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**THE IMPACT OF METAVERSE  
ON THE FASHION BUSINESS**

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Dissertation presented to IADE - Faculty of Design, Technology and Communication of the European University, to fulfill the requirements necessary to obtain the degree of Master in Design Management carried out under the scientific guidance of Dr. Filipa Isabel de Almeida Fernandes Vilaça, Invited Assistant Professor of IADE - Faculty of Design, Technology and Communication of the European University, and scientific co-supervision of Dr. Ana Isabel Canavarro, Adjunct Professor at IPAM Porto – Portuguese Institute of Marketing Administration of Porto.



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**Keywords**

Metaverse, Fashion, Management, Strategy, Virtual.

**Abstract**

The current development of brands and businesses provides for new digital and virtual structures, in which the metaverse plays a disruptive and essential role to them. In this sense, it is increasingly urgent to understand this concept, how brands can ally themselves with this virtual space and how they can gain from it. The knowledge gap in this area is very vast. It is something recent, in development and still not all companies consider this virtual channel.

Through a thematic literature review and a focus group with seven participants from different areas and countries, this research aims to find how metaverse impacts the fashion business, on awareness, engagement and profit levels. It also intends to find if there're any key resources fashion brands need to enter and develop inside the metaverse.

The results indicate that the metaverse has a positive impact on the fashion business, increasing brand awareness and engagement, and several resources are needed for them to succeed. Some say it is the tomorrow of the Internet, but the Metaverse is still far from developed. It will undoubtedly be the future, but there are still many unanswered questions.

**Palavras-chave**

Metaverso, Moda, Gestão, Estratégia, Virtual.

**Resumo**

O desenvolvimento atual de marcas e negócios prevê novas estruturas digitais e virtuais, nas quais o metaverso desempenha um papel disruptivo e essencial para elas. Nesse sentido, é cada vez mais urgente entender este conceito, como as marcas se podem aliar a este espaço virtual e como podem ganhar com isso. A lacuna de conhecimento nesta área é muito grande. É algo recente, em desenvolvimento e ainda nem todas as empresas consideram este canal virtual.

Através de uma revisão temática da literatura e de um grupo focal com sete participantes de diferentes áreas e países, esta investigação pretende descobrir como o metaverso impacta o negócio da moda, nos níveis de consciencialização, envolvimento e lucro. Também pretende descobrir se há recursos-chave que as marcas de moda precisam para entrar e se desenvolver dentro do metaverso.

Os resultados indicam que o metaverso tem um impacto positivo no negócio da moda, aumentando o reconhecimento e o envolvimento de marca, e vários recursos são necessários para que tenham sucesso. Alguns dizem que é o amanhã da Internet, mas o Metaverso ainda está longe de ser desenvolvido. Será, sem dúvida, o futuro, mas ainda há muitas perguntas sem resposta.

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## Glossary & Abbreviations

<b>(AI) Artificial Intelligence</b>	The study of how to produce machines that have some of the qualities that the human mind has, such as the ability to understand language, recognize pictures, solve problems, and learn. (Cambridge Dictionary)
<b>(AR) Augmented Reality</b>	Images produced by a computer and used together with a view of the real world. (Cambridge Dictionary)
<b>Avatars</b>	An image that represents you in online games, chat rooms, etc. and that you can move around the screen. (Cambridge Dictionary)
<b>Blockchain</b>	A system used to make a digital record of all the occasions a cryptocurrency (= a digital currency such as bitcoin) is bought or sold, and that is constantly growing as more blocks are added. (Cambridge Dictionary)
<b>Brand Awareness</b>	Knowledge of the name of a company and the products it sells. (Cambridge Dictionary)
<b>Brand Equity</b>	The value of a particular brand for the company that makes it. (Cambridge Dictionary)
<b>(BoF) Business of Fashion</b>	The Business of Fashion is an online magazine and website dedicated to the world of fashion. (fashionabc)
<b>(B2B) Business to Business</b>	Describe or involve business arrangements or trade between different businesses, rather than between businesses and the general public. (Cambridge Dictionary)
<b>(B2C) Business to Consumer</b>	Describe or involve the sale of goods or services directly to customers for their own use, rather than to businesses. (Cambridge Dictionary)
<b>(CAQDAS) Computer Assisted Qualitative Data Analysis Software</b>	Is a term that refers to a category of computer programs that have been developed specifically to aid researchers in completing a range of tasks associated with analysis and interpretation of qualitative data. (Sage Research Methods)

<b>(C2B) Consumer to Business</b>	Is a type of e-commerce in which consumers make their products and services available online for companies to bid on and purchase. (TechTarget)
<b>(C2C) Consumer to Consumer</b>	Relating to the buying and selling of products, services, and information between individual consumers, especially over the internet. (Cambridge Dictionary)
<b>Cryptocurrency</b>	A digital currency produced by a public network, rather than any government, that uses cryptography to make sure payments are sent and received safely. (Cambridge Dictionary)
<b>Decentralization</b>	The act or process of decentralizing an organization or government (= moving control from a single place to several smaller ones). (Cambridge Dictionary)
<b>Digital Twin</b>	A digital twin is a virtual model designed to accurately reflect a physical object. (IBM)
<b>Digital Wallet</b>	A way of storing a user's digital cash and online shopping information. (Cambridge Dictionary)
<b>(D2C) Direct to Consumer</b>	Is a type of business-to-consumer (B2C) retail sales strategy where a business will build, market, sell and ship a product directly to the customer. (TechTarget)
<b>(ER) Extended Reality</b>	An immersive experience involving interactions with the real world, virtual reality, augmented reality, as well as other machines or computers adding content to the experience. (IGI Global)
<b>Gamification</b>	The practice of making activities more like games in order to make them more interesting or enjoyable. (Cambridge Dictionary)
<b>(HCI) Human Computer Interaction</b>	A multidisciplinary field of study focusing on the design of computer technology and, in particular, the interaction between humans (the users) and computers. (Interaction Design Foundation)
<b>Immersive Experience</b>	A game, performance, work of art, etc. that seems to surround the player or viewer, so they feel totally involved in the experience, often by using three-dimensional computer images. (Oxford Learner's Dictionaries)

**Machine Learning** The use and development of computer systems that are able to learn and adapt without following explicit instructions, by using algorithms and statistical models to analyse and draw inferences from patterns in data. (Oxford Language)

**Metaverse** The internet considered as an imaginary area without limits where you can meet people in virtual reality (= images and sounds, produced by a computer, that seem to represent a real place or situation). (Cambridge Dictionary)

**(MR) Mixed Reality** A medium consisting of immersive computer-generated environments in which elements of a physical and virtual environment are combined. (Oxford Language)

**(NFT) Non-Fungible Tokens** A unique unit of data (= the only one existing of its type) that links to a particular piece of digital art, music, video, etc. and that can be bought and sold. (Cambridge Dictionary)

**Omnichannel** Used to refer to a way of selling products that is the same and equally good for the customer whether they are buying from a computer, a mobile phone app, etc., or in a physical shop. (Cambridge Dictionary)

**Profit** Money that is earned in trade or business after paying the costs of producing and selling goods and services. (Cambridge Dictionary)

**Retail** The activity of selling goods to the public, usually in shops. (Cambridge Dictionary)

**(IoT) The Internet of Things** Objects with computing devices in them that are able to connect to each other and exchange data using the internet. (Cambridge Dictionary)

**Trend** A general development or change in a situation or in the way that people are behaving. (Cambridge Dictionary)

**(VR) Virtual Reality** A set of images and sounds, produced by a computer, that seem to represent a place or a situation that a person can take part in. (Cambridge Dictionary)

**(VW) Virtual World** Images, sounds, and text used by a computer to create a world where people can communicate with each other, play games, and pretend to live another life. (Oxford Learner' Dictionary)

**(WWW) World Wide Web** The system of connected documents on the internet, usually with pictures, video, and sound, that can be searched for information about a particular subject. (Cambridge Dictionary)

# 1. Introduction

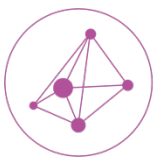
## 1.1. Problem Framework

Fashion brands have been betting on digital strategies in order to develop and engage with their audience. But in recent years, the metaverse has been emerging and gaining a lot of attention and hype not only from companies but also from consumers. Following the rise of gamification, virtual worlds have shown great diversity in their use, which can prove to be an efficient and necessary channel for today's brands.

This research was conducted with the purpose of discovering if the metaverse might have an impact on the fashion business in terms of awareness, engagement and profit. As an additional matter, this research intends to find out if fashion brands need special resources to enter the metaverse, and if so, which ones.

### 1.1.1. Key Drivers

The world has been changing faster than ever since the advent of the Internet and continues to do so in today's virtual era. New technologies arise every day, which represents new opportunities for businesses and their strategies. With this thought, this document presents the below key drivers that define the main reasons for the development of this research and intends to sum up today's rising challenges.

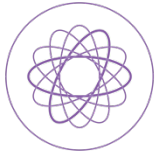


**Decentralized Culture** | Nowadays, power and control in its various meanings are mainly distributed among several individuals or teams.



**Gamification** | The gaming world is getting even more hype these days, being used in nongame environments as business' strategies, to increase engagement and interest.





**Interconnectivity** | Since the advent of the Internet, things have been more and more connected, which creates space for a horizon of possibilities and opportunities for companies and individuals.



**Sense of Community** | Specially with the climate change and 2020 pandemic, people are investing in communities and their belonging feeling towards brands, businesses, or movements.



**Experience over Products** | Related with the gamification rise, consumers are prioritizing experience and immersion with brand's activation processes. This allows consumers to feel emotions towards the experience itself, which will reflect on the respective brand.

## 1.2. Research Design

### 1.2.1. Research Objectives

In this research, the main objective is to understand the impact of the metaverse in the fashion business, using brand awareness, brand engagement and profitability as measurement units. If it proves that this new virtual channel is able to impact the fashion business, then it's necessary to understand how it impacts, in order to provide that knowledge to businesses for a future-forward strategy. Finally, but not least, this research intends to define if key resources are needed for fashion brands entering the metaverse, and if so, which ones. Through the methodology adopted (introduced in front), the author intends to achieve these goals.

### **1.2.2. Research Questions & Hypotheses**

While designing this research program, some questions emerged and have been changing along this path. Taking in consideration this area of research, the main question of this research is:

**Is the metaverse providing an impact for the fashion business?**

Following above's line of thought, the secondary research questions defined along this journey and through the literature review, and whose answers are sought throughout the development of this document, are:

- a) Is metaverse increasing brand awareness for fashion brands?
- b) Is metaverse increasing brand engagement for fashion brands?
- c) Is metaverse generating profit for fashion brands?
- d) Are there any specific resources a fashion brand needs in order to enter the metaverse? If so, which ones?

Then, following these questions, some hypotheses were drawn, and those are:

- A) The metaverse is providing a positive impact for the fashion business.
- B) The metaverse is generating awareness increase for fashion brands.
- C) The metaverse is generating engagement increase for fashion brands.
- D) The metaverse is generating profit for fashion brands.
- E) There are specific resources a fashion brand needs in order to enter the metaverse.

### **1.2.3. Methodology**

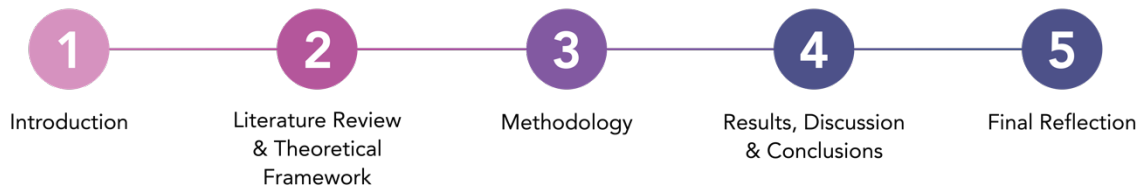
The methodology adopted in this research was qualitative. A thematic literature review and a focus group analysis were conducted in order to achieve this research's objectives. As Sofaer (2002) said "The use of rigorous qualitative research methods can

enhance the development of quality measures, the development and dissemination of comparative quality reports, as well as quality improvement efforts.”

With this thought, and although the knowledge gap in this area is very vast, the researcher was able to collect information based on peer-reviewed literature and moderate a focus group with seven participants within these areas of research, which provided conclusions that will be presented at the end of this document. The literature review will be presented on chapter 2, and the focus group data collection, analysis, results presentation and discussion in chapters 3 and 4, as it will be shown next.

#### 1.2.4. Thesis Outline

This document is organized in four main chapters, which main contents are presented on Figure 1.



**Figure 1 | Thesis Outline** (author, 2023)

This current chapter, named Introduction, stands for the background context that precedes the subject researched. It deals with informative factors about the research, regarding the problem framework, research drivers, objectives, questions and hypotheses, methodology (presented above), and study limitations.

The second chapter is named Literature Review and Theoretical Framework, which contains the peer-reviewed information regarding to this research and area of research, organized by topics.

After this, the methodology adopted is presented, on chapter three, as well as its analysis. The results presentation and consequent discussion is included in the fourth chapter.

Finally, this document will end with a fifth chapter, called Conclusion, where it will be presented the final thoughts gathering all the information collected along the way, as well as some ideas that should be taking in consideration in future researches.

### **1.3. Study Limitations**

In this research area, as told before, the knowledge gap is vast, which might reflect in little scientific information and would weigh in this research's results.

Another factor taking in consideration is the need of professionals in the study field to complete the research. Since it's still developing, metaverse might have few experts and, because of that, few ideas and experiences. Besides this, some professionals will probably be outside the investigator's access zone, which will make it difficult to gather good contributions in terms of quantity, quality and relevance. Considering this, the focus group can be biased because of participants' experiences, professional fields, and personal opinions.

## **2. Literature Review & Theoretical Framework**

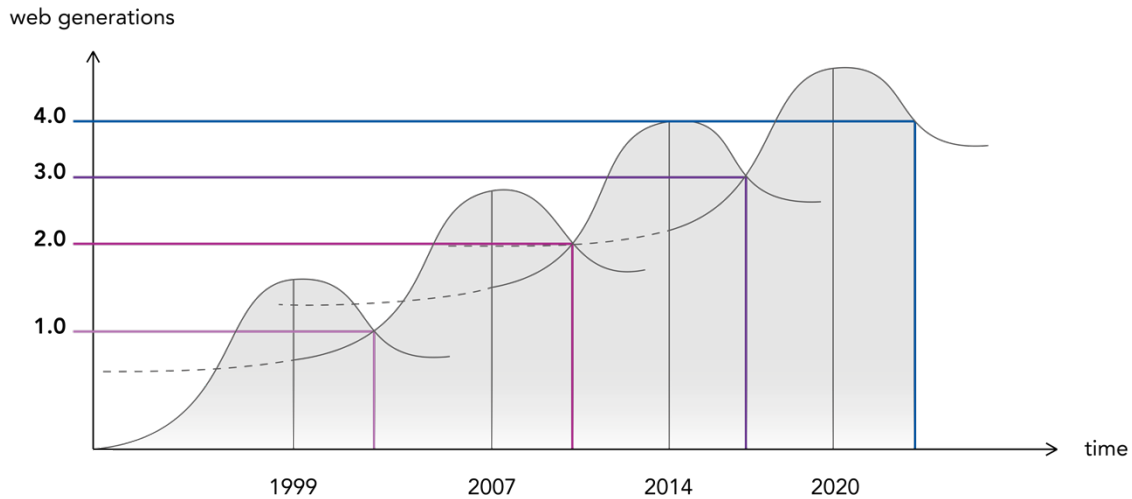
This second chapter will present the literature review since the birth of Web 3.0, the awakening of virtual worlds, the metaverse and its main characteristics, to the fashion business, already inserted in this world, its goals, business perspectives and consumers' experience.

The literature research was made through B-on, Research Gate, Science Direct, Google Scholar and Elicit platforms, using the following keywords: Metaverse, Fashion Business, Management, Strategy, Virtual, Virtual Reality (VR), Augmented Reality (AR), Web 3.0, Avatar, Experience, Retail, Marketing, Virtual World, Roblox, Decentraland, Nikeland, RTFKT, Gamification, Community, Impact, Profitability, Brand Awareness, Brand Engagement, Non-Fungible Token (NFT), Blockchain, Cryptocurrency, Trends. It wasn't applied any chronological limitation.

### **2.1. Metaverse**

The World Wide Web has been evolving since it first appeared, so it wasn't always as people accessed it now. In its first generation, the Web 1.0, users were able to read and share information – the so-called Web of Information Connections. Then, it became Web 2.0, and it was possible to write and communicate between users – this one was the Web of People Connections. The third, and current generation, is Web 3.0 – the Web of Knowledge Connections –, where users can surf through a worldwide database and its high data richness. Some researchers point to Web 4.0 – not yet defined – but Prasad et al. (2013) calls it Symbiotic Web, meaning a “interaction between humans and machines in symbiosis” (Nath et al., 2014; Prasad et al., 2013).

In the next page, is a graphic that represents Web's development through time (Figure 2).



**Figure 2 |** *The development of the Web through identifiable generations* (adapted from Korhonen & Karhu, 2011, p. 8)

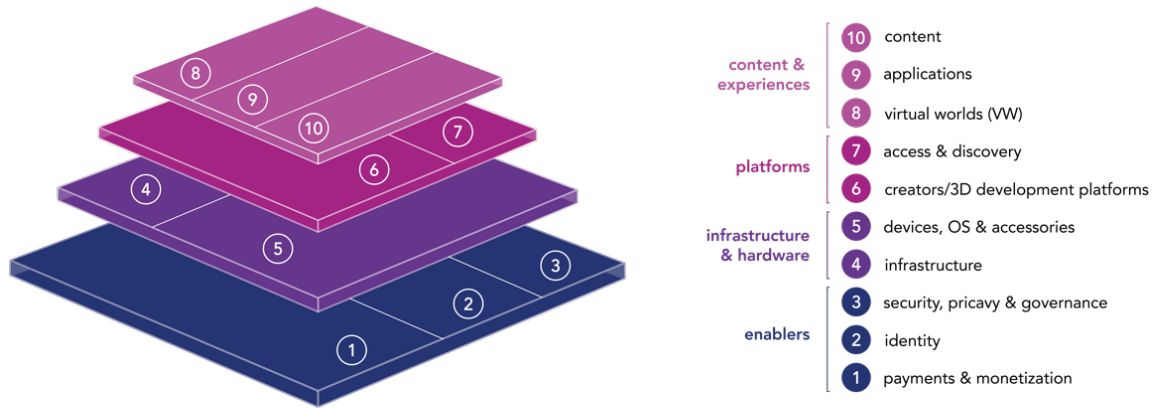
### **But why are we talking about Web 3.0? Are Web 3.0 and metaverse the same?**

Patrizio (2022) compared these concepts to a car and a road, respectively, explaining that the Web 3.0 is the means that leads to the metaverse.

With this thought, and especially during the pandemic, the virtual world has been forced to replace the physical one, accelerating its development and consequent adoption by people (McKinsey & Company, 2022).

In 2021, Facebook’s CEO Marc Zuckerberg changed the group's name to Meta, heralding the arrival of the metaverse era (Kim, 2021). The Metaverse – with capital “M” – described by Zuckerberg is yet to be created, but it’s coming sooner or later. This metaverse involves several activities carried out in deep immersion in the virtual world, such as gaming, working, partying, shopping as well as socializing among friends and colleagues. Human Computer Interaction (HCI) has been highly helpful when it comes to democratizing consumer’s accessibility and equality while immersing in all these activities in the metaverse (Duan et al., 2021).

McKinsey & Company (2022) divided the metaverse into its technical components, to simplify it and understand everything that encompasses it, as showed in Figure 3.



