

Creating value within the Metaverse:

A call to action for fashion brands to innovate their business models

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ABSTRACT

In recent years, the Metaverse has gained considerable attention as the inevitable evolution of the internet, referring to a network of shared virtual environments integrating elements of both the digital and physical world. Fashion brands have begun exploring the Metaverse as a new marketing platform that is expected to cause substantial changes to their business models. However, there is currently limited academic research on the Metaverse's impact on fashion brands' business models, including value proposition, customer relationships and customer segments. To address this gap, this qualitative study employs expert interviews to learn how fashion brands can create value for their consumers within the Metaverse. Through a thematic analysis, this study offers fashion brands valuable insights on ways to alter their business models and preparing for the Metaverse as a new marketing platform. Some of the most substantial findings suggest fashion brands should begin looking into co-creating and building relationships with their consumers through online communities, targeting their consumers more personally by using AI to generate real-time data analytics, and potentially shift their customer segmentation to community segmentation, a term coined from expert interviews that will be explored further in this paper. Based on these empirical findings, this study provides scholars with a theoretical understanding of the business model canvas and the uses and gratifications theory regarding fashion brands and their consumers in the Metaverse. By expanding upon the existing theory, the results offer a first look at a potential consumer-facing business model surrounding customer segments, value propositions and customer relationships for fashion brands. Furthermore, building on the current uses and gratifications theory, the findings provide insights into the most significant hedonic, social and utilitarian gratifications fashion consumers seek to gain from the Metaverse, such as entertainment through gamified experiences and the opportunity for consumers to self-express themselves virtually through digital fashion.

Keywords

Metaverse, Fashion, Customer Relationships, Value Proposition, Customer Segmentation

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1. INTRODUCTION

The term *Metaverse* was first introduced in the 1992 sci-fi novel *Snow Crash*, where it was envisioned as a “computer generated universe” (p. 24), and 3D virtual world populated by lifelike avatars (Stephenson, 1992). In recent years, it has gained considerable attention as the next step in the evolution of the internet (Henz, 2022). Although there is no universally established definition of the Metaverse, it is largely considered a network of 3D virtual worlds that merges features of both the physical and digital worlds (Ravenscraft, 2022; Robertson & Peters, 2021 as cited in Park & Lim, 2023). As a technology-based platform optimized for a contactless era, the scope of the Metaverse is expanding across several markets and industries (Hwang & Lee, 2022). Various fashion brands have already started exploring the Metaverse as a new potential marketing channel (Foutty & Bechtel, 2022; Podmurnyi, 2022 as cited in Park & Lim, 2023). Given its rapid growth, the Metaverse represents a new medium through which fashion brands and their marketers can find new ways to deliver innovative levels of consumer interaction and engagement, thus potentially strengthening the relationship with their consumers (Hwang & Lee, 2022; McKechnie et al., 2011; Shen et al., 2021). Since the Metaverse has the chance to pave the way as a new point of contact between fashion brands and their consumers, it has sparked significant debate on the key challenges and opportunities fashion brands and their marketers will have to prepare for (Dwivedi et al., 2022).

Digital transformations, such as the Metaverse, have the power to disrupt business models across industries (Piepponen et al., 2022). Brands that transform and innovate their business models accordingly are more likely to thrive and "maintain a wide and persistent gap" in their performance and productivity (Manyika et al., 2016, para. 3). Due to the predicted impact of the Metaverse on the fashion industry (Hwang & Lee, 2022), this study seeks to understand how the Metaverse can impact and reshape the consumer-facing side of fashion brands' business models. The business model canvas from Osterwalder & Pigneur (2010) will be used as an organizing principle for the structure of this paper. This will include diving into the changing value propositions, customer segments, and customer relationships fashion brands face with the rise of the Metaverse, as these are all elements from the consumer-facing side of the canvas.

As a concept still in its early development phases (Ng, 2022; Wang et al., 2022), there is limited research on the Metaverse and the fashion industry, making this topic academically relevant. This paper applies the uses & gratifications theory (Katz et al., 1974), and adds

academic value to existing research by understanding what hedonic, social and utilitarian gratifications fashion brands can offer their consumers within the Metaverse. Furthermore, there is a gap in the literature on how fashion brands need to adapt their business models based on the Metaverse. Considering this, the findings contribute to academia by advancing research on customer segmentation, value proposition and customer relationship concerning fashion brands in the Metaverse.

