24
25

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24
25

SEPTEMBER 21, 2024

- **THEME 1:**

COCOON XR

An immersive technological vision

- **THEME 2:**

The entry of tech giants

A challenge and opportunity for the optical industry

EXPERTS

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SESSION.01

September 21, 2024

SESSION #01 – THEME 01

COCOON XR

An immersive technological vision

The session began with the presentation of the COCOON XR project, a synthesis of insights from previous committee meetings.

This project aims to explore a convergence between traditional glasses and immersive headsets, with a particular emphasis on integrating the senses, notably hearing and vision, into a single technological device.

PURPOSE AND CONCEPT OF COCOON XR

The core idea of COCOON XR is to envision a future, ten years from now, where smart glasses have evolved to offer an immersive experience while retaining a design similar to today's glasses. The project emphasizes a hybrid interface combining augmented reality (AR) and virtual reality (VR) to enhance user experience without overburdening it. The goal is to achieve a balance between technology and aesthetics, a topic that sparked considerable debate among experts.

DEBATES AND POTENTIAL DIRECTIONS

Experts discussed the balance between minimalist design and advanced functionality. The difficulty of miniaturizing components while providing a seamless user experience was a widely discussed topic. COCOON XR's immersive approach is distinctive, though some participants expressed a preference for a lighter, less encompassing solution. This tension between minimalism and immersion represents a recurring challenge in the realm of wearable smart devices.

One highlight was the recognition of current limitations in immersive technologies. While significant advancements have been made, the components needed to fully integrate sight and sound into a compact «form factor» remain a major technical challenge. Experts discussed practical applications, such as smart glasses for individuals with hearing impairments or visual correction needs. This vertical approach, targeting specific needs, could facilitate faster adoption of these technologies by the general public.

SESSION #01 – THEME 02

THE ENTRY OF TECH GIANTS

A challenge and opportunity for the optical industry

The second theme of the session focused on the imminent entry of tech giants (GAFAM) into the smart glasses market and the challenges this poses for the optical industry.
The objective was to consider both opportunities and points of resistance for traditional players in this sector.

Changes brought by major tech companies

Discussions highlighted the turning point reached by players such as Ray-Ban in partnership with Meta, and Apple with its Vision Pro. These companies have taken a leap forward in marketing smart glasses, now reaching a wider audience. The success of these connected products from these players demonstrates that the market is undergoing significant transformation.

Issues related to adoption and the role of opticians

A central question raised by experts was the role of opticians in this new value chain. While new smart glasses are mainly sold through traditional distribution channels, such as optician networks, experts pointed out that opticians' involvement remains low. The technical difficulty of fitting corrective lenses onto electronic frames without compromising the electronics is a problem, as is the lack of training among opticians on these new technologies.

To overcome this challenge, experts suggested further involving opticians in the adaptation and assembly of smart glasses, while ensuring that technological products remain close to conventional models. This approach would help maintain consumer familiarity and trust, thus accelerating the adoption of these new products.

Ethical considerations and risks of dependency

A significant concern raised by several experts was the potential impact of constant notifications and prolonged immersion on users. Smart glasses, being close to the face, could reinforce digital dependence and impact users' visual health. This risk also extends to safety concerns, such as distraction while driving or walking.

Some experts mentioned the importance of developing intelligent systems capable of understanding context and blocking notifications in risky situations. For example, a pair of glasses could detect a pedestrian crossing the street and temporarily disable alerts to avoid accidents. This preventive approach is considered crucial for the successful adoption of smart glasses.

Balancing innovation and social acceptability

Discussions revealed concerns about the evolving social perception of connected technologies. Although younger generations are accustomed to constant connectivity, experts cautioned against the risk of sensory overstimulation. The question raised was whether the human mind is truly ready to handle such a cognitive load, even with intelligent notification filtering systems.
Experts compared this situation to that of smartwatches, which have already altered social behaviors by introducing frequent yet discreet interruptions. Notification management is a critical point for smart glasses, as poor management could reduce public acceptance of these products.

CONCLUSION

The expert committee session clarified the key challenges for the future of smart glasses, identifying the hurdles that need to be overcome. The COCOON XR project embodies a vision of an immersive future where technology and aesthetics converge. However, the entry of tech giants into this market raises questions about the adoption and evolution of the optical industry.

The need for better integration of opticians into the value chain and the ethical management of notifications appear to be priorities for the future. Finally, experts agreed that successful adoption of smart glasses will depend on the industry's ability to meet real consumer needs while minimizing risks to health and well-being.