**Figure 3 | Today's ten layers of the metaverse** (adapted from McKinsey & Company's Value Creation in the Metaverse Report, 2022)

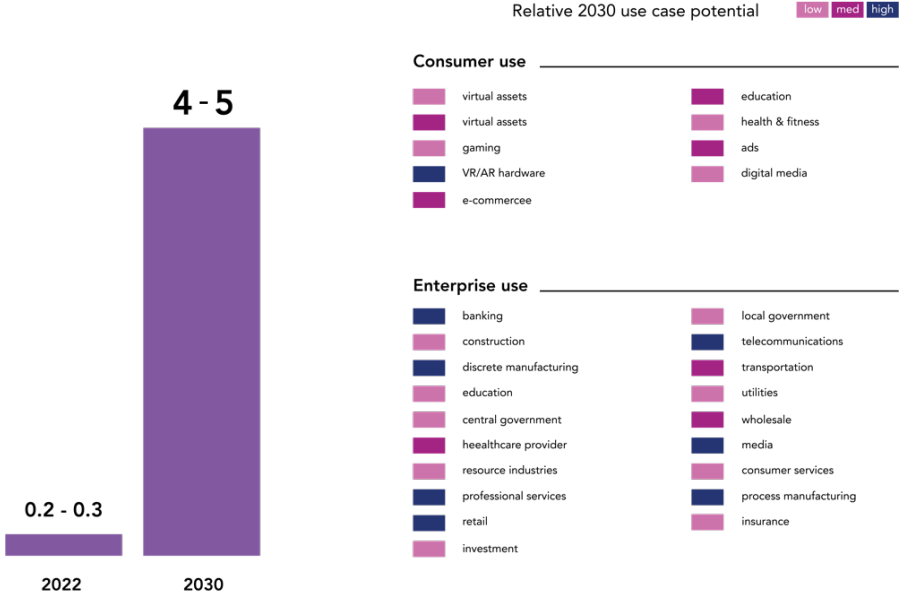
As Tayal et. al (2022) said, immersive social engagement between users and businesses is one of the main advantages of the virtual world, which allows senses and emotions between them (deepened ahead). George et al. (2021) called this changed New Reality, where people will live differently. But like all types of technology, metaverse can be easily used to obtain negative effects as it will be discussed in the subchapter Technological and Economical Issues.

A lot of companies and celebrities are already using metaverse's platforms, especially for their marketing strategy, being Microsoft, Coca-Cola, Epic Games, Beyonce and Lady Gaga some examples. Besides this, the metaverse is also being used as a social network strategy while creating communities (Bushell, 2022).

Aside from a marketing point of view, metaverse can help simulate difficult scenarios and contexts as well as replace the usual environment, which is something hard to do in the physical world. This can be an asset for training, education, marketing, and engineering, to name a few. With these features, businesses can upgrade their

functions, operations capacities, strategies and, therefore, profitability (Dick, 2021, cited in Dwivedi et al., 2022).

Figure 4 (in the next page) presents a McKinsey & Company’s (2022) visual framework with the potential impact that the metaverse will cause on consumers and companies in 2030.



**Figure 4 | Metaverse impact potential by 2030, \$ trillion** (adapted from McKinsey & Company’s Value Creation in the Metaverse Report, 2022)

**2.1.1. History**

The term *metaverse* first appeared in 1992 in author Neal Stephenson's scientific fiction book, *Snow Crash*. It meant “a world where humans as avatars interact with each other and with software agents in a three-dimensional space that reflects the real world” (Stephenson, 1992).

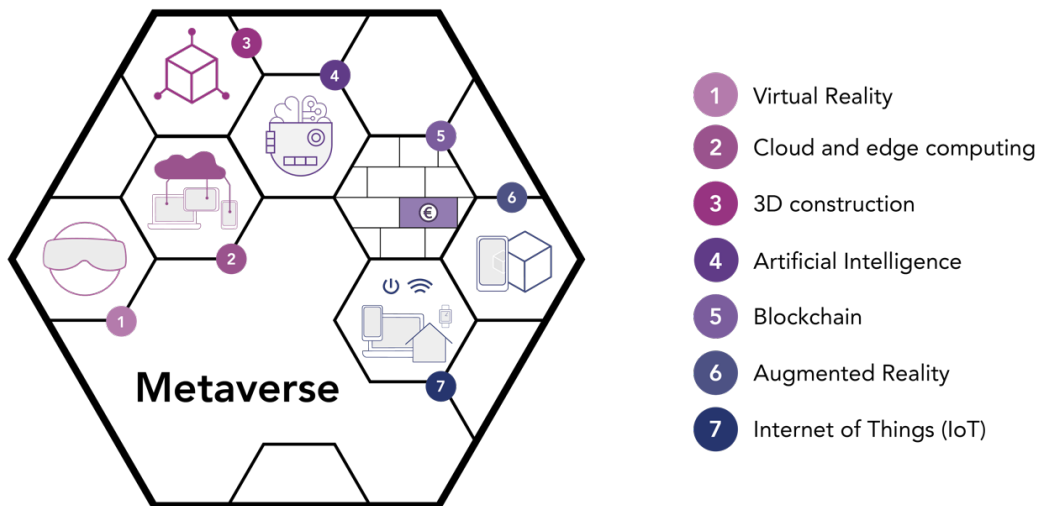
Nowadays, it stands for a virtual three-dimensional world that tries to replicate reality through digital devices, ruled by avatars who engage in several daily basis activities such as politics, economy, culture and social. This world has collective and individual space and resorts to high fidelity technology, such as Extended Reality (XR), Virtual Reality



(VR), Augmented Reality (AR) and Mixed Reality (MR) – which will be presented later – in order to create an immersive experience for the user (Park & Kim, 2022).

Although this term appeared a long ago, in the last few years it has been increasing its impact. Google Trends shows users have been searching for this concept widely since 2021, especially because Facebook Group’s name change (Kim, 2021).

Two factors were crucial for creating this metaverse’s hype. First one was the pandemic, already pointed out in the previous topic, and the second one can be defined by the technological advances (Figure 5) that have been making it a possibility (Xu et al., 2022). This part will be discussed ahead.



**Figure 5** | *A graphical representation of the technological advances allowing the Metaverse (adapted from Al-Ghaili et al., 2022)*

### 2.1.2. Definition

Even though the metaverse doesn’t exist as sold by Zuckerberg, the idea is to be a virtual platform where users can do everything they do in the real world, using an avatar to represent themselves (Breiter & Siegfried, 2022).

There are several possible descriptions of the metaverse, and several authors, but this research will consider the one defined by Matthew Ball, ex-head of strategy for Amazon Studios and co-founder of Ball Metaverse Research Partners:

*“The Metaverse is a massively scaled and interoperable network of real-time rendered 3D virtual worlds which can be experienced synchronously and persistently by an effectively unlimited number of users with an individual sense of presence and with continuity of data, such as identity, history, entitlements, objects, communications, and payments”.*

(Ball, 2022, p. 49)

Being such a recent concept, and considering that there are several definitions, some limits should be drawn. Tim Sweeney (Epic Games’ founder), as well as Matthew Ball, believes the Metaverse should be decentralized, which means it should not be controlled by one place or one entity, but several (Seidel et al., 2022).

### **2.1.3. Technological & Economical Issues**

Such life-change vision can’t be developed without the proper technology, which needs several resources in order to grow and evolve. That being the case, it’s acknowledged that technology and economy are closely related when it comes to innovation (Steenhuis & De Bruijn, 2012).

Some unusual tech terms have appeared alongside Web 3.0 and now the metaverse, which makes it difficult for some to navigate in it (Vavruška et al., 2022).

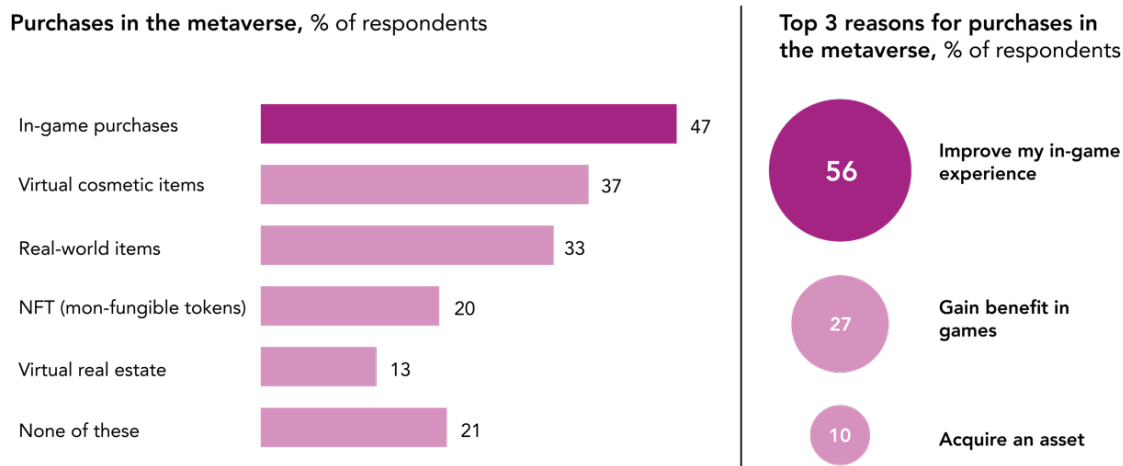
Those terms aren’t mainstream yet, which is why they need to be well explained as well as well developed. For graphic purposes, 3D rendering is a must-have in these worlds, as well as centralized cloud-based approaches for it. Interoperability, ultra-low latency, security and data privacy issues are some examples that need to be deep explored in the future (Dhelim et al., 2022).

Another important idea is that metaverse is not – yet – available to everyone, although it has been defined as something democratized and accessible to anyone (Ball, 2022).

Hardware (head and hand devices) and software’s (object, sound, scene recognition, motion, render) creation and improvement requires a strong economic base and this is still an obstacle when it comes to metaverse’s technological innovation (Park & Kim, 2022).

Virtual commerce resembles e-commerce when it comes to its product’s displays and payment method, but it adds the sense of immersion in environmental spaces and activities while purchasing something, says Shen et al. (2021).

Commerce gains another level when it happens during a virtual experience and users are already facing it (Figure 6).



**Figure 6 | Top 3 reasons for purchases in the metaverse** (adapted from McKinsey & Company’s Value Creation in the Metaverse Report, 2022)

Although the economic system in the metaverse is virtual, it’s still connected to the physical one. This synchronization makes possible economic transactions between physical money and cryptocurrencies, which will be discussed later (Xu et al., 2022).

But because life is not a bed of roses, and as George et. al said “the metaverse ensures a hopeful full future for businesses, but certain challenges are unavoidable, and businesses must prevail along the path” (2021, p. 8), which alerts for numerous possible

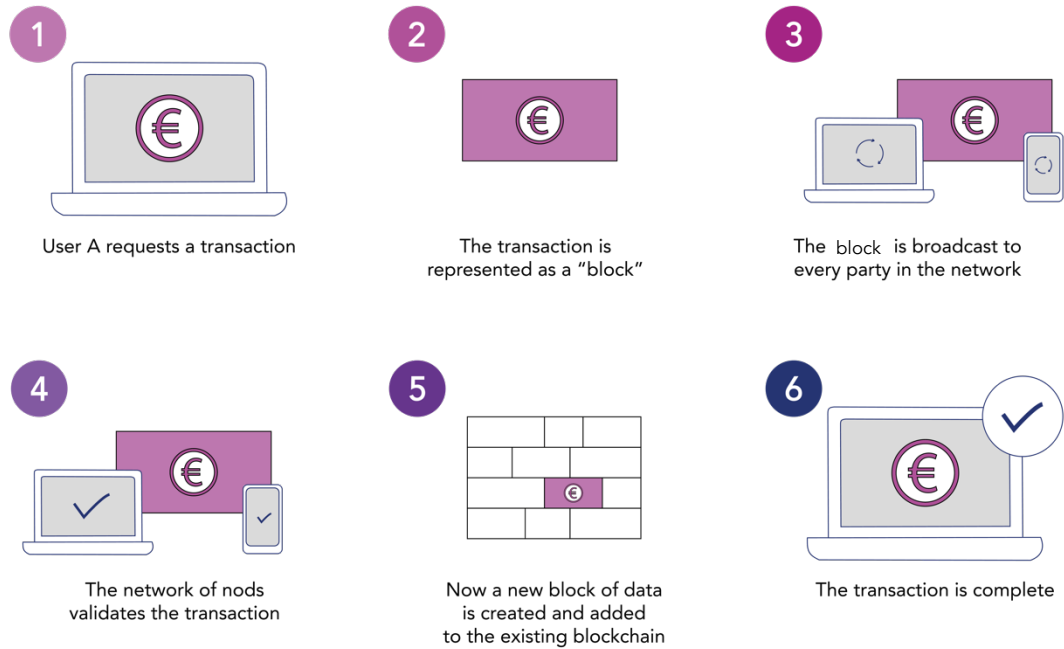
issues that may materialize in the follow-up. This concerns security and data privacy, internet addiction disorder and next isolation, mental illnesses, sexual harassment, and continuous manipulation - all already difficult to protect in the digital era (Breiter et al., 2022).

#### **2.1.3.1. Blockchain & Cryptocurrencies in the Metaverse**

When it comes to finances, people are always aware, and that's the reason why blockchain has been getting a lot of attention. Without an intermediary or a bank, it offers secure transactions and manages user's money by storing it in a chain of blocks that keeps growing whenever new blocks are add to it (Figure 7). It's a decentralized technology that enables a better cost and efficiency when used in online payments or digital assets (Zheng et al., 2017).

The blockchain is peer-to-peer, since it's decentralized, and its transactions are verified and encrypted by hashing algorithm and its already accepted by some companies (Bindhu, 2023).

Another thing drawing attention is cryptocurrencies – digital or virtual money used as a medium to a digital transaction, used in a similar way as physical coins (Bindhu, 2023). There are several cryptocurrencies, being Bitcoin the most known. Digital coins shouldn't be confused with tokens (NFT), which will be presented in this document later.



**Figure 7 |** *How Blockchain Technology works* (adapted from Hassan et al., 2022)

### 2.1.3.2. Immersive Technologies

Although it has been softly referred along this document, it's time for a general overlook into these emerging technologies that, together, help create and develop this envisioned virtual world (Breiter & Siegfried, 2022).

Virtual reality consists in a 3D digital space completely out of reality where the user can choose the environment, decade, space or activity he wants to be in. This can be experienced through the VR glasses, which some companies already sell. For example, Meta Group, which has been betting in this technology, created its "Oculus" and is currently the biggest seller of VR hardware and software (Breiter & Siegfried, 2022). Nowadays, this equipment is still a must-have when it comes to entering the metaverse.

VR is essential when it comes to making the user feel he's inside the virtual world. This is where digital twins come to life: a virtual 3D avatar, that resembles the user in size and features, helping him when it comes to buy something to wear, for example, in

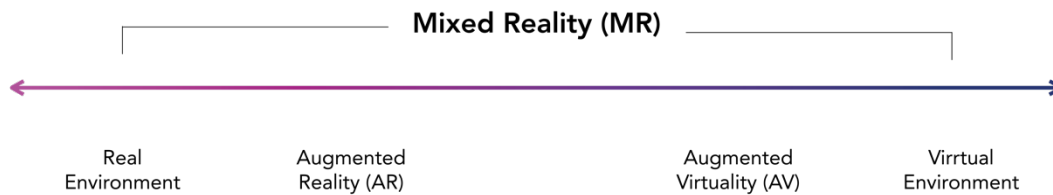
a metaverse platform. This way, the user's avatar, in a virtual fitting room, wears the product – called digital clothing – in different sizes and chooses the option that fits better. With this digitalization technique, users can order the product with a better understanding of its characteristics. As it will be discussed after in the Virtual Retail topic, this will improve fashion businesses' online operations in various ways (Cobben, 2022).

Augmented reality uses human computer interaction to connect the virtual environment with the one we live in using digital devices like smartphones to create projections of products, avatars or filters (Rojahn, 2017, cited in Harba, 2019). Some examples of this technology are “Google Glass” and Instagram's filters.

Amisha et al. (2019, p. 2328) described artificial intelligence as the use of computers and technology to simulate intelligent behaviour and critical thinking comparable to a human being. This complex technology with machine learning, learning systems and coding detection (which will be used in this research, in the focus group's analysis) is being used to help many areas such as medicine, fraud detection and retail, which will lead to where machines will perform more difficult and repeated functions in order to give humans more time for thinking tasks (Lomas et al., 2021).

On one hand, Milgram and Kishino (1994, cited in Çöltekin et al., 2020) defined mixed reality as “a superclass of visual displays consisting of both AR and AV (augmented virtuality)”, where it enables the merge between these two technologies (Figure 8). On the other hand, mixed reality isn't accepted as a technology, but as an evolving concept that must be studied and defined (Speicher et al., 2019). Despite this, MR is already in usage, and it can be found in literature near VR and AR concepts.

Last, but not least, extended reality has been commonly used to refer to these technologies discussed above (VR, AR and MR) as a group, or as an umbrella, as named by Çöltekin et al. (2020).



**Figure 8 | *Mixed Reality definition*** (adapted from Milgram and Kishino, 1994, in Çöltekin et al., 2020)

### 2.1.3.3. Metaverse Platforms, Avatars & Gamification

Although some refer to the metaverse as a singular word (Ball, 2022), being Metaverse – capital M – the virtual world where all metaverse’s platforms are; some believe it should be mentioned in plural, defending the existence of various metaverses. Either way, there are several platforms where users can perform all activities available also in the real world. The most known are gaming platforms, where users take their avatars (already explained in the previous subchapter, along VR technology) wearing skins they bought online and play alone or against other players in a synchronized space (Ball, 2022).

Some most-known examples are Roblox, The Sandbox and Decentraland. The first one is a gaming platform where users (little and grown-up) can play, socialize and do commerce by creating an avatar and interact in an immersive way with other users with it. The Sandbox allows users to create and sell NFTs. The last one, it’s well-known for the ability to “play” real estate, letting users see, buy, rent and sell houses inside Decentraland map (Xu et al., 2022).

As it will be shown along the document, fashion brands have been betting on partnerships with Roblox, where they can have their own space, platform and experience. Some examples are Givenchy, Nike, Burberry, but the first co-branded Roblox platform was launched a little while ago by Gucci and Vans (McDowell, 2023).

Is safe to say that representation of people through avatars can lead to misbehaviour and fake identity, since no one knows who is really behind those virtual creatures (Papagiannidis & Bourlakis, 2010, cited in Vavruška et al., 2022).

#### **2.1.3.4. Non-Fungible Tokens**

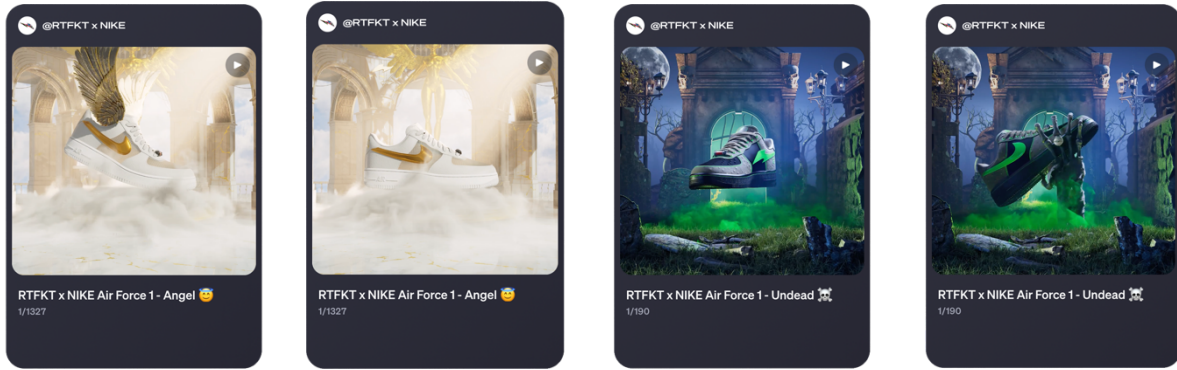
Non-Fungible Tokens – or commonly called NFT – is a group of data, safely stored in a blockchain, that can be sent or sold from its owner, making it impossible to copy (Regner et al., 2019).

This has been a great asset for artists, who can express themselves in this virtual world, creating unique virtual pieces and selling them. It's an opportunity for businesses to increase their virtual interaction with consumers, who can acquire these virtual artifacts and stored them in the blockchain. This consumers' personal possession represents a stamp in the relationship between them and brands, which is a leverage for businesses (Helal & Costa, 2022).

