

GREENHOUSE

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AMBER MEIJERS

**THE METAVERSE:
THE FUTURE OF
COMMERCE?**

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WEBSITE

An online version of this reading guide can be found at:

<https://i393158.hera.fhict.nl/8Folio/index.html>

This portfolio website contains working links and an overview of all products divided up into assessment categories.

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DEFINITIONS

Metaverse

A version of the internet that consists of virtual spaces where people can interact with one another, wherein all spaces are connected with one another, allowing seamless transition from one into the other using the same profile.

Web3.0

The next iteration of the internet that comes after the internet we know today. Many people believe that this iteration will be decentralized.

Blockchain Technology

A blockchain is a type of database wherein transactions of all types are stored. Once both parties approve of a transaction, it is turned into blocks of information which is verified by an independent third party - a process called mining.

Decentralization

The act of moving the activities of an organization away from a central authority or group of authorities. In the context of web3.0, you will often see this word relate to Cryptocurrency and how it moves the power away from banks.

Smart Contract

A coded agreement that is automatically put into motion when a certain condition is met. You can think of Marktplaats' 'Gelijk Oversteken' feature, but without the involvement of a third party. It is another example of decentralization.

Meta Horizons

Facebook or 'Meta's' new 3D virtual platform. Users can meet each other here and play or hang out together. It is similar to platforms such as Microsoft Mesh and games such as Roblox.

INTRODUCTION

Starting your last semester comes with a revelation; the end of your school career has just begun, and this means the end of many of the daily rituals that have become ingrained within you. It is the end of seeing my friends and teachers on campus every day, of going to the Jumbo to get some 'frikandel broodjes' and the end of gossiping with and about the other ICT branches.

It is, however, also a new chapter in my life, and I believe I am ready for that.

At Greenhouse expectations and pacing are high, but in the presence of a versatile team, I am able to apply the talents that I have spent the past five years perfecting, and I am flourishing.

I have documented the journey of my graduation in these pages, and I hope that you will enjoy exploring the future of commerce with me.

I believe that you shouldn't consider every single 3D game to be a part of the Metaverse. By stretching its definition too far, you muddy it. "

Expertinterview

THE PROJECT

SITUATION

**DESIGN A PROTOTYPE THAT
ALLOWS OUR COLLEAGUES
AT GREENHOUSE TO SEE THE
VALUE THAT THE METAVERSE
CAN BRING THEIR CLIENTS,
SO THAT WE CAN KEEP OUR
CLIENT'S COMMERCIAL
OPPORTUNITIES RELEVANT
AS WE MOVE TOWARDS AN
EVER MORE DIGITAL WORLD.**

One of the hottest trends of the past year is the 'metaverse'; the so-called next step in the evolution of the internet. In this iteration of the web 3D platforms, games and virtual worlds come together and everybody will only require one profile to access it all: be that to play Minecraft or to shop for underwear on eBay.

I was given the task to dive into this metaverse and research whether it is a viable solution for the implementation of the online shopping of the future. An often-made mistake when we move to a new medium is that we tend to use the techniques that worked well on established mediums: using radio advertisements with static images as the first TV ads is a great example of this. To prevent this mistake from being made here, my group and I have analysed current and past situations and came up with the following main question (below) and design challenge (left):

How can we introduce our colleagues to the commercial opportunities of the metaverse, so that we can keep our client's commercial opportunities relevant, as the future hurtles towards a virtual world?

As I am working on a solution that heavily involves the user experience of the employees of Greenhouse, the choice to use design thinking as the main research method seemed easily made. A complete analysis of the assignment, as well as a planning and overview of all the sub-questions, can be found in my [project document](#). The SCRUM-method will be employed to give consistent shape to the project, providing continuous sessions of [co-reflection](#) throughout the project.

PROJECT PHASES

DESIGN THINKING PROCESS

EMPATHISE

Before we can introduce our target audience to the metaverse, we must first gain an understanding of the subject and its possibilities ourselves. I began by conducting **library research**, and quickly came to the conclusion that the wishes and wants we have for a metaverse cannot be implemented in the next five to ten years with our current technology; our servers do not have the capacity to host the data every all-encompassing profile of every single person on earth, and our devices cannot synthesise a virtual world that is believable enough. Further research in combination with a **good, bad and best practices analysis** revealed that many companies make the mistake of trying to recreate existing solutions in 3D, something that is universally disliked by those who are shopping online; instead, our focus should lie with creating an engaging, convenient experience that stimulates customers.

A **competitive analysis** conducted by a groupmate outlined which companies are finding success with metaverse-concepts and how they do so. Companies that focus on personalisation and freedom, collaborate with other brands to create a sense of community, and use the metaverse as an extended platform to showcase new products, find themselves successful in capturing attention and having customers return to their virtual world.

