

INTERVIEWS REPORT

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18th March 2023

Target Audience

In this report we will present the 4 interviews we did to our target audience as part of our project Nature Realms and the EPS course Entrepreneurship and Corporate Communication.

Our project is based on a broader research on VR of the AP Hogeschool Immersive Lab, so we don't have a specific product we want to sell. Nevertheless, we have defined our Target Audience as such: people or companies who are currently working on VR projects and would be interested in investing in new technologies to make their virtual experience more immersive.

As such, we have thought of these four people:

1. [Daniel Llamas](#): He works in the field of Strategic Design, this means that he helps organisations in their way to innovation, specially when they aim at having a cultural, social and educational positive impact. He is currently a coordinator in the project ["Building with Bits"](#). It is a European project on the creation of virtual learning spaces using digitized cultural heritage by the Europeana Foundation. These virtual spaces are created using Mozilla Hubs.
2. [Gorka Lorenzo Zabala](#): He is the CEO of [Aglaya](#), a company that creates Virtual Reality environments in the Metaverse for other enterprises. The company has been working for 3 years.
3. [Seppe Peelman](#): Software Developer at [B·U·T global](#).
4. [Stef Colruyt](#): Lead Game Developer at [AlterEyes](#).

In the next section we will present the guiding questions and conclusions from each of the interviews.

Basic details about the interview

Date: 21st March 2023

Language: Spanish

Interviewer: Leire Lisón

Note: This interview is still due to be done on the 21st of March. Therefore, in this report we will only present the guiding questions.

Questions

1. To start with, let's talk a bit about your background with VR. How long have you been working in this field and what technologies have you used so far? (VR headsets, Mozilla Hubs...)
2. With what type of people have you work with in these VR projects? (students, elderly people, people with disabilities...)
3. Now let's talk about the experience in VR itself. Do you usually use Mozilla Hubs with a Headset or on the computer browser?
4. When using a VR headset (be it for Mozilla Hubs or any other VR experience), do you feel like you are actually present in the virtual space or are you still conscious that you are in the physical world?
5. What elements of the experience does it make it more immersive: the visuals, sound, vibration of the controllers...
6. What about the other people you have been working with, did they feel really immersed? What difficulties did they encounter when using VR?
7. When in VR, have you ever experienced any other physical input like, for example, wind, smells, vibration, water...? Did they really add up to the experience? Would you say that they heightened the immersion?
8. Do you know of any technology that is being developed in the VR sector for making immersion feel more real? (Other than software)
9. What is the most immersive experience you have ever had?
10. What other applications apart from videogames do you see for VR?

Basic Details

Date: 15th of March 2023

Language: Spanish

Interviewers: Leire Lisón (via Teams)

Questions

1. To start with, let's talk a bit about your background with VR. How long have you been working in this field? How did you come up with the idea of Aglaya?
2. What technologies have you used so far?
3. What type of consumer do you target? (Students, elderly people, people with disabilities...)
4. Now let's talk about the experience in VR itself. When using a VR headset, do you feel like you are actually present in the virtual space or are you still conscious that you are in the physical world?
5. What elements of the experience does it make it more immersive: the visuals, sound, vibration of the controllers...
6. What about your consumers, do they feel really immersed? What difficulties do they encounter when using VR?
7. When in VR, have you ever experienced any other physical input like, for example, wind, smells, vibration, water...? Did they really add up to the experience? Would you say that they heightened the immersion?
8. Do you know of any technology that is being developed in the VR sector for making immersion feel more real? (Other than software)
9. What is the most immersive experience you have ever had?
10. What other applications apart from videogames do you see for VR?

Conclusions

In the interview with Gorka, he explained us about his company Aglaya, which he created during the pandemic. Back then, he thought that companies needed a virtual space to meet, but that would be more realistic and immersive than a flat screen. He told us that he is now focused on a web-based virtual environment, rather than on a headset based one, as he wants to make the VR experience as user-friendly as possible.

During his career in the VR sector, he has tested some VR headsets and simulators, but not any of the haptic-suit or haptic-gloves that currently exist in the market.

When asked about his personal experience in VR, he said that the longer he spends wearing his VR headset, the more immersed he feels, because he forgets he is just sitting in his room and believes he is somewhere else.

For having a better experience he says he usually uses a desk wheel-chair, that gives him freedom to turn around easily. This is because in VR you have a view of 360°, but if you have to use the controllers to turn the view, instead of turning your whole body, it cuts a bit the immersive experience.

Gorka mentioned VR attractions in amusement parks. He said that these can be very immersive, because they have many additional features: vibrating platforms, water, wind, spatial sound... But he states that the fact that the costumer, before entering the experience, is already full of adrenaline helps making it more immersive. These experiences are very effective in immersion, but very short in time. For Gorka, everyday VR experiences should be longer in time to be more immersive.

He also told us about his customers. He declared that the main difficulties that his users encountered in VR were the fact of moving in VR, but not physically, and that, at first, using the controllers seem complex.

Regarding personal experience, Gorka confesed that the time he most immersed felt in VR was with a "The Walking Dead" game. Each mission in the game took around 45 minitues to complete and it made him feel so scared, that at some point of the experience he tried to run away with the headset on.

Finally, we asked him about what other applications he envisions for VR. He mentioned that entertainment would be a very interesting field to exploit. Creating experiences where people can move around a virtua environment and both, interact with real people (in a multiplayer mode) or with VR characters (in an individual mode). He gave the example of the new "Hogwarts Legacy" game. He thinks it would be great if they created a virtual Hogwarts where people can enter and interact with other real and fictional people, attend classes, visit other settings, ... But all without a preset game-goal or mission, just for hanging out and entertainment.