This is a very important advantage, because it will guarantee pieces' authentication through blockchain – which will either refer to junior artists' works or fashion houses' patented products. Gonzales (2020) defends that NFT's traceability will safeguard brands' identities and profit. Since we are talking about unique pieces, consumers can buy them with that assurance and trade afterwards. Besides this, and similar to what happens in the real world, if these NFTs are limited, the more appealing they are to consumers, which gives an opportunity for its value to increase over time.

Figure 9 shows NFTs examples from RTFKT partnership with Nike.





**Figure 9** | *Examples from RTFKT X Nike NFT Collection* (RTFKT website, n. d.)

## 2.2. Metaverse Fashion Business

The online culture has been an extension of our reality in the most varied fields, such as entertainment, education, work and a space for innovation between the various sectors. Fashion business is no exception and the metaverse is a great opportunity to create pieces for avatars, sell products through virtual stores – both real and virtual ones – and create themed games for each brand. This next innovation level it’s so much a challenge as an opportunity for businesses and fashion brands must considered as it and adjust to this evolving business model (Harba, 2019).

The digital economy discussed before, is one of the main reasons people are betting on virtual world’s commerce. Anyone can purchase and sell something from anywhere retail is omnichannel using digital money free of taxes. What differs metaverse from e-commerce is that consumers can enjoy the comfort of their home while using their avatars to “walk” through virtual stores, concerts, casinos or playgrounds a complex immersive experience instead of just an online click (Dwivedi et al., 2022).

As already said before, metaverse represents a step towards democratization and accessibility increase, and fashion brands are seizing the opportunity by creating digital clothes based on their physical ones. More than this, junior designers can create 3D

products without a wide budget or academic background to advertise and sell in the virtual world in an easier way than would be possible in the real world (Gonzales, 2020).

And, since fashion brands usually show their season's collections on the runways, now they can do it in the digital and virtual world, which was pushed by the pandemic (Figures 10 and 11).



**Figure 10** | *Balmain SS21 Fashion Show* (Glendinning, 2020)



**Figure 11** | *Moschino SS21 Fashion Show* (Moschino, 2020)

With virtual catwalks, brands can build magic scenarios that would be very difficult or impossible to do in real life. Also, it becomes possible for more users to watch it, unlike during the famous fashion weeks. Besides amazing shows, brands can create equally magical clothes that don't exist in real life and are probably impossible to create physically (Idrees et al., 2020).

For all these reasons it is imperative fashion brands learn how to ally themselves with this new era and master all the technologies needed to make this happen (Gonzales, 2020).

### **2.2.1. Virtual Retail**

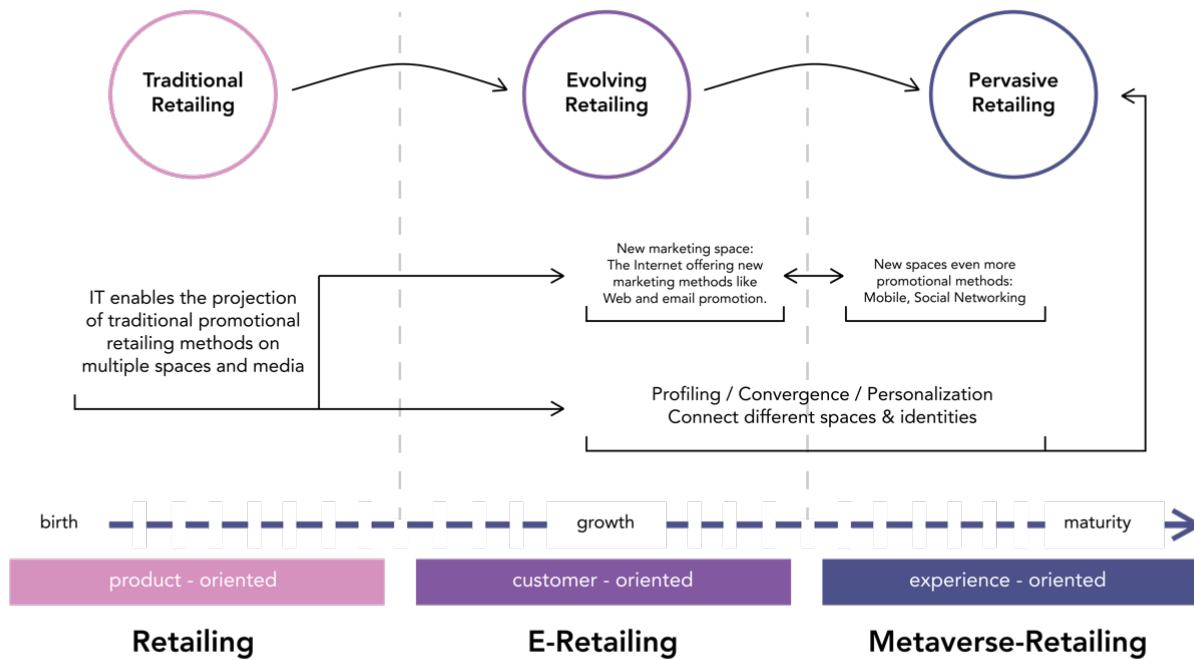
Following the above line of thought, retail has been growing since marketing's first generation, where the main character was the product – marketing 1.0. Then, it developed to answer to customers' needs and wants – marketing 2.0. The third era was based on values, and it was mandatory to pay attention to customers' feelings and thoughts – marketing 3.0. With the not-so-recent e-commerce advance, appeared the digital era, the marketing 4.0, that blends online and offline world and the respective interactions between businesses and clients (Fuciu & Dumitrescu, 2018).

The digital-based generation, alongside the technological advances, opened the way to today's virtual world, where experience is prioritized (Figure 12). This fifth generation is evolving – marketing 5.0 – and it's defined by a human and technology collaboration, which main priority it's to boost customers' experience through the use of Internet of Things (IoT), AI, VR and AR technologies (Alanazi, 2022).

In a virtual retail, brands can be creative through advertisements and promotions in order to profit. By developing 3D clothes, environments, immersive stores and imaginary materials and shapes, fashion businesses can leverage their strategy. These digital garments – products and services – purchased by users, using digital or real currency, can be used in the virtual platforms. Digital clothes can be worn on their avatars – so called skins – and interact in the different virtual worlds with it (Dwivedi, 2022).

In technology terms, there's still a long way to go, as it was discussed before in this document, but from a hardware point of view there's still some limitations that make room for improvement when it comes to haptic feedback and tactile dimension, which are some important skills when it comes to shopping (Vavruška et al., 2022).

Supply chain is a big part of the retail sector, and several things must be in agreement in order to make the business flourish. The interconnectivity between management, warehouse, manufacture and purchase stages and stakeholders must be accurate (Dwivedi et al., 2022).



**Figure 12 | Retailing evolution: from retailing to e-retailing to metaverse-retailing** (adapted from Bourlakis et al., 2009)

As already pointed out, AI can be very resourceful when it comes to benefit the fashion business. It allows “virtual try-ons”, chatbots and avatars in both digital and virtual worlds. Nike, for example, created Nike FIT, an app to upgrade client’s experiences in e-commerce (Lomas et al., 2021).

During an interview with Business of Fashion (BoF), Farfetch founder, Jose Neves, stated that online commerce is moving and evolving faster than physical commerce and that’s why his initiative consists in a blend between online, offline and mobile features (Harba, 2019).

This virtual shopping experience won’t substitute the real life one, as concluded by Breiter & Siegfried (2022), although it’s a new distribution channel still under development that it’s preparing the ground for a possible future. Another important

matter that is crucial to discover is if consumers, in their majority, accept this kind of retail – this will be discussed in the subchapter Consumer Experience.

#### **2.2.1.1. Brand's Main Objectives**

In this early stage, a lot of fashion brands have realized Web 3.0 potential, although the main ones in the metaverse derive from luxury sectors (Joy et al., 2022, cited in Dwivedi et al., 2022).

Nowadays, sustainability is a must-have when a business is launched, and digital production will help reduce costs and emissions. Digital fashion can help that factor by promoting careful consumption from products' digitalization and virtual try-ons – this is where the new technologies come in: VR and AR are already used by businesses in order to improve their processes, from conceptualization and design to chain of supplies, production and distribution (Dwivedi et al., 2022).

Every brand has its goals when entering the metaverse, although some of them can be common. Nike, for instance, in a partnership with the Roblox platform, launched the Nikeland, where users can create their own avatars with Nike products and play games in multiplayer mode (Figure 13). This will increase consumer's interaction inside the metaverse and, therefore, their relationship with the brand. Besides this, every brand wants to get profitable on their sector, which will happen faster with brand awareness and engagement strategies (Dwivedi et al., 2022).



**Figure 13** | *Nikeland in Roblox* (Nike, in CNBC, n. d.)

#### **2.2.1.1.1. Brand Awareness**

Buchari (2008) described brand awareness as the capacity a brand creates on a consumer's mind to make him recognized it and be aware of it. Developing the brand awareness strategy that provides sales and income is one of brand's main business objectives and goals. Aaker (1997) created a pyramid that shows brand awareness' hierarchy, which is presented on Figure 14 (Priraprianti et al., 2018).

Gustafson & Chabot (2007) wrote a plan to develop brand awareness since the moment a business is launched that involved targeting brands' main audience, chose its name, logo and slogan, define the value proposition relative to other businesses in the same sector, advertise and care about customer's relationship with the brand.

Brands must grab the chance to create awareness with their audience and new possible customers inside the metaverse. The interaction process inside it allows brands to communicate directly to consumer (D2C), developing a closer and personal relationship, which will increase customers' interest in the brand and its products or services (Bushell, 2022).



**Figure 14** | *Brand Awareness' pyramid* (adapted from Aaker, 1997, in Priraprianti et al., 2018)

#### **2.2.1.1.2.Brand Engagement**

Erdoğmuş & Tatar (2015) defined brand engagement merging three different approaches (Hollebeek, 2011; Patterson et al., 2006; Brodie et al., 2011) resulting in a “psychological state that occurs by virtue of interactive, co-creative customer experiences with a particular object such as a brand, product or organization”. Well, these emotions create engagement and, consequently, trust and care for the brand, which will lead to customer’s loyalty, purchases and endurance. If this factor is assured by brand’s digital strategy, customers will follow them into the metaverse, guided by curiosity, wish of entertainment and allegiance. In retail brands, this can be reflected on avatar’s skins, NFT sales, gaming platforms’ use, and other types of community relationship (George, 2021).

A consumer-based culture will help brands understand their wishes or needs inside the virtual world, as well as emerging expectations. Awareness and engagement will arise if all these factors are accomplished, which will be noted with time. There are some tasks fashion brands can carry out in order to increase awareness and engagement, such as special virtual events (virtual catwalks or fashion weeks), sell exclusive products

or NFTs. One example is the immersive 14-days event on Roblox called Gucci Garden Exhibition, by the House of Gucci, where users were able to buy exclusive avatar's items and browse and interact with each other inside this space (Roblox, 2021).

### **2.2.1.1.3. Profitability**

On his research, Stepanenko (2021), discovered that there isn't a common definition for profit, which varies between economical and business management, financial and management or accounting sectors. But it's in agreement that involves value, income and capital of companies' different types of activities.

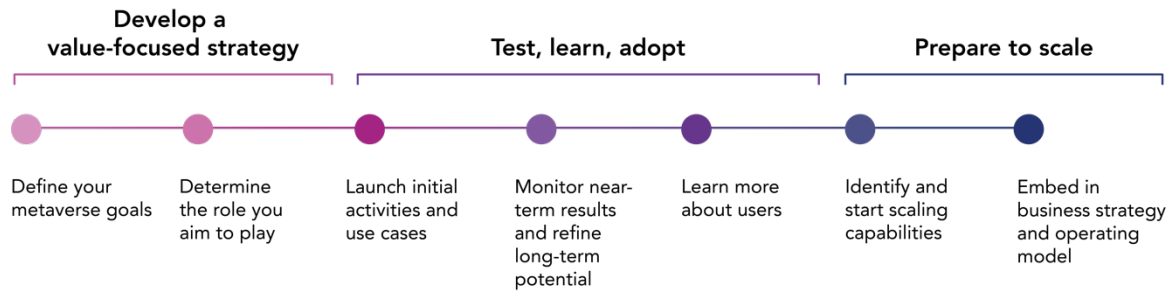
In business matters, being profitable is a need to make things running. It can be achieved with sales, investments, etc. In the virtual world, there's still a long way to go, but retail companies are already investing in NFT exclusive sales and game features. An example is RTFKT, a brand specialized in NFTs and virtual sneakers (previously presented in Figure 9) that "sold 600 pairs of digital sneakers in just seven minutes, generating \$3.1 million in sales", says Gonzales (2020). Another example presented by this author is another fashion item, a Gucci Dionysus handbag, which was sold for more than \$4,000 in Roblox, a higher price than in real life. Although this is still not a daily basis activity for fashion brands, the time will soon come when they will profit from NFT's sales or visits to their virtual showroom.

### **2.2.1.2. Management & Strategy**

Brands' strategy, as well as consumers' needs and expectations have been changing along the way, driven by the world's fast digitalization. Once, the product was prioritized, but then the consumer was the main actor. After that, the world became centred on values and making the world a better place. Now, brands find themselves looking for ways to spread information, using all the channels available (Fuciu & Dumitrescu, 2018).



A brand's strategy varies from its size, target group and values, and in metaverse these variable factors also matter (Figure 15). The purpose being marketing, retail in virtual stores or branding, the chosen platform, as well as the level or ways to make the consumer immerse in it, can be defined by businesses' specific goals (McKinsey & Company, 2022).



**Figure 15** | *Steps to prepare your business for the metaverse* (adapted from McKinsey & Company's Value Creation in the Metaverse Report, 2022)

If in another era it was important to understand if people had a computer at home, now it's mandatory to acknowledge if consumers have the gadgets needed to enter the metaverse. This will change during this journey, but for now VR headsets are still expensive and not specifically necessary for consumers on their daily basis (Ball, 2022).

Although brands are starting to have an idea about Web 3.0, and its advantages or disadvantages, they should work it differently than they do in the digital world. In order to succeed inside virtual worlds, fashion brands should show planning, consistency, purpose and create value with it (Cagnina & Poian, 2008).

These 3D environments allow brands to co-create with their audience, giving them that feeling of entertainment and belonging, which will improve not only the business to consumers (B2C) channel, but also the consumer to consumer (C2C) and business to business (B2B). This type of engagement will not only increase brand equity, but also provide value creation (Helal & Costa, 2022).

The emerging technologies will contribute to brand's management and strategy like they have been during the digital era – by awakening surprise and interest in their consumers. AI, for example, which was already mentioned before, can help improve sales assistance (chatbots), clothes and space design, optimizing production and marketing tools (Banerjee, 2021). VR and AR help create a realistic simulation of products and services, as discussed before, contributing for a better understanding of it by users. Also, according to Rojahn (2017, cited in Harba, 2019), these technologies help discover new ways on how to present their services or products, as well as interacting with consumers with storytelling. An example of a partnership between a fashion brand and Web 3.0 technologies is the one Dior did with DigitasLBI Labs France, where they blended these two sectors creating “Dior Eyes” VR headset (LVMH, 2015).

With these mechanisms, gamification has been rising, which also enables partnerships between game brands and fashion. This sector, as introduced before, has hype and it's trending (shown later in subchapter Trend Forecasting). A good partnership will increase engagement for fashion brands and grow cultural relevance for gaming platforms (Gonzales, 2020).

But again, everyone should have caution while interacting with the metaverse, especially brands, who try to sell an image but can be easily damaged by other users while some limits are yet not defined (George et al., 2021). Companies may also be aware of technologies' possible negative use, which is something everyone's have been contemplating in the last decades.

Despite this, metaverse has been proven to be an asset for fashion brands in fields like marketing strategy and branding, since it allows them to interact with their clients and, therefore, create their own community (Bushell, 2022).

### 2.2.1.3. Consumer Experience

The metaverse hype has been awakening consumer's desires of interaction, entertainment, culture and experience, so they will expect to be surprised by brands beyond virtual shopping (Bourlakis et al., 2009).

Mathur (1971, cited in Eyüboğlu, 2011), defines experience as “the product of an ongoing transaction that gains in quality, intensity, meaning, and value integrating both psychological and emotional conditions”.

Shen et al. (2021) mention the relation that unites consumer behaviour research and research on application design: the first one refers to user's reactions when influenced by some design artifacts; the second uses those studies with the purpose of creating those design artifacts in order to make users consume. Regarding consumer behaviour's study, metaverse hardware can help track and code it, assisting brands with that information so they can improve the necessary channels (Dwivedi et al., 2022).

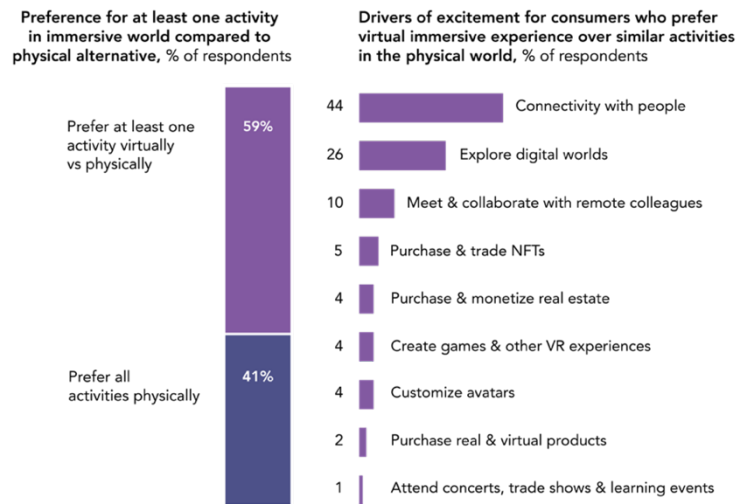
AI will be also useful when it comes to providing experience to users. Although today's marketing goes through digital influence, metaverse will be centred on AI agents (or robots) that will engage with consumers, brands and even employees, helping them along the way (Kozinets, 2022, cited in Dwivedi et al., 2021).

At this moment, some contradicting thoughts arise. Dwivedi et al. (2021) alludes to the possibility of virtual try-ons having a “detrimental effect” on retail. If the quality of VR equipment is poor or the technology advances are still not enough, that will reflect on consumer experience, which can be related only with the virtual experience itself (meaning there's still a long way to go on technological terms) or brand's products – which will damage brand's image and identity. Besides this, users' interaction inside the metaverse can be affected by the lack of virtual equipment (Pospiech, 2022, cited in Dwivedi et al., 2022). A better accessibility will help improve the user's experience and behaviour.

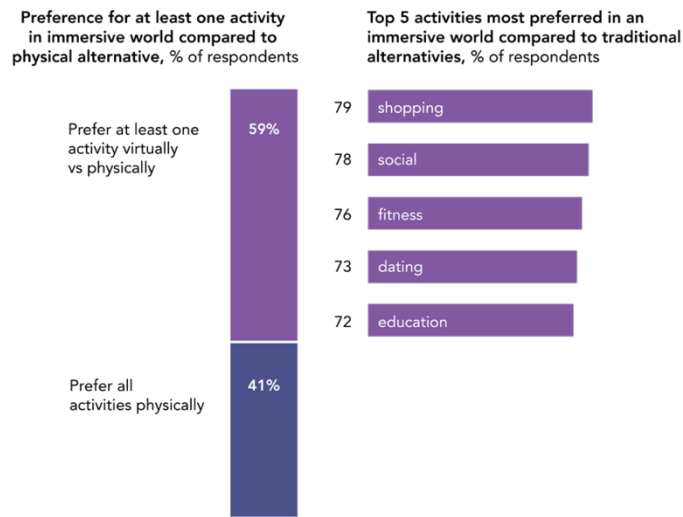
A case study about Hibe – the first Mexican metaverse platform, created during the pandemic – and “Adidas' Money by Jeremy Scott” launching – a partnership with the

study's authors and Adidas inside Hibe had 1,000 users trying the experience. 60 pairs of Adidas for sale inside the platform were sold out in 40 minutes. This case study connected both virtual and physical world, provided experience and entertainment for users and helped Adidas create engagement with their audience (Alcantara & Alcantara, 2022).