Finally, the societal relevance of the study lies in the business value for fashion brands to apply the study's findings to their company. As the Metaverse is an area that fashion brands are already looking into (Foutty & Bechtel, 2022; Podmurnyi, 2022 as cited in Park & Lim, 2023), this study aims to provide recommendations on how best to adapt the consumer-facing side of their business model. By drawing on insights from expert interviews, this research collects data and fills the gap in the existing literature on the Metaverse and the fashion industry. As every section of the business model canvas is about adding value to consumers (Osterwalder & Pigneur, 2010), this paper aims to answer the following research question:

RQ: How can consumer-facing fashion brands create value for their customers within the Metaverse?

Building on the theoretical framework, the following sub-questions were formed to help answer the research question:

- How can consumer-facing fashion brands segment their customers within the Metaverse?
- How can consumer-facing fashion brands offer hedonic, utilitarian and social gratifications within the Metaverse?
- How can consumer-facing fashion brands build relationships with their consumers within the Metaverse?

2. THEORETICAL FRAMEWORK

This chapter presents the literature, including the most relevant concepts, models and theories concerning the research topic. Firstly, the various definitions and views of the Metaverse will be explored, followed by an in-depth outline of the evolutionary economics paradigm as a proposed lens for this study. After this, the need for companies to continuously innovate their business models will be examined as part of the evolutionary economics paradigm. Finally, the theoretical framework will explore relevant literature on customer segments, value propositions and customer relationships concerning the Metaverse fashion industry.

2.1 The Metaverse

Sci-fi author Neal Stephenson initially coined the term Metaverse in his 1992 novel *Snow Crash* (Anderson & Rainie, 2022), where he described it as a “computer generated universe” (p. 24), and 3D virtual world populated by avatars (Stephenson, 1992).

While there is still no universally accepted definition of the Metaverse, experts generally concur that it represents a connected and enduring network of shared virtual environments where individuals can engage with each other in ways similar to real-life interactions (Debter, 2021; Ravenscraft, 2022 as cited in Park & Lim, 2023). According to Smart et al. (2007), the Metaverse is not just a virtual space but a connection joining the physical and virtual worlds. This is supported by Hazan et al. (2022), who perceive the Metaverse as the inevitable evolution of the Internet, consisting of various platforms and technologies that collaborate to create experiences that bridge the digital and physical worlds. This evolution can further be explained as a world comprising a series of immersive technologies, including virtual reality (VR) and augmented reality (AR). While some interactions involve individuals’ augmented-reality apps on their smartphones and computers, other daily interactions occur in more immersive spheres, such as fantasy or gaming worlds (Anderson & Rainie, 2022).

Although there is no explicit agreement on the Metaverse as a concept yet, companies have already started exploring the Metaverse as a new potential marketing channel (Foutty & Bechtel, 2022; Podmurnyi, 2022 as cited in Park & Lim, 2023). Especially from 2021 to 2022, the idea of a Metaverse increased in popularity. Awareness of the term surged in October 2021, when Facebook CEO Mark Zuckerberg announced his decision to rebrand the social media platform as Meta and said he believed “the Metaverse is the next chapter for the internet” (Taylor, 2022, para. 1). However, some Metaverse critics argue that it is an ambiguous concept (Kim, 2021). Although social VR has been studied as the essential base for building the Metaverse, Cheng et al. (2022) argue that aside from industry hype, there has

been limited thorough research on the network performance of social VR platforms. Their findings reveal that popular social VR platforms such as Horizon Worlds and Mozilla Hubs are still in their early stages. Thus, they must overcome significant technical obstacles to realize the “grand version of the Metaverse” (para. 1). On the other hand, a study by the Pew Research Center revealed that about half of the interviewed experts (n= 624) support the idea that by 2040, the Metaverse will be a fully-immersive feature in people’s lives (Anderson & Rainie, 2022). Respondents who expect VR and AR to advance substantially predict that the Metaverse will evolve naturally due to continuous technological innovations. Nevertheless, this still shows that several experts are critical of the concept. While it may be difficult to predict how the Metaverse might evolve over the next few decades, it is clear that technological innovations will play a prominent role in producing an advanced virtual world where consumers spend their time (Taylor, 2022).