With a better understanding of the metaverse, it was time to turn to our target audience; the employees of Greenhouse. I chose this target audience because Greenhouse employees (especially client leads) are the bridge between the new technologies that are studied in labs and our clients. I don't just want them to try and sell the idea of the metaverse - I want them to become ambassadors of this new technology, and for that they will need information.

After debriefing with my stakeholders, my assumption was that the target audience had little to no knowledge of the metaverse. With several interviews planned, I decided to put out a **survey** to gather a couple of quick and dirty quantitative statistics and opinions as inspiration for the interviews and to get an overview of the average Greenhouse employee. This survey showed that my assumption had been wrong; many employees are actually quite familiar with the metaverse, but regard the subject with a tentative or negative opinion.

Following this survey, my group organised a series of **expert interviews** with three knowledgeable individuals (one of which being the Director of Metaverse & Innovation at WPP) that would allow us to ask questions that are difficult to answer through research into such a new topic alone. These interviews did not only grant insightful perspectives on the future of commerce and the metaverse, but also gave valuable insights on the people that work at Greenhouse. I came to learn that the people who work here are data driven decision makers: they value results and good numbers above all. These statements were confirmed when we performed **interviews** with our colleagues to gain an insight into the problems they have with the metaverse; because the metaverse is such a new concept, many are sceptical and are quick to point at the poor performance of companies that have invested a lot of money into this new technology. On top of this, they find it hard to see the metaverse as anything but a gimmick right now, as most organisations present their metaverse concepts in the shape of colourful games.

I have processed the results of these interviews and surveys into a **persona** and **empathy map** to give my teammates at labs a solid overview of the people we are making this solution for.

DEFINE

Kicking off the define phase began with gathering all the problems that our users expressed in the empathise phase and creating a series of **user stories**. These user stories will bring structure to the project by clearly defining the wants and needs of our target audience, and provide a solid basis for creating a list of priorities for the project through the use of the MoSCoW method. Narrowing the scope of these user stories is accomplished by writing **requirements** - these requirements will allow me to share my user

stories with the group and ensure that they are correctly interpreted by everyone.

After defining our concept in the ideate phase, I went back and put together a **customer journey** to visualise the journey Greenhouse Employees will embark on, and how our solution will improve their lives - this customer journey will serve as the backbone for the plan Marloes and I will write up for the GroupM academy in our last weeks.

IDEATE, PROTOTYPE & TEST

Throughout the course of the project, my group went through several ideation phases. We were granted the opportunity to present small demos at a variety of different events throughout the course of the semester. For each of these experiences, we brainstormed ideas and built small prototypes to test with colleagues and clients alike. The overarching objective was to get a conversation started about the metaverse and get people acquainted with the various technologies and business opportunities within virtual worlds.

The **first proof of concept** was geared towards getting acquainted with a new environment for developing virtual content - Meta Horizons. I drafted a short story to give the experience a beginning and an end, and one of my teammates and myself would go on to build it in Meta Horizons - Meta's own environment for developing experiences. I tested the experience at a large event to get an understanding of the interest in VR, as well as to see how we could improve an experience. What I came to realise is that most people in our target audience have very little experience with VR and that they require a lot of guidance. I concluded that the experience should have a low threshold for engagement to remain user friendly.

Between demonstrations for companies, I coded a **proof of concept** to get acquainted with developing user interaction in a virtual environment. In this unity project users can draw on a whiteboard together, opening up the possibilities for collaborative work across vast distances. The target audience enjoyed engaging with this experience, and would go on to state that they see a future in VR as a collaborative work tool in an interview.

My software teammate coded the next proof of concept, which explored the possibilities for selling items in a 3D virtual environment by allowing users to pick them up and try them on their avatar. At this stage we were still heavily exploring just how shopping could look in the future, but came to understand more about the size and constraints of the world we were building. My testing showed that the experience couldn't be too large or people would end up getting lost. I also took note of the way participants were looking for each other in the virtual world, enjoying their interactions with one another.

With all of this knowledge gathered, we drafted our concept in a large, **multi-stage brainstorm**. It aims to solve most of the problems that Greenhouse employees have with the metaverse. Our initial choice fell on a virtual advent calendar that highlights one customer of Greenhouse every day. That day sees a new virtual world with meaningful interactions that cater to the employee's need for an experience that goes beyond a game, and shows them the opportunities the metaverse can bring them. This concept allowed for a variety of different solutions to be showcased, but I came to the realisation that there was a need for a more in-depth explanation.

Instead of providing a single experience, the results of **testing our POCs** lead me to realisation that we should change our approach and I revisited my customer journey. After a discussion with our stakeholders, I instead pushed for placing ourselves right on the cusp of the consideration phase of the employees customer journey by providing an all-in experience that covers the topic of commerce in the metaverse.