In Figures 16 and 17 are presented the drivers of excitement for consumers who prefer virtual immersive experiences, and its favourite 5 activities to do in it, developed in McKinsey & Company's Value Creation in the Metaverse Report, from 2022.



**Figure 16 | Drivers of excitement for consumers who prefer virtual immersive virtual experience over similar activities in the physical world (adapted from McKinsey & Company's Value Creation in the Metaverse Report, 2022)**



**Figure 17 | Top 5 activities most preferred in an immersive world compared to traditional alternatives** (adapted from McKinsey & Company’s Value Creation in the Metaverse Report, 2022)

### 2.3. Trend Forecasting

Trend forecasting can be an important asset for businesses, helping them notice the shift in consumer’s mentality and understand the future tendencies on their buying habits and preferences. Trend forecasters use market research to create annual reports that will show the year’s general market trends. Some companies that develop trend reports that were considered in this research are: Euromonitor (*Top 10 Global Consumer Trends* from 2021, 2022, 2023), TrendHunter (Trend Report from 2023), Accenture (*Fjord Trends* from 2021, 2022, 2023), McKinsey & Company (*McKinsey Technology Trends Outlook* from 2022), Wunderman & Thompson (*The Future 100* from 2021, 2022, 2023).

Another annual important report that presents trends especially connected to the fashion business that was considered in this research is *The State of Fashion* (from 2020, 2021, 2022, 2023), an annual partnership between Business of Fashion (BoF) and McKinsey & Company.

This research’s author created seven categories, similar to the themes presented throughout the literature review on purpose, which are: Digital Gains Ground; Rise of

Web3; Metaverse Awakening; More than Consumption, Experience; Tech Challenges & Opportunities; Virtual Fashion Commerce; Accessibility & Democratization. Every category will present five trends each that argue in favour of this research and its importance.

### 2.3.1. Digital Gains Ground

In the table 1 are presented trends that support the permanence of the digital era and justify its continuous blending into the virtual era, which is reflected on the appearance of the word “phygital”, gaming world and other social platforms that allowed the beginning of a new way of living. As said earlier, the pandemic was an important turning point for the digital features’ use, although digital era had already gained ground.

**Table 1** | *Digital Gains Ground trends* (author, 2023)

Name	Trend	Year	Report
<b>Multifunctional Homes</b>	“The percentage of global households with access to broadband internet has doubled since 2010, giving many consumers internet access in their homes at speeds equal to their workplaces. As a result, companies and workers alike are increasingly able to embrace the benefits of remote work, supported by a host of software products enabling online meetings, chat and collaboration.” (Euromonitor, 2020, p. 38)	2020	Euromonitor
<b>Digital Sprint</b>	“Digital adoption has soared during the pandemic, with many brands finally going online and enthusiasts embracing digital innovations like livestreaming, customer service video chat and social shopping.” (The State of Fashion, 2021, p. 37)	2021	The State of Fashion
<b>Phygital Reality</b>	“Consumers now rely on digital tools to conduct and engage in daily activities both at home and away. Consumers, especially younger cohorts, are indifferent towards whether these activities	2021	Euromonitor

are physical or virtual; they no longer distinguish between the two.” (Euromonitor, 2021, p. 16)

<b>New Gaming Frontiers</b>	“This growth is likely due in part to the fact that digital games are increasingly serving as the backdrop for a variety of activities, from going to a concert to celebrating a graduation to staging a protest.” (The Future 100, 2021, p. 9)	2021	The Future 100
<b>Clicks and Mortar</b>	“The debate over online versus physical in retail is over. Stores of the future will blend both and more, from social media to augmented reality features that go beyond – way beyond – sharing a selfie in the fitting room.” (The Future 100, 2021, p. 154)	2021	The Future 100

### 2.3.2. Rise of Web3

Web3 has been accelerating its development and adoption in the last years, which has been becoming a daily-basis’ need. Being something inevitable, brands must be prepared for its rise and embrace it in a future-forward strategy (see Table 2).

**Table 2 | Rise of Web3** (author, 2023)

<b>Name</b>	<b>Trend</b>	<b>Year</b>	<b>Report</b>
<b>Web3</b>	“Web3 refers to a future model for the internet that decentralizes authority and redistributes it to users, giving them increased control over how their personal data are monetized and stronger ownership of digital assets. In addition, it provides a range of commercial opportunities...” (McKinsey & Company)	2022	McKinsey Technology Trends Outlook
<b>How Web3 Is Shaking Up Digital Marketing</b>	“Proponents of web3 say the technology offers a new way forward for digital marketers looking to engage shoppers and build communities. A growing number of brands in 2023 will be experimenting with nascent web3 technologies	2023	The State of Fashion

like NFTs — and learning that careful nurturing is needed to thrive.” (The State of Fashion, 2023, p.103)

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<b>Web3 Brands</b>	“Web3 is inevitable. To prepare for its arrival, brands are arming themselves with updated digital strategies.” (The Future 100, 2023, p. 72)	2023	The Future 100
<b>Digital Nesting</b>	“Lifestyle design retailers are tapping into gaming with a new avenue for Web3 commerce. Lifestyle design retailers are tapping into gaming with a new avenue for Web3 commerce.” (The Future 100, 2023, p. 154)	2023	The Future 100
<b>Web3 Literacy</b>	“As Web3 becomes more prevalent, some brands are focusing on building Web3 literacy among children.” (Trendhunter, 2023, p. 31)	2023	Trendhunter

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### 2.3.3. Metaverse Awakening

The recent hype has been allowing the metaverse haste and growth, pushed by Web3 rise and the shift in consumers and brands’ mentality. This awakening represents a new horizon with new possibilities, but also challenges at every level. Table 3 sums-up the tendencies in this area, still under research, and presents five trends that call for attention on this matter.



**Table 3** | *Metaverse Awakening* (author, 2023)

Name	Trend	Year	Report
<b>Metaverse Mindset</b>	<p>“As consumers spend more time online and the hype around the metaverse continues to cascade into virtual goods, fashion leaders will unlock new ways of engaging with high-value younger cohorts. To capture untapped value streams, players should explore the potential of non-fungible tokens, gaming and virtual fashion — all of which offer fresh routes to creativity, community-building and commerce.” (The State of Fashion, 2022, p. 57)</p>	2022	The State of Fashion
<b>The Metaverse Movement</b>	<p>“The digital world is evolving beyond virtual hangouts to immersive 3D realities. Consumers are embracing these digital spaces to socialise with communities. Brands at the centre of The Metaverse Movement can build equity. These immersive environments can drive e-commerce and virtual product sales as access expands.” (Euromonitor, 2022, p. 30)</p>	2022	Euromonitor
<b>The Next Frontier</b>	<p>“The metaverse has burst onto the scene, showing promise that it can expand beyond its gaming roots. It’s evolving digital culture and offering people and brands a new place to interact, create, consume and earn.” (Fjord Trends, 2022, p. 30)</p>	2022	Fjord Trends
<b>Building the metaverse</b>	<p>“The metaverse dominated headlines, screens and boardrooms in the second half of 2021. Now brands and companies are rushing to prepare for this next iteration of digital engagement.” (The Future 100, 2022, p. 6)</p>	2022	The Future 100
<b>NFT marketplaces</b>	<p>“Companies are growing their revenue in this new digital frontier. Where consumers are looking to collect and trade, artists and brands are ready to create and mint non-fungible tokens (NFTs)—and all parties are meeting in emerging forums in the metaverse.” (The Future 100, 2022, p. 154)</p>	2022	The Future 100

### 2.3.4. More than Consumption, Experience

As it has been pointed throughout this research, experience is consumers’ focus, which forces brands to respond to this need in order to stay in the game. Since the pandemic and until now, gamification has been increasing its number of users, which has been harnessed by brands, using this feature for their own benefit. The metaverse is another strength point that will enhance this swing on consumers and brands’ relationship (see Table 4).

**Table 4 | *More than Consumption, Experience* (author, 2023)**

Name	Trend	Year	Report
<b>Collective Displacement</b>	“While work to eliminate Covid-19 continues, organizations must find new ways to reach and communicate with people, and to deliver brand experiences at a distance, in a different spatial and social context.” (Fjord Trends, 2021, p. 6)	2021	Fjord Trends
<b>Social Shopping</b>	“Social commerce is experiencing a surge in engagement from brands, consumers and investors alike as new functionality and growing user comfort with the channel unlocks opportunities for seamless shopping experiences from discovery to checkout. Though use cases differ across global markets, brands should double-down on tailored in-app purchase journeys and test opportunities in technologies such as livestreaming and augmented reality try-on.” (The State of Fashion, 2022, p. 65)	2022	The State of Fashion
<b>Game On</b>	“Gaming is a now a top form of entertainment. The generational divide is becoming less apparent and challenging the typical gamer stereotype. Businesses can tap into gaming culture to convert players into payers.” (Euromonitor, 2023, p.25)	2023	Euromonitor

<b>Metaverse Pop-up</b>	"Retailers are creating unique "pop-ups" within the metaverse, or in brick-and-mortar spaces that have adopted elements of the metaverse in their layouts and designs. These experiences offer a unique spin on a popular marketing technique." (Trendhunter, 2023, p. 58)	2023	Trend Report
<b>Reflective Display</b>	"As brick-and-mortar stores compete with ecommerce, businesses are taking cues from the virtual world with tech-enhanced shopping experiences. This now includes connected mirrors being displayed in-store that allow customers to personalize their shopping journey." (Trendhunter, 2023, p. 99)	2023	Trend Report

**2.3.5. Tech Challenges & Opportunities**

As it was discussed in previous subchapters, technologies advances have been an important asset in this movement towards the virtual world. Immersive technologies have been developing and creating numerous opportunities for companies, who will grab it and evolve with it. But, as every other new feature, it comes with risks and challenges that will help lead which way to go through this especial era. Users and companies must define strategies to help them face the adversities that will come with time. Table 5 presents trends considering these matters.

**Table 5 | *Tech Challenges & Opportunities*** (author, 2023)

<b>Name</b>	<b>Trend</b>	<b>Year</b>	<b>Report</b>
<b>Applied AI</b>	"With AI capabilities, such as machine learning (ML), computer vision, and natural-language processing, companies in all industries can use data and derive insights to automate activities, add or augment capabilities, and make better decisions." (McKinsey Technology Trends Outlook, 2022, p. 13)	2022	McKinsey Technology Trends Outlook

<b>Cloud and edge computing</b>	"Ongoing integration of cloud and edge resources will let users extend the cloud's speed and quality to edge and real-time systems, thereby accelerating innovation, lifting productivity, and creating business value." (McKinsey Technology Trends Outlook, 2022, p. 16)	2022	McKinsey Technology Trends Outlook
<b>Immersive-reality technologies</b>	"Immersive-reality technologies use spatial computing to interpret physical space, simulate the addition of data, objects, and people to real- world settings, and enable interactions in virtual worlds, with various levels of immersion provided by augmented reality (AR), virtual reality (VR), and mixed reality (MR)." (McKinsey Technology Trends Outlook, 2022, p. 19)	2022	McKinsey Technology Trends Outlook
<b>Authentic Automation</b>	"Digital is a dominant force, but tech can't match human nuances. While machines make convenience and speed possible, the power of emotional connections shouldn't be underestimated." (Euromonitor, 2023, p. 5)	2023	Euromonitor
<b>New Realities</b>	"The next era of digital engagement will see a diversification of immersive technologies and further blurring of the digital and the physical – ushering in a new reality." (The Future 100, 2023, p. 7)	2023	The Future 100

### 2.3.6. Virtual Fashion Commerce

The fashion business is always up to date when it comes to following consumer's trends and way of thinking. Retail sector reflects these tendencies in its processes, supplies, materials and distribution channel, with the purpose to please consumers and get their support which will be reflected in purchases, awareness and engagement. Once again, the metaverse appears as furtherance to fashion brands, who will use it to fulfil their goals at their highest levels (see Table 6).

**Table 6** | *Fashion Virtual Commerce* (author, 2023)

Name	Trend	Year	Report
<b>Escapist Retail</b>	"Virtual wardrobes and fantastical backdrops are engaging shoppers' imaginations—and dissolving retail boundaries. Digital fashion and virtual spaces are getting dreamy, transporting shoppers to utopic destinations for otherworldly escapes." (The Future 100, 2021, p. 136)	2021	The Future 100
<b>Direct-to-avatar</b>	"From B2B and DTC to DTA—the latest business model sees brands releasing digital products direct to screens." (The Future 100, 2022, p. 137)	2022	The Future 100
<b>Digital twins</b>	"Digital twin stores are innovating the retail sector, with the promise to solve logistical issues for the real-world and replicate the in-person shopping experience." (The Future 100, 2022, p. 151)	2022	The Future 100
<b>Cocreative Commerce</b>	"The future of virtual retail will be cocreative. Creativity is becoming the new status symbol for the dawning Web3 era and brands are adjusting their virtual activations to trade in creativity and cocreation alongside traditional products. Expect to see more brands democratizing vcommerce by offering creative control to their consumers." (The Future 100, 2023, p. 142)	2023	The Future 100
<b>Metaverse Fashion</b>	"Known to be one of the most forward-thinking industries, high-fashion is now experimenting with the metaverse and its artistic implications. Metaverse-based fashion shows and showings are becoming more popular as businesses in the industry see how they can brand themselves in virtual spaces." (Trendhunter, 2023, p. 202)	2023	Trend Report

### 2.3.7. Accessibility & Democratization

Web3 and, consequently, the metaverse, opened doors towards a more accessible, democratic and inclusive world, where everyone can be a part of it. New technologies help this process, which allows users with disabilities to join a life inside virtual worlds, where real-life activities are easier and in some cases possible for them. Besides this, an accessible design will stimulate adherences for all, not only people with disabilities or lack of inclusivity in the society.

The metaverse has been an asset when it comes to these matters, in terms of flexibility, decentralization and connection, which is why is also being used for good, in order to fight noble causes and spread its awareness (see Table 7).

**Table 7** | *Accessibility & Democratization* (author, 2023)

Name	Trend	Year	Report
<b>Techcessibility</b>	"Designing for accessibility and inclusion is not just the right thing to do, it's also big business, especially when it comes to technology. With more than 1 billion people worldwide estimated to experience disability and over 5 billion internet users, there's a major opportunity for brands to upgrade their devices, platforms, and experiences to be more accessible." (The Future 100, 2023, p. 30)	2023	The Future 100
<b>Metaverse for Good</b>	"Digital brand offerings are reaching beyond entertainment to benefit the physical world. Companies taking advantage of flexibility, speed, and international yield in the metaverse can aid and support social causes with ease—harnessing the power to turn the metaverse into a force for social good." (The Future 100, 2023, p. 36)	2023	The Future 100

<b>Meta-Inclusivity</b>	"Brands have a responsibility to create an inclusive metaverse by ensuring avatars, spaces, and narratives offer full-spectrum representation." (The Future 100, 2023, p. 79)	2023	The Future 100
<b>Accessible Commerce</b>	"Brands are leaving money on the table by failing to make their spaces and services universally accessible. Voice-recognition and speech-to-text technologies play a key role in making physical and online retail inclusive for all." (The Future 100, 2023, p. 147)	2023	The Future 100
<b>Gesture Kiosk</b>	"Retail and entertainment industries are opting for gesture-controlled kiosk interfaces to enhance the user experience without contact-related health and safety risks. Hand-tracking technology registers the user's movement to allow touchless screen navigations." (Trendhunter, 2023, p. 101)	2023	Trend Report

## 2.4. Conclusion

This chapter has provided an initial overview of this thesis matter, essential to understand the existing knowledge and the gaps that should be filled in the future. This literature review includes the state of the art on the metaverse, its background context, as well as a technical run-through. It also points out the relation between the metaverse and the fashion business, being the most important areas of this research. The virtual retail is approached, as well as brands' goals and objectives when it comes to create impact on their identifies, through brand awareness, brand engagement and profitability.

One inconsistency stands for the metaverse definition. Some authors believe is a singular word, with capital M – the metaverse –, and some believe there're several metaverses. There is still not an answer about the metaverse being a possible distribution channel for fashion brands, but the future will speak by itself.

With these findings, the following chapters' goal is to build upon this background work, in order to understand how the metaverse impacts the fashion business, regarding brand awareness, engagement and profitability. A focus group is made and examined, and results are discussed and revealed. Conclusions are retrieved blending the literature review and the focus group analysis.



### **3. Methodology**

This chapter will present the qualitative methodology adopted, its objectives and analysis.

#### **3.1. Data collection method & justification**

Since the gap of the unknown is very wide in this research topic, the data collection was made resorting an online focus group with seven participants, which profile details will be presented next, as well as the meeting's objectives. Focus groups are used when exploring themes with little understanding and knowledge, says Stewart et al. (2007).

##### **3.1.1. Focus Group's Objectives**

This focus group, according to this research's objectives, seek to analyse if the metaverse indeed impacts the fashion business, if so, in which ways, and define some key resources fashion brands must ensure if they aspire to enter and develop themselves inside the metaverse.

##### **3.1.2. Participants Selection**

The participants were chosen from the most varied fields in this area of research, such as Web 3.0, metaverse, fashion, technology, brand awareness and engagement, design, education and research, and business strategy. These specifics allowed a fluid and active discussion linking each participant of this dynamic group (see Table 8) towards the previously presented objectives.

This research's author was the moderator which helped organize and conduct the online meeting.

**Table 8** | *Focus Group's participants: genders, age gaps and areas of expertise* (author, 2023)

<b>Participant</b>	<b>Gender</b>	<b>Age Gap</b>	<b>Residence</b>	<b>Area of Expertise</b>
<b>No. 1</b>	Male	31 - 40	PT	Education, Design, Research
<b>No. 2</b>	Female	51 - 60	USA	Fashion, Web 3.0, Metaverse
<b>No. 3</b>	Female	20 - 30	IT	Web 3.0, Metaverse, Technology
<b>No. 4</b>	Male	51 - 60	PT	Web 3.0, Technology
<b>No. 5</b>	Male	31 - 40	PT	Fashion, Business Strategy, Education
<b>No. 6</b>	Female	20 - 30	PT	Brand Awareness & Engagement
<b>No. 7</b>	Male	20 - 30	IT	Web 3.0, Metaverse, Technology

### **3.1.3. Focus Group**

The first thing to do was to invite the participants to the meeting and set a date. This communication was made mainly by LinkedIn and e-mail.

Then, a consent form was sent and respectively signed by the participants – this consent form can be found in the appendix. This research's author received all consent forms properly signed before the meeting.

The online meeting was on Microsoft Teams' platform, on the 2<sup>nd</sup> of May of 2023 at 5pm (Portugal Time Zone). Since some participants were from USA or Italy, it was crucial to meet in an online environment, which allowed real-time discussion and collaboration reaching the purposed objectives (presented on the previous page).

A presentation document was created for the purpose of conducting the meeting, in which was a brief presentation of this research, a storytelling of its main topics –

metaverse and fashion business –, the focus group’s objectives, as well as an initial ice-breaking challenge to start participant’s engagement.

As said in the introduction of this document, research’s questions are centred in four concepts that were also presented – impact, brand awareness, brand engagement and profitability –, but not without first ask the audience what they understood by each and any one of it, to assure unanimity.

After, it was time to dive into the Issue Order – “open-ended ‘grand tour’ questions that seek to obtain participants’ overall orientation toward a topic”, says Stewart et al. (2007). Everyone participated in at least three of these questions, which granted a fluid discussion and a very wide change of ideas and insights:

- 1) What key elements are necessary for a fashion brand to create brand awareness?
- 2) Can you talk about a case of brand awareness increase due to metaverse?
- 3) What key elements are necessary for a fashion brand to create brand engagement?
- 4) Can you talk about a case of brand engagement?
- 5) Is metaverse generating profit? If so, in which cases?
- 6) Do you feel gamification is a strong asset for fashion brands? If so, why?
- 7) Is metaverse able to improve any of these channels: B2B, C2C, B2C, C2B, D2C?
- 8) What role in business strategy is metaverse going to play in the next few years?
- 9) Do you believe there are essential resources for a brand to enter the metaverse?  
If so, which ones?