2.2 Evolutionary economics

This paper draws upon evolutionary economics as it is a paradigm used for “explaining economic change” (Cordes, 2015, p. 430). This helps us understand economic behaviors and the role of technology in changing economic behavior (Witt, 2008), such as the Metaverse. The framework explicitly highlights the importance of innovation and the relationship between the economy and technology (Perez, 2010). Innovation is about change and refers to introducing “something new into the socioeconomic system” (Storsul & Krumsvik, 2013, p. 14). Economist Joseph Schumpeter aimed to explain innovation's role in long-term economic change and was one of the first prominent figures to offer theoretical insight into innovation (Storsul & Krumsvik, 2013). He argued that entrepreneurs and technological changes lay the foundation for economic growth (Perez, 2010) and that large companies are the main drivers of innovation (Hagedoorn, 1996). Furthermore, Schumpeter discussed that innovations “open up possibilities for new business opportunities and future innovations, and in this way set the stage for continuing change” (Fagerberg, 2005, p. 18). As the notions of evolution and innovation drive the Metaverse development, the evolutionary economics paradigm is a suitable theoretical foundation for this study.

Innovation can only be discussed by also addressing digitalization, which “refers to the use of digital technology, and digitized information, to create and harvest value in new ways” (Gobble, 2018, para. 5). The Metaverse offers a glimpse into the next chapter of digital transformation (Rehm et al., 2015), which can be seen as one of the most disruptive forces for business models in all industries (Piepponen et al., 2022). In a world that continues to evolve

digitally, companies must accommodate constant digital transformation (Taylor et al., 2020), as this provides opportunities for brands to create new business models, reshape customer value propositions (Berman, 2012), customer relationships (Payne et al., 2017) and customer segments (Rathore, 2023).

Especially the fashion industry is likely to experience a considerable transformation thanks to technological innovations (Joy et al., 2022). According to a recently published report by Elmasry et al. (2022), e-commerce has the potential to reach the value of \$2.6 trillion in the Metaverse by 2030 and become the most significant driver of the economic impact of the Metaverse. Leading fashion brands, such as Ralph Lauren, H&M and Gucci, are already setting up their shops in one of the largest Metaverse platforms, Roblox (Edelson, 2023 as cited in Park & Lim, 2023). Their early attempts offer an intriguing look at the adoption of the Metaverse and future opportunities within virtual fashion (Park & Lim, 2023). With the evolution of technology, fashion brands could create more immersive marketing campaigns. For example, when used with 3D body scanning, AR technology can enable innovations such as virtual try-on technology, altering the shopping experience (Park & Lim, 2023). By being able to shop beyond any place and time, customers can peruse virtual stores, try on clothing through a 3D fitting room, and even get a 360-degree perspective of what outfits look like (Park & Lim, 2023). Fashion companies, such as Prada, are among the first to use these new tools, and personalized recommendations, higher conversion, and lower return rates are only some of the benefits virtual try-ons can offer fashion brands and consumers alike (Gonzalez, 2019). Furthermore, with the help of AI technology, established fashion brands in the Metaverse will be able to track consumers' activity, taste, purchase history, and demographic profile. This will allow them to use the data to provide new and tailored clothing recommendations and purchases. These AI-driven solutions support fashion brands in improving their competitive advantage and building stronger customer relationships (Rathore, 2023).

2.3 Business model innovation: A constant reconfiguration

Considering the above-mentioned information, there are several opportunities to transform and evolve digital technologies, and the business consequences of doing so can be genuine (Gobble, 2018). A 2016 Harvard Business Review report sustains this, showing that corporations that welcome digital innovation and transform how they work by using their digital capabilities more than others are thriving and even "maintaining a wide and persistent gap" in their performance and productivity (Manyika et al., 2016, para. 3). Since the

Metaverse offers a glimpse into the next chapter of digital transformation (Rehm et al., 2015), it can be seen as one of the most disruptive forces for business models in all industries (Piepponen et al., 2022). In a world that continues to evolve digitally, companies should accommodate continuous digital transformation (Taylor et al., 2020) by creating new business models and reshaping their customer value propositions (Berman, 2012), customer relationships (Payne et al., 2017) and customer segments (Rathore, 2023). Kraus et al. (2022) explore the notion of continuing change and maintain that companies should continuously adapt their business model to include innovations to secure the future of their business. The rise of new technological innovations, such as those related to the Metaverse, sparks the need for new approaches to building trust among consumers (Hernandez et al., 2023). As a technological innovation that is shaping up to become a significant new growth opportunity for the fashion industry within the next decade, the Metaverse has the power to accelerate these new business models (Elmasry et al., 2022).

