Vision Pro VR headsets and AI-powered wearables.
3. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Describes the eSight Go device and its role in enhancing the lives of individuals with sight loss.
4. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Explains the integration of AI in assistive technology, including machine learning, natural language processing, and predictive analytics to improve user experiences.
5. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Details the advancements in augmented reality, particularly the Meta Orion AR glasses, and their potential to assist individuals with visual impairments.
6. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Discusses the evolution of digital accessibility and its impact on inclusion in sectors like healthcare and education.
7. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Highlights the integration of voice-controlled devices and their role in enhancing navigation for users with sight loss.
8. <https://www.eyenews.uk.com/news/post/there-will-be-a-27-rise-in-the-number-of-people-living-with-sight-loss-in-the-uk-by-2035-rnib-the-uk-s-leading-sight-loss-charity-predicts> - Provides data on the projected increase in sight loss in the UK, supporting the global trend mentioned by the International Agency for the Prevention of Blindness.
9. <https://www.rnib.org.uk/professionals/health-social-care-education-professionals/knowledge-and-research-hub/reports-and-insight/registered-blind-and-partially-sighted-people-and-cvi-england-22-23/> - Offers statistics on registered blind and partially sighted people in the UK, aligning with the demographic changes and increasing sight loss trends.
10. <https://viso.ai/computer-vision/computer-vision-trends/> - Discusses the broader trends in computer vision, including augmented reality and AI, which are relevant to the advancements in vision technology.
11. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Emphasizes the importance of personalisation in vision accessibility technology, driven by advancements in AI, AR, and smart wearables.
12. <https://attoday.co.uk/exclusive-2025-vision-tech-trends/> - Please view link - unable to able to access data