After the focus group, a Google Forms was sent to the participants via e-mail with the purpose of gaining an understanding about how the meeting went, participant’s opinions about the strategies used, as well as the communication flowed between them. This task was also used to gather demographic data, such as participant’s age gap. This form was anonymous so that participants felt comfortable answering the questions – the form is presented in the appendix.

### 3.2. Data Analysis

It's true that qualitative data is subjective, as opposed to quantitative data, which makes it more complex to analyse, but, citing Stewart et al. (2007), "the analysis and interpretation of focus group data can be as rigorous as that generated by any other method."

In order to analyse qualitative data, there are several approaches that can be used individually or collectively. Spencer (1994, cited in Rabiee, 2004) described his Framework Analysis in five crucial stages when analysing a focus group data: familiarization, identifying a thematic framework, indexing, charting, mapping and interpretation – this framework was used in this analysis.

First, as it would be needed in any other qualitative analysis method, the meeting's transcription was made with the help of the screen-recording tape (created during the interview and previously accepted by the participants) and Microsoft Word's transcribe tool.

The first stage, familiarization, includes reading the transcription and watching the recording several times, as well as reading the observational notes taken. This last part was based on an Epistemological Orientation during the meeting:

*"Focus group analyses that reflect this view tend to emphasize how group members collaborate on some issue, how they achieve consensus (or fail to), and how they construct shared meanings about commercial products, communications, or social concerns."*

(Stewart et al., 2007)

During the discussion, the moderator was analysing if the participant's panel was able to reach a conclusion on a certain topic, or not, as well as if they were completing each other's thoughts.

Although this was a very important part, the main analysis was made after the meeting had ended and its transcription was done. During this time, while watching

the screen-recording, another concept was used: Reasons Versus Reactions, which stands for analysing participants' reactions during the questions (Stewart et al., 2007).

Next, it was time to start the second stage called identifying a thematic framework – which refers to creating notes with concepts or ideas along the transcription text. Then, the third stage began – which Spencer (1994, cited in Rabiee, 2004) defines as a stage that “... comprises sifting the data, highlighting and sorting out quotes and making comparisons both within and between cases”. After this, the Scissor-and-Sort technique was applied with the creation of color-codes (Figure 18) in order to cluster the information gathered in these two last stages (Stewart et al., 2007).



**Figure 18** | *The Scissor-and-Sort Technique, Color-coding cluster following Stewart et al. (2007)* (author, 2023)

In the charting stage, number four on the list, the quotes highlighted before (on stage three) were reorganized into the clusters created with the above's technique.

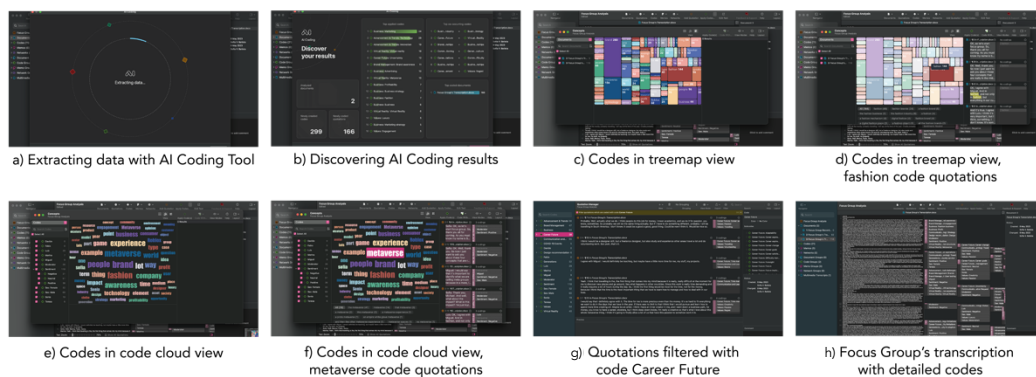
Krueger & Casey (2000, cited in Rabiee, 2004) defend that every researcher should ask these questions to guarantee a good data analysis:

- “1. Did the participant answer the question that was asked? If yes, go to question 3; if no, go to question 2; if don't know, set it aside and review it later;*
- 2. Does the comment answer a different question in the focus group? If yes, move it to the appropriate question; if no, go to question 3;*
- 3. Does the comment say something of importance about the topic? If yes, put it under the appropriate question; if no, set it aside;*



After all of this, Atlas.ti was used, a Computer Assisted Qualitative Data Analysis Software (CAQDAS), with the purpose of using AI Coding tool and merge its findings (Figure 21) with the ones withdrawn from the above's theory. This mix provided a rigorous and impartial analysis. Stewart et al. (2007) defends that:

*“Computer-assisted approaches to content analysis are increasingly being applied to focus group data because they maintain much of the rigor of traditional content analysis while greatly reducing the time and cost required to complete such analyses.”*



**Figure 21 | Codes created with AI Coding Tool by Atlas.ti Software (author, 2023)**

All these techniques were blended until conclusions were retrieved.

Participants agreed that brands' main starting objectives, in this newly era, are to create brand awareness and brand engagement, not profitability:

*"I don't think they're looking necessarily for profitability. They're really experimenting and trying to do the brand awareness. (...) I don't think the big brands are looking at profit right now. They're not there yet, but I'm sure that eventually when they're selling something it's going to be a little bit different. "*

(Participant No. 2, 2023)

*“Probably the entering point will be engagement and OK, please start from there for sure. That will be entertainment.”*

(Participant No. 4, 2023)

*"I think that the first thing that will bring us there, will be probably entertainment related, like a concert or something. "*

(Participant No. 1, 2023)

This leads to the main desire of the metaverse's users: experience. Awareness and engagement happen easily also if the user is exposed to an immersive experience. One participant talked about a personal and specific example:

*"I like that example that Miss Dior... when I saw Dior Beauty did a metaverse experience that you could go to from their website, and it was quite beautiful. But I saw this metaverse experience and I went into it, and it basically took you to the original Chateau where they had created it and, so, you'd go. You were able to, as an avatar, go into this beautiful French Chateau in the South of France and see what the offices looked like and then on the back there were fields and fields of beautiful flowers, and it was so memorable, the experience. (...)  
Anybody who did that I'm sure was re-aware or newly aware of that brand of Miss Dior perfume, which it worked for me. "*

(Participant No. 2, 2023)

Although everything seems to be in order, the main conflict went through the time when the metaverse will be finally developed, although it will be something continuously changing and updating, such as the WWW. Some participants believed it will take 20 years to create it, but, on the other hand, other participants believed it will be faster:

*"In the sense of the society, at the moment, it's not ready to access the metaverse, but we have to wait, in my opinion, at least 20 years to be in the real metaverse what was conceptualised years ago. "*

(Participant No. 3, 2023)



*"So, I think I'm going to jump in here, because I think I'm a little bit more optimistic about timing of what we're going to achieve. I do, I do believe that there will be technological breakthroughs in this decade that are networks and devices and all the pieces that are going to fit together to create a metaverse experience. "*

(Participant No. 2, 2023)

The participants talked about the opportunity that the metaverse represents for brands, artists, users and companies, to develop their strategies and use it in its favour, which they believed meant a new and different channel between consumers and businesses, as well as a new democratic, accessible and inclusive space with new opportunities for everyone:

*"But for sure, all of us can be virtual models or virtual fashion designers. And clearly there is an opportunity for brands to ear or to have a feeling about how their audience, especially the new ones, will be producing new elements, new fashion elements if they were able to do it and at least virtually they can do it. "*

(Participant No. 4, 2023)

*"So, we can do whatever we want in this space. "*

(Participant No. 3, 2023)

*"Because it shows the work that, eventually, people on a non-virtual world don't have the opportunity to share their ideas and because it's more democratic, let's put it this way. It's a nice way to fill the bit of the audience for certain brands, especially for some, let's call it tribes or niches. "*

(Participant No. 4, 2023)

As for the metaverse's target audience, the participants believed the metaverse is strongly connected to the gaming world (one participant agrees it's an opposite factor

of the fashion industry), which they believed is mainly used by young people, but one participant said that Mathew Ball (already referenced in this research) believed the elderly will be positively affected by the metaverse:

*"Generation Z. That will be the main user of this space. "*

(Participant No. 3, 2023)

*"This metaverse is used by young people " [regarding Roblox platform]*

(Participant No. 7, 2023)

*"Metaverse comes from the game's community. So that, let's say is the... I would say... the opposite point in in terms of the target of the fashion industry. (...) We normally see gamers as young people that spend a lot of time playing games. "*

(Participant No. 4, 2023)

*"I do want to add one thing about the age and the generational thing... he [regarding Mathew Ball] believes that actually one of the generations that will benefit the most from it will actually be the elderly. "*

(Participant No. 2, 2023)

Considering distribution channels, the participants referred that the metaverse can help improve them – regarding the question “Is metaverse able to improve any of these channels: B2B, C2C, B2C, C2B, D2C?”:

*“OK for me is this relationship to business to business, consumer to consumer is the most important because now this is the actual metaverse is related to the business to consumer or consumer to consumer. I take an example of the Decentraland or Roblox and so on is when the user talks to the other user. ”*

(Participant No. 7, 2023)

*“OK, also that with the way that the Metaverse promises to exist, it will benefit all of these channels. You know, it's going to be the next era of the Internet. So, it's natural that everything every company will be affected, every person will be affected. It's just going to be something that seamlessly integrates into our lives and will be an improvement.”*

(Participant No. 2, 2023)

Concerning the relationship between the fashion business and the metaverse, participants agreed they can be a mutual asset, which can be related to awareness and engagement again, as said before, or related to optimization, supply chain, production processes, sustainability, etc. It was also mentioned that these two concepts should learn how to exist together with a specific purpose:

*"I believe it can. It can be a strong asset for fashion brands because it can create engaging and interactive experiences for consumers."*

(Participant No. 6, 2023)

*“I would say entertainment or something that is funny to do. This will probably be the entry point for the fashion in metaverse and it's important to understand that we don't need those strange Oculus to theoretically, being a metaverse because eventually, OK, the car window or something like that could be, uh, could be something where we can have augmented reality. I would say in the near, in the near future to three years and the car industry is already doing this right now.”*

(Participant No. 4, 2023)

*“We should find a new meaning for the Metaverse; metaverse a specific type of use related with the necessity and needs that people have and probably fashion could be a new meaning associated to metaverse.”*

(Participant No. 1, 2023)

*"Few very small companies like Meller, no, a producer of without any physical retail, they are investing in something really simple augmented reality because they people need to check the glasses before they buy, they stick. It's a way to reduce the rate of restitution of the product. "*

(Participant No. 1, 2023)

*"Eventually, by having the possibility of personalised object, personalising object having data about which type of colours, which type of materials are more preferred, will help the companies in a having a better production so and more with probably spending less money in producing some pieces that would not be sold otherwise. So, probably it can optimise the manufacturing process as well. "*

(Participant No. 1, 2023)

Respecting the technological advances that were cited along the meeting, participants believed they come with excellent opportunities for fashion brands, but also risks that had already started to appear. Also, the metaverse will only exist if, and once, the technologies developed properly:

*"I do believe that there will be technological breakthroughs in this decade that are networks and devices and all the pieces that are going to fit together to create a metaverse experience.*

*(...) We need the interoperable metaverse. "*

(Participant No. 2, 2023)

*"Because of all of these phygitality, fashion it's going to be cool and try to evolve and adapt to this new-born kind of digitality like the AI, the metaverse, etcetera. "*

(Participant No. 5, 2023)

*"Very high-performance technologies are still a little bit expensive. "*

(Participant No. 1, 2023)

Another topic discussed was the difficulty behind entering the metaverse. Participants said only users with a VR headset can enter the metaverse – as it is supposed to normally happen in the future – although the most common gaming platforms don't require it:

*“To become a trend in fashion it needs to be easy to be copied. And right now, I don't know if it's easy to enter the metaverse, but to become widespread, it needs to be easy, cheap, so, it will never become a trend. People will never use it. For example, it's easy to have a skin on Fortnite? Or it's easy to have a personalised avatar. But entering the metaverse with the glasses, etc. Right now, at this point is not easy. Not everybody like my mum is not going to enter that metaverse.”*

(Participant No. 5, 2023)

Some participants believed gamification is the easiest way to enter the metaverse. During the meeting, some good and bad examples, categorized by the participants, were given:

*"While playing, people tend to feel more relaxed and less aware that they are giving lots of information about themselves. So, it's an interesting way to get information. (...) I really believe that, that gamification, or games associated with industry will play a strong role for the for the engagement with the brand and also uh, it's probably the way to enter the metaverse."*

(Participant No. 4, 2023)

*"Hugo Boss did a gamification, not a lot of people there. So, I wouldn't say that that's the same kind of an asset I was talking about when you have millions of average monthly users in a game. In this particular case, it was the opposite of that. It was, you know, you'd walk through and achieve an orb. And I went through the game, and I got my free digital thing. Whatever. It really wasn't very compelling, so I'm sure that they learned a lot from it."*

(Participant No. 2, 2023)

*“Roblox have many partnerships with like Gucci or Nike and then the Roblox it's prevented by young people and then, you know, if you take about the profit of this metaverse, for example, the Gucci is that not to buy a product or element of this brand. But when I talk about Nike it's, I don't know, it's different because it's more accessible from young people and then we talk this profit from the brand different. OK, I take an example of this Roblox, but there are other and other metaverses like The Sandbox and Decentraland are having collaboration with other brands and then not only to buy an asset from this brand.”*

(Participant No. 7, 2023)

Participants pointed to a positive impact that the metaverse will have on the fashion business and compared luxury and non-luxury fashion brands in this matter:

*"If you get people together somewhere, there will always be some sort of competition like fashion and in terms of fashion, you can have it because of the necessity to be an individual, but also to be part of something, and we can see that for example, when you were talking about video games... presenting themselves to others, to being part of the community and also to have their own identity and that's a fashion mechanism. (...) And in fashion, and not only in fashion, but everything in our culture, it's all about impacting changes. Imagine when we came up from the Second World War, there was a huge impact in fashion. When you get the Dior, when you get all the glamour back. And this is just another wave of impact. Because of all of these phygitality, fashion it's going to be cool and try to evolve and adapt to this new-born kind of digitality like the AI, the metaverse, etcetera."*

(Participant No. 5, 2023)

*"I think that the biggest impact to the consumer is going to be that they're going to have a digital identity and that's going to feel very natural. (...) I think the biggest impact to the consumer will be having a digital identity. (...) I think that the other impact is on the brand side and that brands will be having to deal with a lot more competition than they've ever had before. Luxury brands aside because obviously their brand has so much legacy that they can really, you know leverage that, but everybody else probably should be concerned because all of*

*these new digital native brands are going to emerge just like digital native brands did on the Internet. "*

(Participant No. 2, 2023)

*"It is important also to understand the human dimension of this change and what are the social and cultural motivation that are spreading this change. "*

(Participant No. 3, 2023)

About the must-have resources a fashion brand would need (or not) in order to enter the metaverse, the participants referred an external team to build the virtual spaces, along with 3D assets – which are essential in a 3D world. Then, technical issues were a topic, because, as mentioned in the literature review, it can influence consumers' feeling and experience, which will reflect on the brand that is investing on that experience or advertising, for example.

A better understanding of the target group was also pointed out, as well as content reviewers to help ensure a good behaviour.

*"To work with a third party. (...) I think the resource is that there are some really great builders out there that they can work with to enter in however way you know, however big they want to go or small they want to go, they can help them. "*

(Participant No. 2, 2023)

*"Something related with the technical improvement of specific type of experiences eventually could be good help also in guaranteeing a good success of the solution created. "*

(Participant No. 1, 2023)

*"I would believe also that are some key elements needed, like a clear understanding of the target audience, the development of immersive and interactive content, and a strong digital presence and also the ability to adapt and innovate in response to evolving technologies and consumer preferences. "*

(Participant No. 6, 2023)

*“I think being open minded and be to where that your company must evolve to that. I think that's the main resource, if we can call it resource. It's like the openness of your mind, for the company in this case.”*

(Participant No. 5, 2023)

*“Yeah, I like that point too. (...) If we know that this is going to be a three-dimensional immersive world, then it starts with having 3D assets, right? So, one thing that's I always recommend for brands to do is to at least start exploring creating your own 3D assets, because even when you do go when you do make the decision to go into the metaverse, part of the package is they're going to say, well, do you have any 3D assets, or do we have to create that for you?”*

(Participant No. 2, 2023)

*“They could be eventually some more people to moderate some type of experience otherwise weird things could happen in the... in this matter without moderation. Some there could be like a supervision. Also, very important.”*

(Participant No. 1, 2023)



## 4. Results, Discussion & Conclusions

### 4.1. Results

The results suggest that, although the metaverse, as shown by Meta Group's CEO, Mark Zuckerberg, doesn't exist, it will be a reality in a not-so-far future, as well as an important asset for fashion brands, especially – and initially – on brand awareness and engagement levels. As also discussed during the literature review, the focus group's participants pointed to the metaverse and its hype increase from all over the world, which have awoken curiosity and pursue.

The results show that the metaverse is an opportunity for brands, artists, users and companies, to develop their strategies and use it in their favor, which means a new and different channel between consumers and businesses, as well as a new democratic, accessible and inclusive space with new opportunities for everyone.

Another topic discussed was the difficulty behind entering the metaverse. When the Internet appeared, only users with computers and a wi-fi connection could browse. Now, only users with a VR headset can enter the metaverse – as it is supposed to normally happen in the future – although other gaming platforms don't require VR devices.

About what concerns gamification, as discussed along the literature review, the results point to a positive relationship regarding its use to improve the fashion business and their strategy, that isn't just about profit, inside the metaverse.

Following this line of thought, the main findings also point to a unanimous positive impact that the metaverse will have on the fashion business. Nowadays, some examples are visible since fashion brands are already betting on virtual strategies. There's a comparison made between luxury and non-luxury fashion brands, which participants believe it will be noticed in terms of impact. Also, this term is referred as something intrinsic to fashion, which can be seen and used as an advantage by this sector.

Regarding the must-have resources a fashion brand would need (or not) in order to enter the metaverse, the most pointed out were an external team to build the virtual

spaces, along with 3D assets – which are essential in a 3D world. Then, technical issues were referred, because, as mentioned in the literature review, it can influence consumers' feelings and experiences, which will reflect on the brand that is investing on that experience or advertising, for example.

A better understanding of the target group was also pointed out, as well as content reviewers to help ensure a good behaviour.

Regarding the final online form sent to all seven participants, and with the objective to summarize its answers, 100% responded they had found the online meeting was suitable for its purposes, participants were involved enough, the time was sufficient to achieve the expected results and the meeting's details were communicated timely enough. About focus group's general objectives, only one participant responded they've found it more or less clear. On the one hand, and concerning this part, one participant found the subjects very broad; on the other hand, another participant answered the themes' diversity and the clear connection between fashion and technology was an interesting mixture, to the same question. About the composition, two participants answered it would be useful using a brainstorming session as well as the managers of fashion businesses' participation, respectively.

Summing up their positive highlights, valuable insights, good number of participants, knowledgeable moderator, shared experiences and empathy on an interaction level were pointed out. Finally, there was a space where participants could write improvement topics, and the ones highlighted were profitability, participation of industry players and general clarity.

Participants' full answers can be found in the appendix.

## **4.2. Discussion**

This research main purpose is to understand how the metaverse impacts the fashion business, as well as if it helps increase brand awareness and engagement and profitability. With this line of thought, and after analysing the focus group, results mean

that this new virtual channel indeed impacts the fashion business, especially in terms of awareness and engagement. Right now, the metaverse isn't generating profit for fashion brands, beside NFT sales, which isn't a considerable amount at this moment, but in the future, it can be a source of income.

