

Immersive Research Lab

A VR Research Platform that Provides Researchers Real-time Insights into User's Perspective

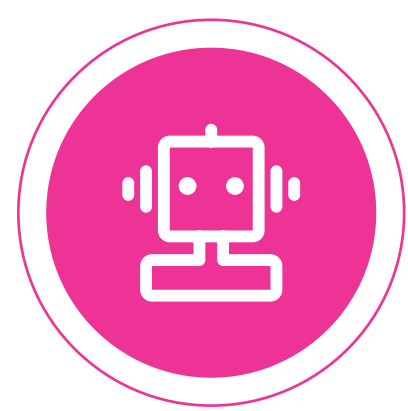
PROBLEM

"How can we improve the remote research process and inspire new research methodologies through technology?" Teague's researchers started using virtual reality at the beginning of the decade to advance aircraft cabin design in commercial aviation. Over the years, they created their own freeware VR prototyping tool to facilitate collaborative design with their global customers. As their work has extended into built environments, they began asking how they might enhance this tool for use in simulate contextual research settings. They wanted to explore technology that can gather emotional and situational data, and that was where we started our project.

SOLUTION

Using human-centered design methods, we developed an **all-in-one research platform** that provides **real-time sentiment feedback** for researchers to probe deeper at the moment when they see conflicting or interesting emotions. Our proof-of-concept prototype aims to demonstrate how these features come together within an enhanced **VR research environment**.

In this platform, this sentiment data can be aligned with qualitative inquiry notes, and researchers can organize it within our platform to generate efficiencies in **synthesis and reporting**. The data serves as a layer of proof to complement real-time observations.



Real-Time Sentiment Feedback



VR Environment



All-In-One Holistic Platform

DESIGN PROCESS

To understand the problem space, we interviewed subject matter experts in the field of design research. We asked questions about using VR as a research tool, emotional data that would add value to the contextual research, and features we could add to our research platform to speed up synthesis and reporting. We also did cognitive walkthroughs and heuristic evaluations to examine existing qualitative research tools. Finally, we triangulated our findings with 56 survey responses and card-sorting sessions at Teague to prioritize key features for our design.

After completing our initial discovery phase, we designed a prototype and used the Rapid Iterative Testing and Evaluation (RITE) method with 11 people to make sure the feedback on our early design insights are incorporated into our final solution.

USER SCENARIO