This paper uses the business model canvas by Osterwalder & Pigneur (2010) as an organizing structure. In essence, business models help define how a company offers value to customers, persuades customers to pay for that value, and converts the payments into profit (Teece, 2010). Given the focus of the research question, this paper focuses solely on the consumer-facing side of the business model canvas, as the focus of the research is on how fashion brands can create value for consumers, which is critical for brands and their marketers to consider when offering new services in an expanding platform such as the Metaverse (Smith & Colgate, 2007). The consumer-facing side of the business model canvas includes customer segments, value propositions, and customer relationships. Although channels are typically also part of the consumer-facing element within the business model canvas, the Metaverse is, in this case, perceived as the new channel (Zhang et al., 2022), making it irrelevant for this particular study to include channels. Finally, although the following chapters distinguish between the three elements, rather than looking at these three core elements of the business model canvas individually, they need to be considered linked, as one element cannot succeed without the other (Osterwalder & Pigneur, 2010).

2.4 Customer segments

Customer segments can be described as a group of customers who share similar characteristics, which can be based on behavioral, demographic, geographic, or psychographic data (Cooil et al., 2008). According to Dwivedi et al. (2022), generations Y, Z and Alpha will be the most dominant customer segments in the Metaverse, as they are the

most knowledgeable and enthusiastic about tech. Customer segmentation is one of the most important elements related to customer relationship management and value proposition, as it helps identify whom the business aims to create value for (Osterwalder & Pigneur, 2010). Moreover, customer segmentation is beneficial for a business to focus its marketing efforts and give its customers a more tailored experience (Cooil et al., 2008). Especially fashion brands are perceived to be likely to have to re-evaluate their customer segments to better understand the interactive possibilities by mixing virtual and physical environments (Olson et al., 2019; Sultan, 2018).

2.4.1 Avatar behavioral analysis

Avatars allow consumers to customize their digital representation in the Metaverse and enable brands to target them similarly to how they would in the real world (Periyasami & Periyasamy, 2022). This is unsurprising, considering the findings by Ratan et al. (2020), who discovered there is a similar link between the behavior of a virtual avatar and how consumers act in real life, as people tend to frequently adopt the attitudes and behaviors that they associate with the identities of their avatars. Furthermore, Dwivedi et al. (2022), argue that the Metaverse will help brands determine how and where to invest in the digital space. They explore how the virtual worlds offer brands the opportunity to understand their customer segments through data analysis on the behavior of their users' avatars. These types of data could take the form of avatar based sensory data, meaning the interactions that avatars have with brands and specific promotions, as well as real-time responses to products and services. Overall, these new methods for leveraging additional customer segments highlight the substantial potential for marketers to get to know their consumers better and offer them more tailored experiences (Dwivedi et al., 2022). Nevertheless, scholars argue that the challenges related to data security, inadequate governance and the exploitation of vulnerable groups still need to be questioned when it comes to data analysis of users in the Metaverse (Aei, 2022; Merre, 2022 as cited in Dwivedi et al., 2022).

2.4.2 Personalization using AI & data

Customer segmentation can only be discussed by addressing data, as the era of big data has led customer segmentation to face a significant evolution (Verdenhofs & Tambovceva, 2019). AI is currently gaining prominence in marketing due to the rise in computing power, availability of big data, lower computing costs, and the advancement of machine learning algorithms and models (Huang & Rust, 2021). AI may speed up customer segmentation by determining which products are accepted, how customers use and style themselves with

fashion, and which customer persona profile fits each individual (Rathore, 2023). The combination of AI in the Metaverse allows fashion brands to automate their customer segmentation process and offer personalized customer experiences through real-time data analytics. Overall, AI can be seen as a new predictive marketing analytic method that can help fashion brands identify their most profitable customer segments (Rathore, 2023).