This experience will include an introduction to the metaverse with an interactive quiz, a demonstration and a high-quality video that showcases the true potential of advertising in the metaverse. Within this overarching concept, I will flesh out an example of non-intrusive takeover advertisement to stimulate our target audience. A full explanation of this concept can be found in my [concept book](#). I ended up drafting a [prototype video](#) as an aftermovie for one of the events we attended to bring this concept across.

I started the process of making my video with a [brainstorm](#) wherein I established what type of video material I would require that could contribute to having a positive discussion about the future of advertising. The decision fell upon the creation of four distinct examples of the takeover advertisement; two examples would encompass Greenhouse clients and two examples that involve international brands to give myself some creative wiggle room. I then went on to create [inspiration boards](#) for the four scenes so I could communicate my ideas to my team in our sprint review. Here I received the feedback that I should feel comfortable to use more overt imagery related to the brand in question, as it isn't clear which brand is linked to which scenes in all cases.

After a couple more small tweaks, I drafted a [storyboard](#) with a voiceover script for the entire video and tested it with a couple of employees to

ensure that the message I was trying to put across was understood, before I began sinking hundreds of hours into a video. Fortunately, all test subjects were able to understand the sketches, allowing me to begin working on the video itself. The environment in which I chose to do so is Unreal Engine 5, a powerful 3D graphic game development engine. The main reason I did so is because of Nanite, an engine included with UE5 that allows for highly detailed photographic source material to be placed into the scenes. Further explanation on this choice, as well as some snapshots I made while building my scenes can be found in my [Video Development document](#). I performed post-processing of all footage I shot in the engine in After Effects.

The big day of the [Metaverse Deepdive](#) arrived on January 5th. Organised in conjunction with the Creative Craft team, me and my teammate Marloes hosted the [interactive presentation quiz](#) she prepared, showcased my [video](#) and the [tutorial](#) our software teammate Stela made. Finally, we opened the floor to feedback and questions, which have been noted in the [testplan](#) and further down this document in the recommendations. The event itself proved to be a success: employees were excitedly discussing questions and answers amongst each other throughout the presentation, and came forward with questions and ideas for advertisements in a virtual environment on their own afterwards.



CONCLUSION

This project sought to answer the question:

“How can we introduce our colleagues to the commercial opportunities of the metaverse, so that we can keep our client’s commercial opportunities relevant, as the future hurtles towards a virtual world?”

The answer is providing solid experiences that allow employees to dig deep into a subject, without committing too strongly to the limitations of future technologies. First and foremost, there is a great need to understand the subject; because there is a lot of false and conflicting information out there, it is

important to do away with preconceptions and if need be, establish a definition of your own. Doing this allowed me to paint a scene that gives context to my concepts and ideas. Continually throwing small, loosely related demonstrations and powerpoints with broad definitions at employees only furthers misconceptions, and these lower quality experiences should be avoided in favour of creating a meaningful deep dive that truly stimulates the attendees. Furthermore, this deep dive should not be a one-time thing; my thoughts on this will be described further below.



Recommendations

It would be a shame to leave this deep dive as a single instance. As such, after the hand-in date for this portfolio, I will be sitting down with the official GroupM academy to discuss the possibilities for making this a yearly occurrence. This will include me and my teammates training employees to continue hosting this type of experience.

During this internship, I have managed to work on one concept (my takeover advertisements) to provide an example. Further examples can and should be worked out as employees begin sharing their own ideas, as well as to stay up to date with current developments.

On that topic, the deep dive must be adjusted to include the latest developments surrounding the meta-verse - or similar virtual environments - and must continue to include both examples of success stories and failures; as with all new technologies, it is important to learn from people who are pioneering these technologies. I am of the belief that for this step (and the steps after it) new students of Greenhouse Labs could prove to be valuable assets in coordinating with and supporting Greenhouse employees.

Once the deep dive has been established properly in the GroupM academy, a best-case scenario would see the next steps of my customer journey - once employees have become acquainted with the landscape, workshops should be organised to brainstorm and concept ideas. Depending on the advancement of technologies, these concepts could also be worked out into proper demonstrations. After testing and discussing them with other employees, these concepts could be presented to clients. This final step sees employees transformed from sceptics to ambassadors of new technologies, allowing Greenhouse employees to support clients in their efforts to keep their commercial options relevant in an ever-changing digital landscape.

PROOF OF COMPETENCIES

TABLES

I would like to reiterate that I have an overview of my competencies in my portfolio website as well, which can be found [here](#).