Aside from this, fashion brands should count on resources to enter the metaverse, such as an external team to build the virtual spaces and 3D immersive and interactive content assets, technical teams, content reviewers, but only when they understand the target audience they're looking to achieve and being open minded about this new space.

Kim & Noh (2022) developed a study where its main goal was to investigate fashion brands' marketing impact through metaverse. Based on their results, the use of virtual clothes and fitting rooms with AR and VR technologies, as well as investing on brand identity inside the metaverse increases the value of the fashion brands who bet on these features.

Another study, called *Interactive Virtual Reality Shopping and the Impact in Luxury Brands*, written by Altarteer et al. (2013), referred that the 10 luxury fashion consumers analysed answered unanimously that they "would prefer to do online shopping in a website that offers this 3D real-time visualisation and customisation experience as it offers significantly better quality of visual information regarding the product."

About this thesis, the focus group developed was limited by the participants' sphere of knowledge about this subject, which may reflect on these results. Not every participant had a clear understanding about this concept and its features. But, on the other hand, a participants' panel filled with metaverse experts could get biased results. Another limitation was the lack of fashion management's participants that could have an internal point of view.

Future research – and according to the online form's answers – could improve the understanding of these subjects through a dynamic activity, such as a collective brainstorming session, and the addition of more industry players.

### **4.3. Conclusions**

To sum-up, this focus group's main results point to the existence of an impact that the metaverse has on the fashion business, and an increase on brand awareness and engagement levels. Right now, profitability isn't a main actor, because of the metaverse's recent stage. All participants agreed that the metaverse is still far from existing on its own, but it will exist, sooner or later, although its goal relationship with the fashion business is still to be discovered. Besides this, there're key resources fashion brands' need before and when inside the metaverse.

These findings present an important relevance for the fashion business and verified that the metaverse should be used as a channel towards the consumers. This virtual world will create impact on the fashion business by increasing their awareness and engagement. In the future, the metaverse might help fashion brand's increase profitability as well.

## **5. Final Reflection**

This research aimed to understand how the metaverse impacts the fashion business, in this recent era. It can be concluded that the metaverse, as these areas' players believe to be, is not yet realized, nor designed in its entirety, which makes it difficult to understand its advantages and disadvantages. But one thing is certain, it will be a period of discovery, innovation, and constant technological advancement, with consumers being the ones who matter most. The results indicate that who persists at the arrival of the metaverse, sooner or later will have to face this new reality or will have no future in the trade of the Web3 era. With this research, it's possible the metaverse might be a leading technology in the future-forward.

When emerging concepts arise, it's important to understand them and discover how to use it and find which risks come with. This is why understanding the metaverse, the virtual worlds and respective features and technologies, is a must-have in Web3 era, and the reason this research was conducted.

While discovering if the metaverse might have a positive and greater impact on the fashion business in terms of awareness, engagement and profit, this research was able to understand the key resources needed in order to succeed in the virtual world.

### **5.1. Objectives Accomplished**

One of this research's objective was to comprehend the impact of the metaverse in the fashion business – if it was a positive impact measured on awareness, engagement, and profitability levels. Another key objective was to find out if especial resources are needed for a fashion brand to enter the metaverse.

This research was carried out with a thematic literature review that, although it had a lack of accessible and reliable information, was completed alongside a focus group meeting with seven participants in the areas of knowledge of this research's interest.

**Table 9** | *Research's Questions Balance* (author, 2023)

Research Question	Answered
1. Is the metaverse providing an impact for the fashion business?	Yes
2. Is metaverse increasing brand awareness for fashion brands?"	Yes
3. Is metaverse increasing brand engagement for fashion brands?"	Yes
4. Is metaverse generating profit for fashion brands?"	No
5. Are there any specific resources a fashion brand needs in order to enter the metaverse? If so, which ones?"	Yes/Partly

To the principal question, it's understood that the metaverse is generating a positive impact for the fashion business. To the second and third ones, the results show the metaverse is capable of increasing awareness and engagement increase. To the fourth question and given the lack of information about companies' profit, it wasn't possible to discover a trustworthy answer on this subject, with either the literature review data or the focus group meeting. Last, but not least, and regarding the fifth question, which is divided in two, the research showed fashion brands need resources in order to enter and develop themselves inside the metaverse, but although some of them were mentioned, there is no data that proves the ones discovered are enough.

## 5.2. Study Limitations

This research was presented with a lot of obstacles during its development, being the lack of information one of them. As told before, the knowledge gap is vast, which reflects in little scientific information and might weigh in this research's results. Besides this, the lack of available and relevant people to participate in the focus group was also a challenge. Nevertheless, the contributions were acknowledged and comprehended in this document in order to fill a void in this subject. This research's outcome should be taken into consideration in future research.

### **5.3. Future Research**

This research clearly illustrates the positive impact the metaverse can create in the fashion business, which they must consider on their future-forward strategy. On the other hand, this research also raises the following questions:

**Where is the start and end of the metaverse? How can its impact be measured? Can it be done on a quantitative level? How will brands manage the competition inside the metaverse? Is metaverse able to generate real profit for fashion brands?**

These are all non-answered questions that future research should try to find. In this early stage, this research is only skimming the surface of this giant iceberg.

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## Appendix

This final part presents the research's content that is not included along the document, such as focus group's consent form, its transcript and final online form sent to the participants with the respective answers.

### A. Focus Group Consent Form

“Dear participant,

Thank you for participating in this survey. Your opinion is very important as it will help obtain valuable data about this area of research.

The purpose of this focus group is to obtain qualitative data related to the impact of the Metaverse in the Fashion Business, so the areas covered will be fashion, metaverse, profitability, sustainability and brand awareness. The data collected will be used for research purposes only and will form part of a dissertation submitted to IADE, European University of Lisbon.

If you have any questions or concerns about this study, please find the contact above.

Informed consent:

- Your responses will be confidential.
- The data collected in this study will be used only for academic research purposes.
- You consent to the recording of the focus group only for academic purposes.
- Your participation in this study is voluntary, and you have the right to withdraw at any time.

By signing this document, you will be giving your consent to participate in the focus group voluntarily and consciously, allowing its recording.



Best regards.”

## **B. Focus group’s Transcription non coded**

**Moderator** | OK, so let's start focus group. So, thank you all for coming. As you must know my name is Sophia. OK. So then let's start. So, my thesis is about the impact of materials on the fashion business, and this is why we're doing this focus. So, I'm going to first do like a brief presentation. This is me. My master is design management master in European University of Lisbon. My dissertation has already said the impact of metaverse on the fashion business. My research questions are about brand awareness, brand engagement and profit. So, if metaverse is able to increase brand awareness on fashion brands, if it's able to increase brand engagement for fashion brands, if it is able to generate profit for fashion brands. Also, when a fashion brand decides to enter the metaverse, are there any specific resources they need to have? Like a must-have to enter the metaverse, and if so, which ones? These are my hypothesis. I do believe the answer will be yes. So, Metaverse is generating enough in awareness in for fashion brand as well as engagement increase, as well as generating profit for fashion brands, being like a new distribution channel. And I do believe there are specific resources Fashion brands need in order to enter the metaverse so let's find out if this is accurate or not. First, well, as you all know, metaverse is getting a lot of hype by the media and the companies. This topic has become a trend in the last year, especially when Facebook CEO Mark Zuckerberg changed his company name into Meta. The Metaverse has a lot of definitions from a lot of authors along the way, but we can simply describe it as an interoperable network of real time rendered 3D virtual worlds where users can work, they can party, they can shop, meet, etc. The current development of brands and businesses provides for new digital and virtual structures in which the metaverse place

disruptive and essential role to them. In this sense, it's increasingly urgent to understand this concept, how brands can align themselves with this virtual space and how they can gain from it. The knowledge kept in this area is very vast. This is something pretty recent still in development and still not all companies consider it far from developed, right? So, I've invited you all because your areas of expertise are between metaverse, fashion, technology, brand awareness and engagement, design, and strategy. And so, I think we have a very dynamic group, which makes me think that the discussion will fit very well and I'm sure I will learn a lot from your insights. So now I can present to you the objectives of this focus group, so first I want to understand if the metaverse really impacts the fashion business. If you understand it does, then how. And then you will try to define a path for fashion brands who need to enter the metaverse and find which special resources they need to have. So, this is our group for today, but Sarah and Daniel are missing but it's OK. I will do an individual interview with them. So, Sonia, David and Miguel, Luis, Marina and Fabio, thank you. Thank you so much for coming. Then let's start with a tiny ice breaking just so you can start engaging and then let's go to the questions. OK, so the ice breaking is if money and time or no object, what would you be doing? Right now, where would you be? Where you in the moon? You tell me. So, does anyone want to start?

**Participant No. 1** | Probably. Well, actually what we do. I think people do this job for money, I mean academics, and we do it for passion, you know, sometimes. So probably we will do the same thing actually. But if I have to do something different, probably I will be travelling in South America. I don't know. It could be a good a good, good thing. Could be now I think it. Would be nice so.

**Moderator** | Thank you.

**Participant No. 4** | OK, in my case it it's a bit like Davide. I like what I am, what I do so, but OK. If we have all the money, probably travelling, I will say at this time of the year, Croatia probably. Sailing.

**Participant No. 6** | I think I would be a designer still, but a freelance designer, but also study and experience other areas travel a lot and do volunteering work. But yeah, that's it.

**Participant No. 5** | I agree with Miguel. I would definitely be teaching, but maybe have a little more time for me, my stuff, my projects.

**Moderator** | Well, Marina, Fabio. Sonia.

**Participant No. 3** | Yeah. I think that travelling is the, the first thing that comes into my mind because it is really, really difficult at the moment for me to discover new places and go around. See what happens in other countries. Since this work is really time demanding and it really requires a lot of hours during the day. So, I think the first thing would be most for the time, not for the money, because I think that the time is the most important thing that we have to learn how to manage and how to deal with in our lives.

**Moderator** | Thank you.

**Participant No. 2** | I would say that I definitely agree with it. The time for me is more precious even than the money. It's so hard to fit everything we want to do in the days that we have in the year. If there was no limit to that I think that I would pursue and learn how to spend more time creating art. Maybe be an artist. I think I have an inner creator in me, and I went down a business path, for money, you know to have a career, etcetera, but I think deep down inside, I'm really a creative so that's what I love about this whole metaverse thing, I think it's going to finally allow a lot of us that have this passion to somehow work it in.

**Participant No. 7** | That's me too. Is the time is the game changer, when I go away and do what I want.

**Moderator** | OK. Well, thank you. So now I just want to ask you about these four concepts that are really in the middle of my problem, my research problem since impact, brand awareness, brand engagement and profitability are in the middle of this relation between metaverse and the fashion industry. So, will someone, any of you want to tell me what do you understand by impact? Because I do believe it's a very variable concept.

**Participant No. 4** | I would say that it's important to identify what we are calling meta groups because in a more, let's say, blood sense, a metaverse is a place which were one. Namely, when where we can have a sense of immersion more than we normally have, our reference is probably the web. That is interactive and one important element is what is normally called user agency, meaning the way we virtually interact within environment. Has an impact impacting the environment. Something changes, OK. So, one of the problems that I believe most companies will have when they decide to enter the metaverse is that for real metaverse doesn't exist, or at least the metaverse that we are selling right now with the AR or VR glasses it's not. It's not real for now. But part of it, like the ability to have different personas like the artist, the musician, or the painter as the alter ego of ourselves. This can already exist and somehow this already exists in social media. OK, so, we are in a situation where probably most of we what we talk about entering the Metaverse will not be real, because when we face real Metaverse situation and it's probably in till the end of this year, during the next year, new equipment and more velocity in the network will enable something that we are now calling the metaverse, but for sure it will be different. For those of you that are IADE, yeah, it's interesting if you want to test it, we are doing some user testing with the VR glasses with natural walking, meaning we have a space with nothing in it for us to move around with, with glasses on it. OK, it's fun, but if you test it, you understand that the idea of using with the same simplicity VR or AR like we are using, I 's say the web or our mobile phones, probably it's not for now, it will be in the near future, but not, not for now. What happens is that it's an opportunity for most of the brands to position themselves as it's important to be there and when these, let's say technical problems, are solved, there's a lot of opportunities and we don't want to start thinking about it when it appears we want to be able to discuss it prior to the arrival of this so-called metaverse.

**Moderator** | Thank you, Michael. And well, what about the impact? What is this impact? I'm just trying to 1st define these concepts so we all uh have the same definition

of it. So, what would you say is the impact metaverse? What is impact? It's so as you said something that creates, happens and then creates a difference in environment, right?

**Participant No. 4** | Probably uh. The impact will be in the way we can personalise stuff or else and in the way we can somehow contribute to the trends, that is something that for now, it's at least difficult, if not impossible. OK.

**Moderator** | Well, so uhm yes.

**Participant No. 5** | Sorry, can you hear me?

**Moderator** | Yes, yes, I can.

**Participant No. 5** | OK, I agree with Miguel. And in fashion, and not only in fashion, but everything in our culture, it's all about impacting changes. Imagine when we came up from the Second World War, there was a huge impact in fashion. When you get the Dior, when you get all the glamour back. And this is just another wave of impact. Because of all of these phygitality, fashion it's going to be cool and try to evolve and adapt to this new-born kind of digitality like the AI, the metaverse, etcetera. But it's just an evolution from what we already have, the social media, etcetera that started in the 90s and matured in the 2000s and now we're getting a third stage. And so, fashion to be fashionable needs to be hype and to be heard needs to be part of this new concepts. So, like we always saying, it's very important especially to just say I'm here and it's cool, but when it starts to be common, probably fashion will go somewhere else. You know what I mean? But now they need to be. When Balenciaga was in Fortnite and when we were during the pandemic, every brand had its own fashion digital show somehow. It's not the like Miguel was saying that maybe the metaverse we imagined, or Zuckerberg sold us because we're not there yet, but this imagination of digitality in the future that I think fashion tries to grab because it's cool to be part of it.

**Moderator** | OK.

**Participant No. 5** | The statement of vogue. Not many people buy vogue, but by being on vogue is a statement because I have money to be on vogue.

**Moderator** | OK.

**Participant No. 1** | And it's true. I agree with Luis. I think it's very important, but I think, something, I don't know. It's something that with technology I would like to reflect about on it. It's also the need. Imagine, when we when... I want to cite a little bit the work of Roberto Berganti, that is a professor of innovation. And he talks a lot, a lot about technology. And he says in a fantastic book that I suggest that this about design innovation, that when a technology emerges, a very powerful technology and very new technology and but it can simply substitute the old one. Imagine we can believe that metaverse will substitute the way we use Internet, or we can find another meaning to this technology that will change also the way we use this type of technology when we what if we associate a technology advance to a change of meaning, we will probably have what Berganti calls technological epiphany that is a revelation of a new use of the technology, one example in fashion is Swatch. You know at that time, when the watch was created, the technology that allowed it, the creation of this new trend was the quartz battery that were really, really small, very cheap, and in the past, watches were very expensive objects that were created to be the only one in a lifetime, you know. And after was understood that they could use this cheap technology to change the meaning of the watch. The watch started to be a fashion object that everybody could change according to their own outfit, I think we have to think in this way also in the Metaverse, so we should believe we should find a new meaning for the Metaverse, not simply substituting what we have now. Maybe we should find for metaverse a specific type of use related with the necessity and needs that people have and probably fashion could be a new meaning associated to metaverse.

**Participant No. 5** | And also, to something to be confession, to become a trend in fashion it needs to be easy to be copied. And right now, I don't know if it's easy to enter the metaverse, but to become widespread, it needs to be easy, cheap, so, it will never become a trend. People will never use it. For example, it's easy to have a skin on Fortnite? Or it's easy to have a personalised avatar. But entering the metaverse with the

glasses, etc. Right now, at this point is not easy. Not everybody like my mum is not going to enter that metaverse.

**Participant No. 1** | Yeah, it should be more accessible.

**Participant No. 3** | I think that it is highly dependent also on the generations that will use this space, since now we are not yet in the we are starting the era of the Generation Z. That will be the main user of this space. But of course, if we think about generation X or for example also the boomers, this space is it is we cannot think that for example some boomers can access in an easy way since I think that. This process that is a social, cultural and also economical process that comes from some needs that are changing and that are leading the human being in a new era that started in particular during the COVID, when where we all understand that we can mirror our real lives in digital. So, we can do whatever we want in this space. And so now we are only at the first stage of this big change that will happen, in my opinion, really in 20-30 years because we are not ready now at the moment, for be prepared to use in at Mountain Display virtual or also an augmented display because they are not in our dictionary, we are not... In the sense of the society, at the moment, is not ready to access the metaverse with his but we have to wait, in my opinion, at least 20 years to be in the real metaverse what was conceptualised years ago, but will happen really in 20 years, I would say, but I'm not so sure because things change really fast. But this is my opinion, so the users it is important also to understand the human dimension of this change and what are the social and cultural motivation that are spreading this change.

**Participant No. 2** | So, I think I'm going to jump in here because I think I'm a little bit more optimistic about timing of what we're going to achieve. Not me, I'm not going to achieve, don't know who is, but the big players that will make this metaverse happen. I do, I do believe that there will be technological breakthroughs in this decade that are networks and devices and all the pieces that are going to fit together to create a metaverse experience. I mean, we have metaverse experiences already today that what you know people are talking about you. You know this luxury brands are testing them

out, etcetera. You know, those are the billion-dollar brands that can afford to experiment. But to get to the point where all the fashion brands can enter, we need the interoperable metaverse. When these breakthroughs happen. When you talk about impact, I think that the biggest impact to the consumer is going to be that they're going to have a digital identity and that's going to feel very natural. Which is in my opinion more natural than scrolling through boxes and squares on the Internet. It's going to feel more natural to take on an avatar and walk through spaces and experience them, experience them, experienced them virtually. And I'm not talking about a headset. I don't. I'm not comfortable wearing a headset, headset, headset, and I do like to go and, you know, browse through metaverse spaces. There's not that much going on there right now. There not many people, but the idea of doing what the young people do in Roblox and putting it, etcetera, when it's something that's more appealing, that's more artistic, more like what spatial is doing, which is more culture focus and eventually there will be boutiques and shops. I think it will be very enjoyable to be an avatar and experience that or to go to a concert or entertainment, etcetera. So, I think the biggest impact to the consumer will be having a digital identity. I think that the 1<sup>st</sup> things that will bring us there will be probably entertainment related, like a concert or something. And then once we're there, we're going to want to be dressed a certain way, we're going to see other people. We're in their digital clothing and it's going to affect us somehow, and we're going to be wanting to dress up. So, I think that the other impact is on the brand side and that brands will be having to deal with a lot more competition than they've ever had before. Luxury brands aside because obviously their brand has so much legacy that they can really, you know leverage that, but everybody else probably should be concerned because all of these new digital native brands are going to emerge just like digital native brands did on the Internet. It's going to be the same thing in 3D, so it's just going to add another layer of competition to fashion brands which, you know, I guess later on the conversation we will have to attack that question. What are they going to do about that? So that's kind of how I see it for impact.



**Moderator** | Well, I'm. I'm not sure if anyone would like to say anything else that to brand awareness.

**Participant No. 4** | Yes, but just to say that. I fully agree with Sonia. Probably the entering point will be engagement and OK, please start from there for sure. That will be entertainment. It will be entertainment and it will be especially because where the metaverse is OK, where we see something that eventually will be what we expect from the Metaverse comes from the game's community. So that, let's say is the, I would say the opposite point in in terms of the target of the fashion industry, but there's a lot of, there's a lot of experiments eventually starting in the game communities, especially the idea of having a visual representation of ourselves completely distinct from OK our real persona, that eventually will lead us to some cool ideas in terms of using that approach in fashion. So, I would say entertainment or something that is funny to do. This will probably be the entry point for the fashion in metaverse and it's important to understand that we don't need those strange Oculus to theoretically, being a metaverse because eventually, OK, the car window or something like that could be, uh, uh. Could be something where we can have augmented reality. I would say in the near, in the near future to three years and the car industry is already doing this right now.

