



HANDS-FREE VISUAL INTERPRETING POWERED BY QUALCOMM TECHNOLOGIES

AIRA'S META RAY-BAN GLASSES PROJECT FINDINGS



EXECUTIVE SUMMARY

Aira spearheaded a pioneering pilot to assess the impact of Meta Ray-Ban Smart glasses—powered by Qualcomm® technology—on real-world accessibility. By engaging 75 Explorers nationwide, Aira demonstrated how its innovative approach and deep community engagement are transforming independence and mobility for blind and low-vision individuals.

Throughout the project, participants reported significant benefits from hands-free, wearable-camera streaming, such as enhanced efficiency and greater mobility. The pilot also revealed innovative new use cases, highlighted integration challenges due to Meta's pending SDK release, and provided clear insights into Explorer preferences for future development.



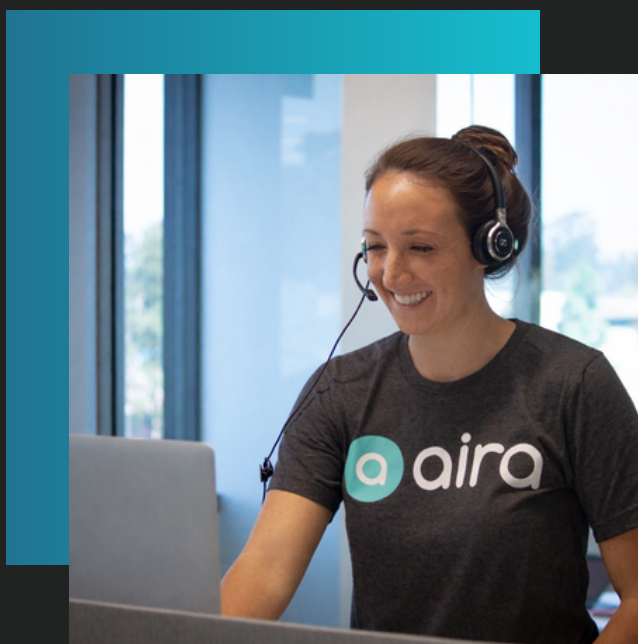
BACKGROUND & PURPOSE

Aira selected Meta Ray-Ban glasses powered by Qualcomm's Snapdragon® chipsets, to deliver high-quality video capture, low-latency transmission, and reliable audio—critical components for Aira's real-time visual interpreting platform.

Aira's goals for this project were:

- Distribute Meta Ray-Bans to Aira Explorers and collect real usage feedback.
- Understand the impact of hands-free usage, particularly how the glasses change the Aira experience.
- Gather Explorer feedback about the Meta Ray-Bans' comfort, usefulness, and technical performance.
- Provide recommendations for next steps, including integration needs, future testing, and scaling potential.

This project serves as a first of its kind assessment of Qualcomm®-enabled wearable hardware within a public, real-world accessibility environment.



PROJECT STRUCTURE

Aira recruited a cohort of 75 US-based Explorers, representing a wide range of usage patterns, environments (home, public transit, workplace), and preferred tasks (navigation, reading, technology, and more).

Duration

- Distribution: 6-8 weeks to scale delivery
- Onboarding: 2-4 weeks, tailored to users' needs
- Engagement: 8 weeks of structured usage and feedback
- Review: End-of-project calls and surveys

Technology Tested

- Meta Ray-Bans smart glasses powered by a Snapdragon® chip with:
 - Camera, computer, audio, bluetooth connectivity
- Aira Explorer app
- Individual users' smart phones

Key Activities Measured

- Everyday tasks (cooking, sorting, reading, labelling)
- Outdoor navigation and mobility
- Shopping and errand running
- Computer tasks while maintaining hands-free
- Technical tasks requiring precise camera framing



SUCCESSES & CHALLENGES

SUCCESSES

Successful Pilot Deployment in Partnership with Qualcomm:

The Pilot successfully deployed 75 Meta-Ray Ban Smart glasses in collaboration with Qualcomm Technologies, demonstrating the feasibility of scaling hands-free, wearable assistive technology across a diverse explorer cohort.

Expanded Hands-Free Access to Aira Services:

Explorers gained access to a new hands-free calling experience, allowing them to maintain mobility and independence while engaging with Aira interpreters-particularly beneficial during navigation, carrying items, and multitasking.

Clear validation of wearables as an accessibility tool:

The pilot confirmed that wearables can enhance accessibility workflows beyond traditional handheld devices, supporting longer sessions and more complex tasks.

CHALLENGES

Aira encountered and addressed several challenges:

- Integration: Pending release of Meta's full SDK required interim solutions for video streaming.
- Logistics: Ordering, shipping, and onboarding complexities due to user knowledge fluency and device platforms, and Android/iOS set up differences.
- Training: Varied user proficiency highlighted the need for enhanced training materials.



BIGGEST SUCCESSES

The project had strong Explorer participation and collaboration. Explorers stayed highly engaged, provided detailed feedback, joined calls, and tested the glasses in diverse environments—resulting in the successful collection of new types of data.

The glasses revealed a range of insights made possible by a hands-free, head-mounted experience, including natural camera framing based on head position, movement-driven recording, extended task tracking, and real-world multi-tasking scenarios such as carrying items while maintaining a continuous live stream. Several of these use cases emerged for the first time during this project, highlighting the unique potential of the glasses.

Participants gave clear feedback on next steps, including desired improvements, integration needs (with Meta's SDK for the Meta Ray-Bans), whether they'd recommend the glasses, and how much hands-free use improved their overall Aira experience.

The cohort showed strong momentum and satisfaction. Aira usage grew 35% year over year (compared with the same timeframe in 2024, pre-wearable implementation). A quarter of users increased their usage by more than 50%. Task preferences shifted, with describing and reading activities becoming more prominent in 2025 over the previous year's preferences of online tasks, reading and describing.

Notably, **94.4% of participants reported enhanced experiences**, and every Explorer indicated they would both continue using and recommend the glasses, highlighting the project's strong positive effect.



EXPLORER QUOTES & STORIES



Independence & Hands-Free Use

"It makes tasks easier and safer to have it hands-free."

"Navigation was definitely better with the glasses."

"Shopping was best since I needed both hands—using the glasses was very easy and smooth."

"It is nice to have both hands free, or only one occupied with a cane."

Navigation

"I loved using them for navigating new stores or malls where I had trouble finding the right place."

"Navigation and shopping go much quicker with the glasses."

"Identifying room numbers, locating dropped items, and navigating buildings became much easier."

Reading & Identification

"Having the Aira agent read things I can't see was incredibly helpful."

"Reading mail, instructions, and identifying objects was so much easier with the glasses."

Workplace & Task Support

"Tasks that needed multiple hands—like finding items in a storage closet or learning new machines—were much easier with the glasses."

"Using the glasses to navigate the touchscreen on my thermostat was a useful hands-free experience."

Skill Development & Training

"I love these glasses—I just wish I had more training because I feel like they can do so much more."



IN CLOSING

Recommendations & Next Steps

Aira plans to build full integration once the SDK is released, offer hands-free support as a permanent feature, provide more training materials for new wearable users, and continue gathering long-term performance data.

Conclusion

The Aira Meta Ray-Ban project—powered by Qualcomm technology—demonstrates the transformative impact of hands-free visual interpreting. Explorers overwhelmingly reported increased independence, better efficiency, and strong interest in next steps.

With SDK integration and continued collaboration between Aira and Qualcomm Technologies (and Meta), hands-free wearable devices have the potential to redefine accessible navigation and task support for blind and low-vision individuals worldwide.



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