Furthermore, AI is beneficial for fashion brands to make data-driven decisions and create personalized collections for each consumer based on user behavior and preferences (Yang et al., 2022). AI will have the power to analyze past customer data and leverage machine learning to make accurate recommendations to customers on their preferred products. In other words, by using data to segment customers, organizations may better understand their consumers' needs and target their marketing efforts to the different consumer categories (Rathore, 2023). By offering more accurate and tailored product recommendations, fashion brands will be able to increase conversion rates and customer loyalty (Rathore, 2022). As a result, the technological evolutions of AI and methods for collecting data will allow fashion brands to become more productive and serve their consumers faster and better (Harreis et al., 2023).

2.5 Value proposition

The value proposition is a crucial component of any business model, as it provides the foundation of what and how a company can provide value to its customers and users (Osterwalder & Pigneur, 2003). A brand's value proposition should explain how its specific service or product fulfils a consumer's need (Osterwalder & Pigneur, 2010). The concept builds on innovation, as innovative processes help firms find new ways to assist and solve their consumers' problems (Payne et al., 2017). Linking this back to the evolutionary economics paradigm, it is unsurprising that technology, in particular, can help improve customer solutions by making them more effective yet also offer a completely new strategy to address unmet customer needs (Payne et al., 2017). In order to understand how innovation, in this case, the Metaverse, can impact and reshape a company's business model, fashion brands need to assess how their current value propositions will evolve (Abovitz et al., 2022).

2.5.1 Uses & gratifications theory

Drawing upon the uses & gratifications theory can provide a theoretical foundation and help understand how consumers feel and intend to use the Metaverse as a channel for shopping from a media perspective (Lim & Ting, 2012). The relationship between value proposition and uses & gratifications can be observed in the shared manner that both focus on fulfilling

consumers' needs and desires. Uses & gratifications theory was first proposed in 1974 and examines consumers' media consumption by looking at two elements: how the media, the Metaverse in this case, is consumed and what benefits the media creates for the consumer (Katz et al., 1974). In other words, the theory is characterized by the idea that people choose and use media to obtain gratification from fulfilling their needs (Stafford, 2008 as cited in Chen et al., 2010). Similarly, a company's value proposition should focus on delivering unique value and benefits that meet the desires and needs of the target audience (Kotler & Keller, 2016).

Since its principles apply to almost every form of mediated communication, including conventional media such as newspapers and more interactive media such as the internet, the uses and gratifications theory is considered an axiomatic theoretical approach (Luo & Remus, 2014). The theory has been used extensively to understand the motivations for the use of new media such as instant messengers, smartphones, social networks, as well as virtual worlds (Hossain et al., 2019; Nambisan & Baron, 2007; Piyathasanan et al., 2015; Zhou et al., 2014 as cited in Wongkitrungrueng & Suprawan, 2023). According to prior empirical research, utilitarian, social, and hedonic gratifications primarily motivate people to utilize virtual worlds (Mäntymäki & Riemer, 2014), making it relevant to explore these further within this study.

Many scholars have confirmed the applicability of the uses and gratifications theory within various areas, including the web and specific media channels (Eighmey, 1997; Papacharissi & Rubin, 2000). While studies on the uses and gratifications of the Metaverse are limited, applying the theory makes it possible to ask experts what for, and why, fashion consumers might use the Metaverse.

2.5.1.1 Hedonic gratifications

According to Hossain et al. (2019), "hedonic gratification refers to fulfilling users' hedonic expectations of entertainment and passing time" (p. 4). Hedonic factors in marketing include emotional responses such as enjoyment, referring to the fun users achieve from product usage experiences (Hirschman & Holbrook, 1982). When users interact with technology, affective reactions are observed, which can be described as emotional responses (Patil et al., 2022). Many users are engaging themselves in the virtual world to find exciting and entertaining activities that allow them to escape from the real world (Bleize & Antheunis, 2019). Concerning the fashion industry, particularly shopping experiences in the Metaverse, hedonic gratifications motivate consumers to shop for multi-sensory and emotional experiences.

