

Objective and Validation Metrics

My goal:

Verify whether the user can understand the differences between the two roles.

(Host: In Quest, use the Mixed Reality (MR) mode to see your real home and overlay virtual objects within it.

Guests: Enter the meeting space in VR mode through the virtual room model generated by scanning with the camera.)

Test whether communication in this environment is natural and smooth.

Observe whether users consider that the meeting space lacks the necessary functions.

Collect feedback from users regarding the advantages and disadvantages of the concept.

Interview Question

1. Do you think the role you played (host / guest) is easy to understand?
2. Do you feel comfortable communicating with others in this space?
3. What functions do you think are lacking in this meeting space?
4. What do you think is the greatest advantage of this concept?
5. What do you hope I focus on improving in the next version?

Results

A total of 5 students were interviewed, and the following feedback was obtained:

Role understanding: Most participants indicated that the character settings were clear and they could distinguish whether they were the host or the guest.

Communication Experience: Two students mentioned that due to the difference in perspectives between the two sides, it might affect the naturalness of communication. If they were in such an environment, they might feel that the communication was not smooth enough.

Function deficiency: Most students believe that the current prototype lacks essential

functions. They generally suggest adding features such as a shared whiteboard, projection, or more detailed room information.

Concept advantages: Participants generally believe that this concept is novel and interesting, and there has been no similar experience before.

Improvement direction: The main suggestions for improvement focus on adding interactive virtual items to enhance the sense of immersion and participation.

Quotation:

I can tell whether I'm the host or the guest, but it feels like one is in reality and the other is in a virtual world. I find it a bit strange.(Jialiang He, DECO2300 Thu 12:00, STU1)

I feel there are still not enough options. It would be great if you could add some other items that can stimulate my interest in the future. For example, pencils, or whiteboards(Sean, DECO2300 Thu 12:00, STU1)

Your idea is very interesting. I haven't seen anything like it before. I'm looking forward to seeing your final product.(Sijian Xin, DECO2300 Thu 12:00, STU1)

Analysis

It can be seen from the interview results that:

The participants were able to distinguish between the host (MR room) and the guests (VR room model), indicating that the basic concept of this design is easy to understand. My general idea is not problematic.

However, two students mentioned that the difference in perspectives might lead to unnatural communication, which conflicts somewhat with my main idea. Additionally, some students suggested that I add more interactive tools. That is to say, in addition to the immersive experience, users also need more collaboration tools.

Almost all the participants mentioned that the experience was novel and interesting, which indicates that this concept is attractive and worthy of further iteration. This is the conclusion I reached during the interview.

Concept Iteration

Based on the results and analysis of this interview, I propose the following iterative directions:

Enhance sharing and collaboration functions

Add the functions of virtual whiteboard, projection screen or shared desktop

Add virtual interactive items

Introduce more interactive elements (such as virtual tables, documents, buttons), so that users can not only "watch" but also "operate".

Enhance the sense of immersion and participation.

Enrich the details of the VR room

Optimize the performance of the room as much as possible and reduce the sense of disconnection for users.

Reflection

Users can quickly understand their roles, which indicates that the core design concept is clear. However, this approach is not perfect either. It might also cause problems with unnatural communication. I need to find a way to solve this problem.

Next, the most prominent feedback is the lack of functionality. Users hope to have practical tools to support collaboration.

The number of interviewees for this session is 5, and the method used is Think-Aloud. The test prototype is still an early version and has not been tested on the actual Quest hardware. This might have affected the authenticity of the user experience.

In the future, I will enhance the fidelity of the prototype and conduct real tests on the Quest device. And add sharing tools and interactive elements to respond to the most direct needs of users.

Reference

How To Create A Unity VR Multiplayer Game in JUST 8 Minutes!

<https://www.youtube.com/watch?v=JiqmoJ9XFnw>

15 EASY Steps to Build a Colocated Multiplayer XR Game - Meta Building Blocks!

<https://www.youtube.com/watch?v=bXhgsAVkaQw&t=477s>