**Participant No. 2** | I do want to add one thing about the age and the generational thing because I don't know how much you research about Matthew Ball. But he's he has. Written a great book. Called the Metaverse, and he's done podcasts. And he has a great 14-minute video on YouTube that kind of explains a lot about the universe. But one thing that I found really. Interesting in one of his podcasts. Was that he believes that it'll actually be one of the generations that will benefit the most from it will actually be the elderly. And I was so surprised by this. But it does make sense. Once he started explaining it where he said that, you know, the elderly who can't leave the house and spend hours and hours and hours in front of the television. If they had this opportunity to feel like they're travelling or going places as an avatar. You know, assuming that this metaverse experience is also going to allow us to do all those things you guys were

saying, travel all over the world and really feel like you're there when the rendering is so realistic that you actually feel like you're there, and supposedly the travel industry is going to be able to really promote different places because once you experienced it in the virtual world, you might want to go there in real life etcetera. But for the elderly people that they will want to experience it that way. So, I thought that was just really interesting that, you know, I think a lot of us do make assumptions that it's a different generation. But then when you look at that point that he made does kind of make sense. And then all the other people that kind of stuck because they have handicaps or things that keep them locked inside, and I I've done a lot of research for this book I'm writing about fashion in the Metaverse and one another part of the research I found was that even today, people that go into places like Second Life and like all those you know, original metaverse or virtual world spaces, there are a lot of people that were the type that couldn't leave the house. So, there's evidence there that the people are already doing that. And you know, because they have to. They can't just go out and do what everybody else can do. So, I thought. That was interesting.

**Participant No. 3** | It is really interesting, Sonia, but for from my point of, from my experience, I'm a third year PhD student and within the experiment that I carried out with the virtual reality and augmented reality, there are big limitations from elderly in using, for example an advantage display but also the controllers and not only speaking about the elderly, because I made also my grandmother and my grandfather used the VR headset in order to make a pilot study and to understand whether they can really use it and understand how to move, how to interact, but it is really, really difficult from the practical point of view. Of course, from my experience, I did not make a big study, so, maybe considering a big sample of users of from the boomers or also before generation we can say that maybe there are other results, but it is really interesting this book and also these assumptions because I'm really curious about it.

**Participant No. 2** | Good point. Good point. There are always going to be obstacles.

**Participant No. 3** | Yes.

**Participant No. 5** | I was just going to say that for me it's quite simple in terms of how this is going to happen because it's a fashion mechanism. If you get people together somewhere, there will always be some sort of competition like fashion and in terms of fashion, you can have it because of the necessity to be an individual, but also to be part of something, and we can see that for example, when you were talking about video games. When you have Fortnite, when you have Apex legends, or the Second Life, people are getting stuff to show some sort of level up to have this cosmetic way of presenting themselves to others, to being part of the community and also to have their own identity and that's, and that's a fashion mechanism. So, if you just gather people, you always get some sort of fashion. Digitally or in in, in physicality.

**Moderator** | OK well so. Well, now about brand awareness and brand engagement. So, we already, so what impact us and then you already talked about brain about awareness and engagement, right? So maybe now profitability. Since, well, we all know money runs the world, right? So, if it is not profitable if brains can get profit from metaverse. Are they going to be in the metaverse? So, what do you understand about profitability inside the metaverse?

**Participant No. 1** | Well, probably now is more expensive to access what we call metaverse because the very high-performance technologies are still a little bit expensive, but I think from a point of view of advertising when we have a new environment as in the past was Google and many other search engines, we now, the campaigns in probably in in specific environments are more, are cheaper. So, if we if a company is there in this moment, probably will be the first, that will take advantage of the position there. Can position itself in a cheaper way than it would be in the future. From another, from a technological point of view, if we have the possibility to personalise objects and I probably will refer more to the eyewear and food to wear companies that I think are cases in which we see also already more attention now. Eventually, by having the possibility of personalised object, personalising object having data about which type of colours, which type of materials are more preferred, will help the companies in a having

a better production so and more with probably spending less money in producing some pieces that would not be sold otherwise. So, probably it can optimise the manufacturing process as well.

**Participant No. 5** | You need to see in terms of the whole chain of production.

**Participant No. 1** | Yes.

**Participant No. 5** | Not only the yen part of communication, but you can speed up processes like they were saying the production, but also in the design. You will always get profitable if you want something that you can do. I want these clothes, but I can't be creative enough to make them or I don't have the skill to make them. So, you pay some somebody else to make it for you and it works for physical clothes, but also for the digital clothes. I want the cool clothes, but I don't have the ideas to have the company for those clothes. So, I think, yeah, I think you can get profitability and some clothes are already being sold online and you have fully digital brands like the Fabricant, and you have many others that only produce digital clothing. And even people on Second Life that have stores there and get rich by selling items of clothing there, because it depends on if people want and need those kinds of products and that's the basic thing in marketing in sales that if there's a need somebody can profit from that need.

**Participant No. 4** | I would say that not all of us can be models or fashion designers. But for sure, all of us can be virtual models or virtual fashion designers. And clearly there is an opportunity for brands to here or to have a feeling about how their audience, especially the new ones, will be producing new elements, new fashion elements if they were able to do it and at least virtually they can do it. It has nothing to do with fashion, but we are doing something similar in music, we are developing small competition of electronic dance music on the metaverse, with the final objective of those virtual musicians to be able to play in a real concert. So, those virtual designers, so, those virtual models... OK, model is a bit a bit more difficult, but you see, it's a parallel, it's one example of a parallel world, not really difficult to exist nowadays that will

somehow... because it gives, because it shows the work that eventually people on a non-virtual world don't have the opportunity to share their ideas and because it's, it's because it's more democratic, let's put it this way. Eventually, it's a nice way to fill the bit of the audience for certain brands, especially for some, let's call it tribes or niches or some not mainstream areas where sometimes it's really important to pay attention, and especially in fashion as you know things that could be completely strange 10 years ago became mainstream, we don't know exactly why. So, profitability can be direct or indirect because you can eventually do some sort of scouting, like in sports in terms of trends, in terms of ideas and eventually in terms of people.

**Participant No. 2** | I see two extremes when I think about the profitability side of it. The luxury brands that are investing in these huge custom experiences are, you know, they're very, very expensive. I mean, some of them, I'm sure are, you know, six figures and up to produce these experiences like it's like almost like a movie production, right? Some of them. So, for those custom ones, I don't think they're looking necessarily for profitability. They really are experimenting and just trying to do the brand awareness, etcetera. On the other extreme, you have somebody like House of Blueberry, which her name is Mishi Nick something. I forgot her last name and she was a designer that started in Second Life and people started noticing her digital fashion. And in the last couple of years, she started producing clothing in Roblox and now in Roblox if you sell clothing like, let's say you're a digital designer, that's just a native digital designer and you're selling clothing in Roblox, you're going to get 30% of that profit. So, I believe it's 30% goes to the creator, 30% goes to the seller and 40% goes to Roblox. No, 40% goes to the seller, right. And then 30% goes to Roblox. So, there's a formula in there, so if you are the seller and the creator, then you get 70% of the profit. So, this designer House of Blueberry now she's got partnerships with some fashion brands, and she's already sold like 20 million units. And these, I mean, she's only things cost like a dollar, you know, cause a digital fashion piece is not a lot of money, but she's selling a lot of it, so it's a really good example for us to see what the extremes are for, you know, being profitable

in a metaverse experience. So, there's going to an existing virtual world like a Roblox to get started and see where it takes you and then there's the extreme of custom building an empire white glove metaverse with a third party where it comes directly from your website so you're not even using a third-party platform or anything. You're just building something that's going directly from your world, the customer has no idea where, who is hosting it, you know? So, that's those are the two extremes. And so, I don't think the big brands are looking at profit right now. I think it's they're not there yet, but I'm sure that eventually when they're selling something it's going to be a little bit different.

**Participant No. 7 |** Yes, I move that the focus of the Roblox case study because that this metaverse is used by young people and that Roblox have many partnerships with like Gucci or Nike and then the Roblox it's prevented by young people and then, you know, if you take about the profit of this metaverse, for example, the Gucci is that not to buy a product or element of this brand. But when I talk about this Nike it's, I don't know, it's different because it's more accessible from young people and then we talk this profit from the brand different. OK, I take an example of this Roblox, but there are other and other metaverses like The Sandbox and Decentraland are having collaboration with other brands and then not only to buy an asset from this brand.

**Participant No. 5 |** OK, I agree with Sonia? I think it depends. Like in every fashion brand on your strategy, on whom you want to achieve your target audience, the product you you're selling, we can't say that this will fit for everybody, but it depends on your strategy, what you want to do, who you want to. Grab the attention. And for every brand, I think they need to understand how to use this in their benefit to get the profit they want. If they just want awareness, or if they just want the hype, or not, if they just want to do business. It depends on the business model they are working with. And it can work for one and work differently for others. So, I think like any other brand, physical or not, it depends.

**Moderator |** Then now uh, although we already talked a lot about some of the topics you may find, uhm, afterwards, but then it starts our questions. So, the first one is about

specifically brand awareness and then brand again. And we'll go from we'll go to profitability, and you'll see the themes, but then, but let's start with this one. So what key elements are necessary for a fashion brand to create brand awareness? So first of all, and foremost, what key elements?

**Participant No. 6** | I think it really depends on what type of fashion brand we are talking about. But focusing on most fashion runs, I would say that nowadays it requires a multifaceted approach that combines several key elements, including unique identity, consistent branding, influencer marketing, social media presence, events and collaboration, because we can have specific strategies that might vary depending on the brands, but these elements I think that are crucial for building brand recognition and connecting with the target audience.

**Moderator** | Thank you. Anyone else?

**Participant No. 4** | I believe it depends on the size of the of the brand. Because eventually if it is a small brand it may want to be associated with a let's say some part of the society and event. I don't know if we are talking generally about brand awareness or brand awareness using Metaverse. But in in both cases especially OK not the big ones. Eventually they want to identify clearly identify their tribes. And identify something that connects people, that gives that sense that we all belong to the same, let's called, movement and in terms of the metaverse, what's really important, it's to find a way or to find something that, I don't know if it was Davide or... that says that that it's not replicating what we already have. Uhm, that is what can offer to these group, to my target that they will want specially that sense of user agency, that sense of their opinion their position is heard or what they are doing in this environment has impact and it's crucial to have something where people sense the feedback of the environment. Let's put it this way. I'm spending more time using a different technology once again you don't need to have glasses, it's more virtual in terms of technology right now, but. I believe the key element is to offer something clearly interesting and different from the

other medias to that group, and eventually with some sort of entertainment slash competition slash interaction between people.

**Participant No. 2** | I agree with what Theresa was saying, that it's so much about marketing still and even if a brand does have a metaverse experience, I think they're realising that they still have to market to it. So, they still have to go into a web to kind of marketing funnel etcetera just to get customers to be aware that they have a metaverse experience, so I don't think marketing is going away, so, we might have new ways of marketing but it's still, you know, it's still necessary for brand awareness, all the usual.

**Participant No. 1** | I think an element that, it's now a very personal idea, an element really helps to create brand awareness beyond the objective of creating a brand awareness is the possibility that brand have special in fashion industry. To shape the vision of a society. So, this is not the brand awareness objective, but it has an impact in terms of brand awareness. Imagine some if, I see for example some idea of advertising in brands as Bennetton in the 1st 90s, for example, they were shaping an idea of an inclusive society beyond create, and they created brand awareness with that. I think if some companies want to use the metaverse to generate brand awareness they have to shape an idea of society in which the Metaverse is very important, in which the Metaverse is an opportunity, which we have special interaction designed for the Metaverse, which metaverse has again a different type of meaning. I think this is a very important, the idea of the passion the design makes in an excellent way of shaping a new society.

**Moderator** | OK. So then on to the next question. So, can you talk about the case of brand awareness increase due to metaverse? So, the last question was really about brand awareness in general. So inside or outside the metaverse, but now do you? Recall any brand awareness increase due to metaphors. Or is it too early to talk about it? You tell me.

**Participant No. 5** | I think it, it depends again on who's there, because if I'm not there, I might not be aware that the brand is there. But then you have another kind of



publicity, because I think that awareness works on publicity. That is by novelty people talking to you there like, this whole new thing that happened on Metaverse with the brand that happened and went to the news. That's another type of awareness. It's just to create that hype that you're experiencing something like Sonia was saying. It's just the statement itself. But if you're not there, how can you be aware of things happening there? So, you need to be the public for the metaverse, like in this case.

**Participant No. 2** | Yeah, that's a really good. That's a really good. Anything you do, anything you do new that's it's going to make. I mean, people want the writers. The media wants something to write about, right? So, if you give them something to write about, you're going to get brand awareness and like one brand to give you an example that really comes to mind for me is a brand we have here called Forever 21 and they were doing fashion in Roblox and. They created, they had best seller, one of their digital fashions pieces was a best seller. It was just a Beanie hat. Like a little wool hat that you know. No big deal hat that said the brand name and so they put it into their stores. They created. That's a physical version of that, and then some other sweatshirts and things that were kind of phygital, they call it married to the stuff that they've done, had done digitally. Well, the headlines read Forever 21 creates first, you know, physical collection based on digital fashion like, well, you know what I mean. They were they claimed to be first. Maybe they were first, I don't know. But it doesn't matter, because all the headlines said they were first and forever on the Internet. It says that. They were first, so there you go. I mean, it's a brand that I never even paid attention to, but when I saw that headline, I'm aware, you know, so interesting.

**Participant No. 4** | You have one example outside Fashion, one radio station here in Portugal claimed to be the first one on the Metaverse. And if that's exactly, that's exactly what's what. What's the saying? OK, it went to the news because. And it was the first one that met the words, and probably most of the people didn't enter their metre words to see what's in there. But they were the first in the metaverse and yeah, that generates awareness for sure.

**Participant No. 5** | We need we do need to be aware in this, in this type of scenarios, because I'll be talking especially specifically in, in terms of metaverse or just a tool to get headlines? Because it's hype. It's cool talk, in terms of metaverse. Because this can happen with anything like the sustainability, like a whole brand, just marketing, marketed and wearing headlines because of sustainability like H&M, they have this machine that turned the old world into a new world. It was a lie because that machine could never do that in the times they needed to be. It was just marketing. And this happens all the time with fashion brands. They just want to be hyped because fashion is too quick to be slow.

**Participant No. 1** | It's like the paradigm of the organic shoes that are made of plastics, you know, OK, organic shoes. First of all, I remember a few years ago, the world leader producer of eyewear, was Luxottica made a joint venture with Essilor. That is the world leader producer of lenses, and they justify this joint venture by saying that they were investing a lot in augmented reality and in this type of technological advances, and they also made few partnerships with the media, with Facebook, because they wanted to invest in this. I remember this type of approach. I think that company is more focused on creating experience through the glasses, but I then I saw on the other level, very few very small companies like Meller, no, a producer of without any physical retail, they are investing in something really simple augmented reality because they people need to check the glasses before they buy, they stick. It's a way to reduce the rate of restitution of the product. But still yeah, it's evident this a lot of companies said OK, we will want to be there just because is hype as you, as you said could be. I will explore more about the work of the eyework fashion. Probably. I don't know, because of the implication that eyewear has in for the metaverse as a type of object that allows the entering the metaverse and also for the type of object itself, that is used. I think eyewear accessory design like a machinery or bags, footwear design.

**Participant No. 5** | I think I do agree with you, but. I think it's all about experience like you we're saying. If you can get some experience in the metaverse or digitally that

you can't get in the physical world people might look for it. You can fly. You can do. I don't know. Whatever it is that can enhance that experience of being part of Gucci and Balenciaga, or whatever, people will go there like. It happened in the first, I don't know... Concert in the metaverse, it was like trippy and crazy, and that can enhance, not mimic, but enhance things, create a new world with different rules.

**Participant No. 1** | And new and, like, new experience beyond the retail or...

**Participant No. 5** | Yes

**Participant No. 1** |...That could be I think actually yes. Something you're not only using the metaverse only as a medium to buy something, but you will also receive something extra beyond the way, the place, where you buy something or you try something, that is given with this technology.

**Participant No. 5** | You love Dior so much that you want to feel that magic to be a princess in a castle. I don't know. That that feeling of the brand.

**Participant No. 1** | A narrative.

**Participant No. 5** | Yeah. Yeah. Exaggerated. And the metaverse can give you that. OK. It's like the experience of the runway show, but 10 times bigger and you're there.

**Participant No. 1** | An ecstasy.

**Participant No. 5** | Like a something that, that experience that it's just for the few can be for everybody else, for the fans of the brand like a game.

**Participant No. 2** | I like that example that Miss Dior, when I saw Dior Beauty did a metaverse experience that you could go to from their website and it was quite beautiful. And I had, I remember Miss Dior perfume from like, 20 years ago. I had not, it hadn't been topped of my mind in a very long time. But I saw this metaverse experience and I went into it, and it basically took you to the original Chateau where they had created it and, so, you'd go. You were able to as an avatar, go into this beautiful French Chateau in the South of France and see what the offices looked like and then on the back there were fields and fields of beautiful flowers, and it was so memorable, the experience, and so that really... Anybody who did that I'm sure was re-aware or newly aware of that

brand of Miss Dior perfume, which it worked for me. And then another example, I would say that you know back to like, OK, what if it's not headline related? A lot of these designers, these luxury designers, are saying that the reason that they're going into these Roblox and Fortnite and gaming experiences is because they want to create new brand awareness for generation Alpha and new customers that are just going to hear about them for the first time. So, they already claim that they're basically, doing that just for brand awareness. And if they're in there and they've got 60 million average monthly users on Roblox. Chances are they're achieving some of that.

**Participant No. 5** | It's like what Sonia said at the beginning, with the elderly and incapacitated, you need to give people something that they don't already have some experience. It can be a mundane experience with something that they don't have regularly actually try to imagine what regarding what you said.

**Participant No. 1** | Imagine a situation in which, sometimes we have to watch movies to understand the origin of the brand. House of Gucci, you know. Some examples that everybody knows that is very, I think very few people knew the story of Gucci from the beginning, beyond the family, beyond the brand, that I think is very, very... sometimes how many brands from the UK for so we can sometimes. We can have some experiences of like being like in the 60s, in 68 and say how the brand was created, what people were looking at and we state of the experience, how was the society at that time, so to travel a little bit with the mind and the imagination to go back to the real origins of the brand, to the real meaning to understand, to know more, the history of the brand and also could be very cool. Yeah, I actually would love to be, I don't know in the in the 60s, in the in. In in London and see the mods going on the Vespa and understanding why they were making some specific choices with their clothes, because they want to be different, because they want to be a subculture. I don't know. I would like to experience that.

**Participant No. 5** | Time travelling.

**Participant No. 1** | Time travelling. I would love to see this, to see how a brand like a Fred Perry was great in that in that period. I don't know.

**Participant No. 5** | And also, in the 70s we saw a shift in terms of fashion brands because they started to be targeted at younger audiences and all of them want to be young, so it's like a brand that every time they reinvent themselves need to be younger and younger. So, it makes sense like Sonia was saying that they need to sell now to the younger, so they can stay cool and young.

**Participant No. 1** | Yeah, yeah..

**Participant No. 5** | And that happened here in Portugal in the 2000s with Lacoste. Lacoste was clear as old fashioned. But they didn't know that until they did some market research and so they started to put the brand in this teenager television shows so they can like, rejuvenate the brand. And this is another type of marketing strategy like that. They need to be there to be interpreted as young and cool again. So yes, it's important for engagement and awareness. Because all of the brands want to stay cool and yelling. But that's in terms of culture and society, it's also a shift that started in the 60s and 70s, that we started to look for the young people as role models. Before it was the opposite. Everybody want to be mature and elderly with lots of knowledge and just shifted and the fashion brands shift with that also and when they want to be younger. And that's where the models are like teenagers, most of the models.

**Moderator** | OK, well, uh. On to the third question. So, these two will be similar to the previous two, but uh. Related to brand engagement. So, and the difference between those are right at the bottom as uh, I'm sure you all. Know. So now about really the process of encouraging people to be interested in the brand. So not only about the marketing, but what actions that key elements are necessary for fashion. And to create that kind of encouragement for people to be interested in brand. And this is not specifically on metaverse, so really, outside metaverse as well.