Assessment Dimension	Proof
Knowledge & Insight	Project Document Reading Guide
Analysis	Benchmarking the Metaverse Good, Bad & Best Practices Library Research Project Document Survey Expert Interview Empathy Map Customer Journey Interview Persona Test Report
Advise	Co-Reflection Project Document Reading Guide Customer Journey User Stories & Requirements
Design	Brainstorm Brainstorm II Finished Product Inspiration Board Storyboarding Conceptbook Test Report User Stories Video Process Documentation
Realisation	Finished Product Proof of Concept I Proof of Concept II Video Process Documentation
Management & Control	Co-Reflection Finished Product Project Document Github Video Process Documentation

PROOF OF COMPETENCIES

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Assessment Dimension	Proof
Judgement	Benchmarking the Metaverse Co-Reflection Peer Feedback Project Document User Stories Survey Expert Interview Interview Brainstorm
Learning Ability	Peer Feedback Co-Reflection Video Process Documentation
Communication	Project Document Brainstorm Brainstorm II Co-Reflection Conceptbook

PERSONAL LEARNING GOALS



Interpersonal Skills - Assertiveness

My semester reflection already covers a lot of my progress in regards to becoming more assertive. I have worked hard on my craft and it felt good to see that my work was appreciated, and even admired in this semester. I am less afraid to defend the choices I have made and the ideas which I believe in.

Overall, I believe that speaking up about about my opinions and sticking to my guns influenced this project postively, as it increased the overall quality of the final product(s), and I am of the belief that it improved the way our coaches regarded the project as the subjects I pushed for were related to accountability and using our research as a solid basis for our concept.



Networking

While I found myself intimidated by the prospect of building up new connections with professionals, I am pleased with the ease at which I connected with both fellow students and employees at the company. Through this internet I have even managed to link up with former Labs students, who were more than willing to provide help and feedback when called upon.

Furthermore, the various company parties, trips and demonstrations gave me the opportunity to connect with colleagues in different departments, and also with clients.



Media Innovation Skills

This semester pushed my conceptions of Media Design in the advertising industry to a new levels, forcing me to move my boundaries with them. While I have worked in an advertising company in a previous semester, I couldn't apply all of that knowledge on this project and I instead learned new techniques and perspectives. By interviewing and working closely with experts in the field of innovative technologies, I have gained a better understanding of what to look out for when studying trends, and trained to keep my mind more open to the concept of future technology, rather than only focussing on what is and isn't possible.



SEMESTER REFLECTION

The first couple of weeks of this semester, I was still getting used to the company culture and the people I would be working with. Interestingly, most of the workshops we were given in these first weeks have been geared towards getting to know myself and the people I would be working with.

As our research questions began to take shape, so did the differences between what myself and my teammates were interested in working on (and what we would have to work on) become apparent. While my teammate Marloes wanted to practise with being the SCRUM master, I began to settle into a product owner-esque role, where I continually safeguarded our research from the people in the team who wished to press on without backing up our choices. It is here that I practised with becoming more assertive, as I did not feel comfortable standing by and allowing this project to fail.

This trend would continue into the latter half of the project as well, where I pushed others to properly explain their decisions so that we may defend our claims in sprint reviews. Often, I would find myself met with resistance, but in most instances we managed to smooth things over by explaining what our individual needs were.

I still struggled with letting go of the idea that I am responsible for other people's work, especially when I noticed one of my teammates that studies in the same course as I slacking off, but I reaffirmed to myself and my other group mates that everyone is responsible for their own process, and that so long as they contributed to the overall product that we would deliver as a group, I would not get involved.

Looking back on the semester now, I feel that I readily took the opportunities to learn new things; I attended a variety of Deep Dive sessions on social media platforms and advertising, and signed up for an official WPP course to learn Unreal Engine 5 (something that came in handy later in my project).

Finally there is the eternal struggle of asking for feedback and keeping my team updated - Having a personal meeting every two weeks beside the weekly sprint review also greatly helped me touch base and put things into perspective for myself. I have noticed that while I am more comfortable now with actively seeking group feedback, I still find one-on-one feedback that takes place face-to-face a little intimidating. Using slack as a medium to communicate with my coaches and post progress footage helped mediate this problem slightly.

In previous semesters, I received feedback that indicated I could share my progress a little more with teammates. While this team was a little less readily available to continually share progress, I endeavoured to update them via Whatsapp or Slack every morning and afternoon about my progress of the day. I may not have always received a response, but I rest easy in the knowledge that I reached out and kept everybody updated.

All-in-all, I am pleased with the progress I have made in this semester, and while a little bit of residual fear may exist about missing those days where I see my friends in class every day and we go to the Jumbo for a frkandelbroodje, I look back with fondness upon this chapter of my life.

..And for that I must thank you.