# A tale of iterations with Gensler

**Lo and behold—the development of my soft skills—Metaverse and meta-cognition**

The metaverse, the latest innovation from the tech industry, allows people to experience the world in a new and exciting way. By adding a digital layer on top of the physical world, people can socialize in virtual spaces and engage in all sorts of activities, from sitting around digital campfires to playing virtual soccer.

Our company partnered with Gensler, a world-renowned architecture firm, to bring the power of the metaverse to the aviation industry. Gensler wanted to use our expertise in creating digital experiences to enhance the experience of airport passengers. The question we asked ourselves was: “How can we use the metaverse to make airports more engaging and enjoyable for passengers?”

It was a Tuesday afternoon at Gensler Headquarters in San Francisco when we had our first physical meeting to discuss the potential applications of the new technology known as the metaverse. The team spent a lot of time trying to understand and define the metaverse, as well as discussing the expectations and deliverables for our project.

One challenge we faced was the fact that experiencing the metaverse typically requires expensive, bulky virtual reality headsets developed by companies like Meta and Oculus Rift. This got me thinking about potential applications of the metaverse that didn’t require specialized hardware.

I remembered how I often use kiosks in airports to look up the location of a particular store or restaurant. In unfamiliar places like airports, it can be helpful to have a map to guide you around. With this in mind, I proposed an idea for a web app that would bring the functionality of these kiosks to passengers’ individual phones.

“Why not make an indoor Google Maps for airports?” I asked the team. One key difference between our solution and Google Maps would be the ability to take “tours” within the airport once you’ve found your gate. These tours would be pre-determined routes created by airport staff, highlighting different points of interest within the airport. For example, a “Japanese Tour” might include stops at a Japanese mask show, a

Japanese restaurant, and a Japanese souvenir store.

The team and Gensler discussed my idea and agreed that it had potential, but we had trouble figuring out how to incorporate the metaverse into our solution. As a result, we decided to redefine our problem statement as “How might we use Extended Realities to personalize the wayfinding experiences of airport passengers?”

The ACRP is an industry-driven, applied research program that develops near-term, practical solutions to airport challenges. The Level of Service (LOS) metric is used to measure the level of satisfaction felt by passengers, which can translate into higher revenues. Through research, I discovered that the top 10 most important experiences for international travelers, according to a survey by the ACRP, are related to wayfinding. This led me to incorporate features such as step-by-step boarding guides, an in-app button for requesting physical assistance, and augmented reality-guided navigation into my project. I also added the option for pre-determined self-guided tours of the airport.

To make the project more realistic and convenient for my team, I decided to use the Google Maps API (Indoor Maps) and Google’s AR Core API. This allowed us to utilize pre-existing code for calculating distances between locations and focus on validating and refining our solution. I presented the updated project to Gensler, who were impressed by the incorporation of augmented reality into the features. Although they were satisfied with the solution, the team decided to use the first semester to further identify and address the problem.

The team at San Francisco Airport recently conducted a study on high-traffic areas such as bathrooms, gates, and restaurants and retail. The study was presented to Gensler, but the ideas were not well received. In response, Gensler hosted a 15-minute design sprint where each member of the team brainstormed potential solutions.

After the design sprint, me and a fellow Product Designer, Greg, took to the whiteboard at WeWork to properly define the problem and create a pitch deck showcasing our solution. We focused on developing a web app that would provide a simple map interface to help airport passengers navigate the airport based on their inputs.

To make the experience more engaging, we decided to gamify the app by giving users a role to fill and rewarding them with shareable NFT

rewards. These rewards could be traded in for a tree to be planted. We presented our ideas to Gensler, who suggested that the NFT aspect could be a separate app.

Overall, our main focus was on creating a simplified wayfinding experience for airport passengers, with the gamified aspect serving as an added incentive. We received feedback from Gensler on the potential added stress of requiring user inputs, especially for passengers who are carrying luggage.

The team will now focus on creating personalized “portals” for users to explore famous tourist destinations. These portals will be accessed through an Instagram filter that allows users to enter a “hole in the wall”. We have taken inspiration from other content creators, such as those at Meta, and recognize the importance of incorporating a human element, as seen in the example of the physical assistance button inspired by Target. By incorporating these features, we hope to improve user engagement and enhance the overall user experience.

I experienced a lot of difficulties while managing my team. Our first meeting didn’t go well because I approached Greg and planned our strategy without involving the rest of the team. I did this because I thought Greg was the only member who was tech-literate and could help me get the project done quickly and efficiently. As a result, the team lost trust in each other and in me. I also realized that I was dominating the conversations and idea space, which made the other members feel left out. This contributed to the team receiving a low score on our HC application.

I sought help from Professor Powers and learned a lot about the importance of involving the whole team in decision-making and communication. I realized that not everyone may be a strong writer, but they can contribute in other ways, such as by communicating effectively and creating easy-to-understand slides. I have started getting 1:1 talks with team members to understand their motivations and roles in the project.

As the spring semester approaches, I will have to step up as a leader and make sure that the team works well together. I have always been an individual contributor, but I am starting to enjoy the process of leading a team. I hope that with this new knowledge, I can guide the team to

successfully complete our project with Gensler.