**Participant No. 1** | Well, if we talk about the experience itself is the as well because experience itself is creating engagement. So, it's very natural the connexion between the two things, I think.

**Participant No. 5** | I feel engaged with brands if the story they tell resonates with me and the products they sell fit in my lifestyle. And the values they have fit with my values. So, it's all about match, sorry.

**Participant No. 3** | Yes Luis, I agree with you because I was thinking that the one of the key elements. I would say that is also the storytelling. So, what is the story that every brand wants to convey in order to, uhm, transfer some specific value of that brand. So even if the Metaverse does not have to be exactly as the real world, so, for example, a shop in the metaverse does not have to be like a real shop but can be gamified, or can be on an island, in another scenario. It is important for the brand always to transfer that values that, for example in particular for the luxury companies that have to sell high quality products. So, the quality. Is one of the most important values that that brands have to convey, for example. Also, the craftsmanship. So how the brands can convey this dimension and it is really interesting in my opinion, the case of Burberry that tries to, that was trying to convey the quality in a completely different way from other companies. So, by playing with these schemes these avatars that were animals and characters from fantasy presents some skins that were modelled in high quality way with these patterns that wanted to convey the brand idea of pattern. Because, of course, Burberry worked a lot with the pattern and the important source of the...f this specific dimension for the for the brand communication. So, it is interesting how all the brands, especially the luxury brands, are trying to convey the quality dimension. Also, in my opinion, to enhance the band engagement, because the most I can convey my values and also the more I can engage the users within these matter scenarios.

**Participant No. 2** | I was going to mention another brand example for. Someone who did something really great and that is bringing about community with a human element so, a really great way that a brand can increase engagement is to have in-person events, and then they build a community that feels like they're participating, like an actual experience. It could be localised and one example of a brand that's done this very well. Is a sneaker brand, which it is so hard, you can imagine building a sneaker brand in this

day and age with how many big players there are. But the brand Axel Arigato. You know, that's how they did it, you know, one of the ways they did it. Besides having a beautiful product at a somewhat accessible price point, I think it keeps going up though, is that they had all these in person events and through their social media they got people to show up in person. And then that, you know, people seeing other people that are part of the same community and that always drives engagement. It's really about a community that feels like they're connected to each other because they have something in common, whether that's through social media or in person. But I feel like the in-person element is huge, and that's like a success story.

**Participant No. 6** | Uh Sofia, as you know, my thesis has this concept, so once again is a concept that I think it really depends on what fashion brand we are talking about, but I believe that are some key elements that are necessary like as some of guests already said authenticity to their values and beliefs, creativity and innovation, consistency in brand messaging. I think, emotional connexion it's really important to create experience that resonates with the customers on a personal level, always social media presence and exceptional customer service. And I think in general, I think these are the most important ones, but... But if we for example are talking about luxury brands, then quality it's really, will be really important too. So, I think for a specific marketing strategy it will depends on the brand. On the type of brand.

**Moderator** | So now on to this one. So UM, actually you already talked a bit about this on the concept part, but do you believe Metaverse is generating profits and if so, in which cases so? And if these kings? You tell me.

**Participant No. 2** | I think very brands are admitting, are admitting... what this answer, it's very I think very private information for most metaverse builders and brands. No one's bragging about profit but obviously NFT's have we can see the numbers that there are, have been cases of NFTS generating a lot of business for some big players. And then what I spoke about before like the custom made very, you know, all out productions of Metaverse. I would, you know, I doubt that, though. And from

what I understand, those are not really profit generating, but then the ones that are like, I think, when they're in partnership with a third party that is a platform, they're, there's some profit coming from there, but it doesn't seem like that's the phase we're in right now. The metaverse is still very, very new and I don't think anybody is expecting that at this early stage is about profit. I think that's more in future phases, it's from what I gather, but somebody else might know more.

**Participant No. 4** | My personal opinion, and I don't have that information, is that it's very difficult that is generating profit directly at this moment. Eventually and probably the first signs of some profit will be related with the being able to reduce some costs in advertising, because it's in a channel and eventually, but I don't know, I don't really know. It's a personal opinion, but I found it very difficult. That's generating profit right now.

**Participant No. 5** | Think in terms of fashion we need to acknowledge that it's not only high fashion or to fashion, but we can also have smaller brands and smaller types of fashion, because like in Roblox, like Sonia was telling us about, in other mediums, it's a fashion, it's a fashion happening that that's there. So, it can be profitable if not directly, indirectly with advertising or when you spend hours and hours doing something in a video game, for example, to get something, then you're investing time and that time can mean money in some way like the like in your cell phone, the advertising you see or some other mechanisms for the brand. So, profitability, it depends on what we're talking about because it can be other types of profitability. But it's not just a direct transaction. I'm buying that stuff I can be exchanging my data; I'd be exchanging something else, my time and the brand, my Google are selling my data and so it's having profitability but not directly.

**Participant No. 2** | I think that's a good point, I mean the game if the gaming world is considered a metaverse experience, well, yeah, they're usually profitable right now, right. And then the other metaverse experience... Let's be clear, like there's no Metaverse yet, like the with Capital M. The Metaverse doesn't exist yet, right? That's



coming in the future when it's all connected and interoperable. But these metaverse experiences and virtual worlds that exist today, the gaming ones are very profitable. The other ones, you know, they're trying to build something.

**Participant No. 5** | If you think a bit our social media, it's a bit of a proto metaverse. It's not in live action, but you create images for your avatar, and you change your appearance how you want. You can even dress up and change your eyes, etcetera. So, where it's the start and the end of the metaverse. That's also a question.

**Participant No. 2** | I mean, I'm using the definition of a 3D, 3-dimensional immersive world for, it's going to be interoperable. So, there are a lot of 3D immersive worlds that are, you know, one offs like Decentraland and Spatial and The Sandbox, like, they do exist, but they're not really the metaverse yet, but I'm distinguishing it where it's a 3D immersive world to distinguish it from web 2.0.

**Moderator** | OK. So on to the second one. And since we already talked about games and game world, Roblox and all that. So, do you believe it is strong asset for fashion brands? Only because of the skins. You tell me.

**Participant No. 6** | I believe it can. It can be a strong asset for fashion brands because it can create engaging and interactive experiences for consumers and can increase brand awareness and loyalty because by incorporating elements of gameplay into their marketing strategies, fashion brands can create fun and memorable experience that encourage customers to engage with brands and its products, so, it can help to build a stronger emotional connexion with them.

**Participant No. 2** | I agree. I think it's a really great place for a fashion brand to start because you can learn so much about digital fashion. You can learn about how the younger generation behaves. You can learn about being in a virtual world. There's, there's just so much learning to be done, and it's not nearly as big of an investment as doing something from scratch, from scratch and as a custom experience.

**Participant No. 4** | While playing, people tend to feel more relaxed and less aware that they are giving lots of information about themselves. So, it's an interesting way to

get information, because I mean, and I'm imagining that we are talking about creating some sort of games related with the industry itself. So, in the way people behave in a game that relates with the, with the fashion industry, we can get some insights about their ideas about it. So, I believe it could be really interesting and we talked about it some minutes ago. It helps, and that's one of the reasons why game communities are so strong. It helps to create a tribe, a group of people that share the same ideas, and this can be related with something that we already talked yet some, some minutes ago, about. If you agree with the, if you feel connected with the, with the brand, and if the brand is developing something outside their core business that is related with some social intervention, people tend to... to want to participate. and gaming at this level, I'm imagining, let's say more light type of game because we normally see gamers as young people that spend a lot of time playing games in those, it plays Candy Crush for hours and hours, so I really believe that, that gamification, or games associated with industry will play a strong role for the for the engagement with the brand and also uh, it's probably the way to enter the metaverse. OK, I take the opportunity I really have to leave.

**Participant No. 2** | Was referring to the game gamification in terms of like the existing gaming platforms that are here today, but on the they had like Hugo Boss did a gamification, not a lot of people there. So, I wouldn't say that that's the same kind of an asset I was talking about when you have millions of average monthly users in a game. In this particular case, it was the opposite of that. It was, you know, you'd walk through and achieve an orb. And I went through the game, and I got my free digital thing. Whatever. It really wasn't very compelling, so I'm sure that they learned a lot from it. Interesting fun, kind of sort of a lot of other brands did gamification that way as well, where it was like they built something in a metaverse virtual world that wasn't one of the big platforms that our games. And then a third example is Louis Vuitton did their own game, which was an app and they've done it twice, so the fact that they did it a second time means they might have had success the first time. And that was, I did not

experience it, but I read about it and that was an actual full-blown game that you have to get the app and then play it to really collect things as you're learning about their entire history so. Those are different, but what I. Was referring to is for sure, a great place to start was more like a really a real gaming platform from today.

**Moderator** | OK. Well, thank. So, on to the last three questions, is metaverse able to improve any of these challenges. So, business to business, consumer to consumer business to consumer, consumer to business or direct to consumer.

**Participant No. 7** | OK for me is this relationship to business to business, consumer to consumer is the most important because now this is the actual metaverse is related to the business to consumer or consumer to consumer. I take an example of the Decentraland or Roblox and so on is when the user talks to the other user. But when the from a company is talking to other companies is not study this, this, this topic and then is the most important because then the company the use of the metaverse, it's not only to create a new product but to design, to relate with the other part of the companies. And this, this approach is not the movement nowadays.

**Participant No. 2** | OK, also that with the way that the Metaverse promises to exist, it will benefit all of these channels. You know, it's going to be the next era of the Internet. So, it's natural that everything every company will be affected, every person will be affected. It's just going to be something that seamlessly integrates into our lives and will be an improvement. I mean, technology is always about advancing, right? Every time we have new technology, it improves our lives in some way. Yes, there are always risks and issues. That come along with it. But in every single case, technology is an improvement to what we're already doing and that's no different than web 3.0 and the metaverse. It's there to be an improvement in what exists today, and every single company will have to participate or else if you don't innovate, you die. That's just the way it is, so, absolutely, I think every single channel will be improved.

**Moderator** | OK, a real bit about the future. So, what role in business strategy is metaverse going to play in the next few years. I guess you already talked a bit about this. Uh, in all of your answers. But let's hear it.

**Participant No. 2** | It depends on the company. I think a lot of businesses are sceptical and are not necessarily going to pursue it in the next few years, you know, but the ones that do will be ahead of the game. Because they will just have less time to make them mistakes. I would say that the advice that a lot of the big firms like McKinsey, etcetera, are giving to companies is to watch the players that are doing it early and learn from their mistakes, and that would be like step one to, you know, maybe that's the strategy is just every single week having a meeting and talking about what is everybody else doing, because it's an expensive endeavour at this point and there's not a lot of ROI being discussed or presented, so, it depends on the size of the company. You know, I think if it's like a billion plus dollar company, they can afford to be the ones to experiment and then everybody else can strategize something that's more accessible to them. But again, as soon as the breakthroughs happen, everyone's going to be scrambling. So, it depends on, you know, if somebody wants to wait for that or start experimenting in any way they can. Right now. That's my take on it.

**Participant No. 6** | Uh, so my answer to this question is speculation because I don't have much knowledge about the metaverse world. But I think that Metaverse has potential to create new opportunities and for engagement and commerce by creating immersive digital environments so business can reach consumers in new and innovative ways and offer unique experience and products. So, that is not possible in the physical world, somethings that metaverse can offer. So, this can help business to build stronger relationships with some of their customers and increase brand awareness and loyalty. And drive sales, maybe.

**Participant No. 5** | Not only just the communication part like we've spoken before, but Metaverse, I think it will be like a tool that every company will decide the best way to use it. It can be in the production, it can be in the design phase, it can be to have

meeting with the clients. They would use it to fine tune the business strategy, to the business model and to achieve more profitability, not only in the selling point but all over the process.

**Moderator** | So maybe we can. Go to the last question. So do you believe there are any essential resources, so those must have a brand, needs to have in order to enter the metaphors. More like in a practical kind of way.

**Participant No. 2** | Let's say they probably need to work with a third party, just like when they first had to enter the Internet, they had to hire an agency to help them build a website. It's no different. I think the resource is that there are some really great builders out there that they can work with to enter in however way you know, however big they want to go or small they want to go, they can help them.

**Participant No. 1** | I think also something very important would be something that we didn't talk about previously, something related with the ethical improvement of specific type of experiences eventually could be good help also in guaranteeing a good success of the solution created. Probably it's it is a concern that we should talk a little bit more on this on this level.

**Participant No. 6** | I would believe also that are some key elements needed, like a clear understanding of the target audience, the development of immersive and interactive content, and a strong digital presence and also the ability to adapt and innovate in response to evolving technologies and consumer preferences.

**Participant No. 5** | Yeah, I do agree. I, think it's all about the lifestyle of the brand, how you address these things? This this shouldn't be just another an external thing you do. It needs to be part of your company, so you leave it. So, I think being open minded and be to where that your company must evolve to that. I think that's the main resource, if we can call it resource. It's like the openness of your mind, for the company in this case.

**Participant No. 2** | Yeah, I like that point too. And I and I. And one thing I was thinking of that even if they don't go full out into the metaverse, if we know that this is

going to be a three-dimensional immersive world, then it starts with having 3D assets, right? So, one thing that's I always recommend for brands to do is to at least start exploring creating your own 3D assets, because even when you do go when you do make the decision to go into the metaverse, part of the package is they're going to say, well, do you have any 3D assets, or do we have to create that for you? You know, one way to get a head start for a brand, especially in fashion, is to start moving towards 3D design. So right now, a lot of fashion brands exist with sketching and Adobe illustrator, etcetera. But having somebody on the team, even a freelance person etcetera, just to start. You know, even if it's for production reasons or if it's for digital asset reasons, having 3D design is, I think, absolutely necessary for everyone in fashion because they're going to have to have it eventually, so why not at least start creating those assets now?

**Participant No. 5** | You can even start by having human resources that deal with that. Having an intern, having some new worker that, just knows how to work with that can be a starting point.

**Participant No. 1** | Well, something very important will just avoid some incorrect behaviours there. If I believe that the ticket is... they could be eventually some more people to moderate some type of experience otherwise weird things could happen in the... in this matter without moderation. Some there could be like a supervision. Also, very important.

**Participant No. 5** | Well in terms of workforce, at least here in Portugal there there's an increase in in companies looking for people with this capability.

**Participant No. 1** | Yeah, content reviewers simulate this.

**Participant No. 5** | And also, 3D models. Or 3D not only for the presentation part, but also for the productivity part, you're starting to create there. So yeah, I think starting by evolving the company as a whole mentality, I think, it can really work.

**Moderator** | OK. Well, uhm, if no one wants to say anything else. This was the last question. Not sure if anyone would like to add something. If you do, now is the time.

**Participant No. 5** | Thank you for the invitation.

**Moderator** | It was my first focus group of my life, so I think it went pretty, pretty great. Let's see.

**Participant No. 1** | It looks like you have been, uh, doing this activity for years. You are extraordinary in conducting everything everybody can agree with that.

**Moderator** | I didn't believe my English. Was very bad actually, because I was very. Nervous, but let's... Well, with the years I will try to make it better. Well, thank you all, can I ask you if I can take a picture so I can post on my LinkedIn page. Thank you all for coming. Thank you very much for your presence. I will send you an e-mail with the tiny forms just so you can tell me your feedback. OK, because it's really something that I need to do.

**Participant No. 3** | Thank you, Sophia.

**Moderator** | Well, I hope you enjoy it as much as I did. Thank you very much, guys.

**Participant No. 3** | Good luck, Sofia.

**Participant No. 2** | Thank Sofia.

**Moderator** | Thank you. Nice to meet you.

### **C. Online Form post-focus group**

“Hello! If you're receiving this form is because you participate in the focus group.

First of all, thank you very much for helping me in this journey, your opinion mattered and provided me a lot of insights to think and work about in my **master thesis The Impact of Metaverse in the Fashion Business.**

Now, I'll just ask you to answer this mini survey (anonymously) in order to help me fill out some demographic data as well as your thoughts about the focus group. It will be very quick.

Thank you once again.

Best regards, Sofia.

P.S.: Please note the symbol “\*” means when the answer it's required.”

Form's questions were the followed:

Please indicate your age. \*

- 20 - 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 +

Did you find an online meeting suitable for reaching Focus Group's purposes? \*

- Yes.
- No.
- Another option

Were the general objectives of the Focus Group clear? \*

- Yes.
- No.
- More or less.

Do you think the Focus Group had the right composition for reaching its objectives?  
(e.g., questions, time, participants) \*

- Yes.
- No.
- I didn't find the objectives clear.

Comments on the previous question.

Would you change the composition of the Focus Group? (e.g., participants panel, dynamic...) \*

- Yes.



- No.

If you answered yes, what other criteria would you include?

Do you believe the participants were involved enough? \*

- Yes.
- No.

If you answered no, how could this be improved?

What do you think about the time the Focus Group took? \*

- Sufficient to achieve the expected results.
- Not sufficient to achieve the expected results.

Do you think the information was communicated timely enough before the Focus Group meeting? (e.g., date and time, theme...) \*

- Yes.
- No.

How would you evaluate other participant's communication/contributions? \*

- Very good.
- Good.
- Sufficient.
- Insufficient.

Name three positive highlights of the Focus Group. \*

Name three improvement points of the Focus Group. \*

If you want, please write any final thoughts about the Focus Group.

**D. Participant's answers** (100% = 7 participants)

Please indicate your age. \*

- 20 - 30 **(42,9%)**
- 31 - 40 **(28,6%)**
- 41 - 50
- 51 - 60 **(28,6%)**
- 61 +

Did you find an online meeting suitable for reaching Focus Group's purposes? \*

- Yes. **(100%)**
- No.
- Another option

Were the general objectives of the Focus Group clear? \*

- Yes. **(85,7%)**
- No.
- More or less. **(14,3%)**

Do you think the Focus Group had the right composition for reaching its objectives?  
(e.g., questions, time, participants) \*

- Yes. **(85,7%)**
- No.
- I didn't find the objectives clear. **(14,3%)**

Comments on the previous question.

- **Some of the subjects were very broad.**
- **Diversity in terms of background and a clear connection with fashion and/or branding, and/or tech. A really interesting mixture :)**

Would you change the composition of the Focus Group? (e.g., participants panel, dynamic...) \*

- Yes. **(28,6%)**
- No. **(71,4%)**

If you answered yes, what other criteria would you include?

- It will be useful the addition of a brainstorming session on the topic with post-it, etc.**
- Managers of fashion businesses.**

Do you believe the participants were involved enough? \*

- Yes. **(100%)**
- No.

If you answered no, how could this be improved?

- 0 answers**

What do you think about the time the Focus Group took? \*

- Sufficient to achieve the expected results. **(100%)**
- Not sufficient to achieve the expected results.

Do you think the information was communicated timely enough before the Focus Group meeting? (e.g., date and time, theme...) \*

- Yes. **(100%)**
- No.

How would you evaluate other participant's communication/contributions? \*

- Very good. **(85,7%)**
- Good. **(14,3%)**

- Sufficient.
- Insufficient.

Name three positive highlights of the Focus Group. \*

- **Valuable insights, deeper understanding, important discussions.**
- **Informative, Good number of participants, knowledgeable moderator**
- **Concepts, awareness, fashion.**
- **Dialogue, suggestions, improvements.**
- **Shared experiences, topics, participants.**
- **Empathy (nice level of interaction), different but complementary approaches, good interaction/discussion.**
- **Moderator, group fluency, areas of research.**

Name three improvement points of the Focus Group.

- **I really don't have one, I think it went perfectly.**
- **Nothing to comment.**
- **Profitability.**
- **clarity, ideas, transdisciplinarity.**
- **More industry players, more specification, more focus.**
- **Some questions were previously discussed (in that case just skip it); bring ideas to a more practical level (how to use it now).**
- **Nothing to add.**

If you want, please write any final thoughts about the Focus Group.

- **It was really interesting and we discussed so many different things that I believe everyone ended up looking up to some of the references that were given, in google. Really cool, Congrats!**