Basic Details

Date: 15th of March

Language: Dutch

Interviewers: Bavo Debraekeleer (at [JOB 2023](#))

Conclusions

Seppe was at JOB 2023, a job event by AP and KdG Universities in Antwerp. He was one of the representatives for the company B·U·T global, a digital production company that builds VR applications for professional customers. Mainly for training purposes.

One of the projects they have fit in very nicely with our research. It is a simulation of riding an electric scooter (step).

The setup is a physical handlebar with acceleration and breaking, as well as a fan in front to create wind.

This is connected to an Arduino which is in turn connected to a computer, via USB cable, that runs the application in Unity.

When the user accelerates with the actual handlebar they are holding, the speed is adjusted inside the virtual reality and the speed of the fan is adjusted accordingly.

This created a real sense of speed and the feeling of actually riding the electric scooter.

It also negated the effect of nausea you would normally get from automatically moving the user in VR.

If there is a way of moving in real life without moving your body, eg. driving a car, boating a kayak, you can get away more easily with moving the user in virtual reality.

Adding extra senses to that next to visuals, like the feeling of wind and wind direction, creates an even better experience.

Basic Details

Date: 17th of March

Language: Dutch

Interviewers: Bavo Debraekeleer (via Teams)

Questions

1. What kind of VR projects do you work on at AlterEyes?
2. Which technologies do you use? What software, headsets? Any extra hardware like sensors or moving parts?
3. With [DOJO](#) you also develop Location Based VR. What is the main idea behind this?
 - 3.1 Are there any physical influences present, eg. fans for wind, or moving platform?
 - 3.2 Any special tracking? On the head maybe?
4. Do you have any specific findings or ideas on how to heighten the immersion in VR?
5. Ever experimented with adding physical elements?
6. What is/are the most immersive VR experiences you've had?
7. Do you have any specific ideas you want to test out around immersion?
8. How do you handle testing?

Conclusions

Stef is currently working on an arcade style game where you are in a mech shooter. This allows the player to be sitting while playing and not get nauseous because sitting down while moving the mech around feels natural. So finding ways of movement while your body would stay stationary in real life as well is definitely the best way to get around people getting nauseous.

For Stef you get the most immersion when you have to move your body a lot in a natural instinctive way. He mentioned Half-Life Alyx and Space Pirate Trainer, two VR games where you have to lean and dodge things a lot. So making the user move naturally without them thinking about it really works well.

Another thing he mentions, and something he worked on with DOJO, is shared space VR. Being in the same room with other people and occasionally getting to touch one another gets great results. In their port of Clash of Chefs: Chaos Kitchen for DOJO they had users stealing ingredients from other players and passing plates to each other and here the occasional touch had great impact for the immersion. Although bigger ideas for DOJO were scrapped because of safety concerns of people accidentally hitting each other.

One of those ideas was adding touch and interactable elements to the walls of the enclosed space the DOJO creates for up to four players.

For the DOJO they used HTC Vive Pro's, but now they're mainly working with Oculus Quest 2. Although they did make it possible to use a tracker from the Vive to track the relative distance between multiple Quest's inside of Unity with custom code they wrote themselves. Further than that they don't use any external sensors or hardware at the moment.

He thinks good sport games are not yet much developed at the moment, but would maybe work better in AR. This could be an interesting use of adding something physical though, like a baseball bat or tennis racket.

In VR something that could potentially work great, and something they thought about for developing an escape room, is tracking a simple object like a box. Letting the user do for example puzzles with it, but in VR switching it out for different objects. Could also be something scary or something you can't see or predict what it's going to be next.

For testing they do the normal approach. First unit and feature testing of the code, and for player tests first with family and friends and further along in development with focus groups.

Influencer

Basic Details

Language: English

Interviewers: Philipp Parteder (Immersive Lab)

Conclusions

In our case, influencers are people who influence companies to invest in our research. We came to the conclusion that the main influencers of our project would be the Immersive Lab at AP Hogeschool.

For our interview we met with multiple staff members from the Immersive Lab to pick their brains about the latest developments in VR, what they think the current immersive technologies have to offer for users and developers and also what they think about the research we are going to conduct during our stay in Antwerp.

- One thing very important to them was the emotional component of our VR experiences. They really challenged us to think about what kind of emotional response we want to elicit in our users and how we can trigger these emotional reactions using our environment.
- They are interested in the social applications more than in the game applications of VR.
- Another thing they are excited about is the launch of a new smell delivery device to stimulate the olfactory sense of users. Maybe, if the Immersive Lab team can get their hands on it, it could be a great technology to research within one of our experiments.

Recommender

Basic Details

Language: Deutsch

Interviewers: Philipp Parteder (University)

Conclusions

The recommenders of our project are the users that have tested our technologies. This means the volunteers who have taken part in the experiment and that can tell other people about how immersive our experiences are.

For our interview we have contacted Awais, a student from the EPS programme and asked him about his thought on our Immersion Experiments.

When we asked him what he thinks the most important part of a immersive experience is, he told us his thoughts about interaction design and the gameplay. He said that the experience has to offer entertaining and engaging interactions with the virtual world for users to be immersed in it and that it is important to him to have fun when trying a VR experience.

He said he is very enthusiastic about VR and the possibilities it offers and he would like to take part in all of our future experiments.