These are associated with fun and playful activities (Patil et al., 2022). Similar to a shopping mall in the physical world, the virtual world allows users to realize hedonic value through exploration and entertainment (Bleize & Antheunis, 2019; Pizzi et al., 2019; Rintamäki et al., 2006 as cited in Wongkitrungrueng & Suprawan, 2023). Whether the platform is focused on social interactions or gaming, a game can attract user engagement and keep the user experience fun and enjoyable. Taking Nikeland on Roblox as an example, players can compete with others in sports and even create their own games. Furthermore, users can also find entertainment in actively participating in brand related activities such as quests and events and interacting with brands' products (Wongkitrungrueng & Suprawan, 2023).

2.5.1.2 Utilitarian gratifications

The utilitarian gratification for consumers experiencing a brand experience in the Metaverse can be realized “when the branded virtual world provides useful information about products and brands, enhancing customer knowledge and fulfilling the desire to learn” (Wongkitrungrueng & Suprawan, 2023, p. 5). In other words, utilitarian gratification consists of information seeking, where consumers seek out valuable, new or helpful information (Hossain et al., 2019). Utilitarian shoppers tend to carefully think more about their purchases and look into attributes such as premium quality and long-lasting life (Niinimäki, 2010; Overby & Lee, 2006). Overall utilitarian fashion consumers have the attitude to seek value for the money (Zeithaml, 1988). By allowing customers to try on the fashion products virtually, the branded experiences in the Metaverse can be useful and informative for consumers to decide whether to move through with the purchase (Gabisch, 2011). Furthermore, some fashion branded virtual worlds, such as Gucci Town, allow consumers to learn about Gucci's heritage, their latest collections and the background of their specific products, which will help users further understand how a brand and product fits into their lives (Wongkitrungrueng & Suprawan, 2023).

2.5.1.3 Social gratifications

Lastly, “social gratification refers to the meeting of users' social expectations of social interaction and social presence” (Hossain et al., 2019, p. 4). In other words, social gratifications refer to the psychological significance that users associate with a product or, in the case of fashion, the act of shopping that influences and shapes their identity, self-perception, social status and connections with others (Firat & Venkatesh, 1993; Smith & Colgate, 2007). Certain products can enhance consumers' image and self-esteem while enabling them to express their personalities, values and preferences (Smith & Colgate, 2007).

Users' self-concept and connection with the brand can improve when engaging with branded virtual worlds. Consumers who participate in these worlds may compete in games and brand-related challenges to earn rewards, leading to a sense of accomplishment (Han et al., 2021, as cited in Wongkitrungrueng & Suprawan, 2023).

Additionally, by offering users who may not have the means to afford luxury fashion in the Metaverse access to brand events, brands can establish a connection with their consumers and give them the feeling of being valued (Koles & Nagy, 2021; Schlosser, 2003 as cited in Wongkitrungrueng & Suprawan, 2023). Moreover, customizations of virtual fashion items in the Metaverse, which users can use to represent their identity, encourage personalized opportunities to self-express themselves in the virtual platforms (Bischoff et al., 2019). This, in turn, can enhance users' self-concept and a sense of belonging and ownership of the brand (Wongkitrungrueng & Suprawan, 2023). Finally, the virtual connection to the virtual store and space influences consumers' shopping behavior. In the Metaverse, retail brands are typically keen to help consumers feel a sense of belonging and use communities to retain loyal customers. Consequently, brands can facilitate shared experiences with consumers through communities (Patil et al., 2022).

2.6 Customer relationships

During the past few years, the internet has advanced significantly from Web 1.0 to the current evolution of web3, which includes the Metaverse. In 1991, the first version of the World Wide Web was launched, commonly called Web 1.0 (Nath, 2022). This version focused on connecting and helping individuals gather information through the internet and still needed to use the first iteration for marketing purposes. It was not until the innovation of web 2.0 that the marketing domain's scope was considerably expanded (Nath, 2022), as users became more active participants rather than passive ones (Sharma & Verma, 2018). As a result, there was a significant growth in online user activity, specifically related to the evolution of social media and e-commerce. The evolution prompted numerous companies to launch e-commerce enterprises using digital marketing, encouraging and enabling users to become part of creating and delivering content (Lee & Cho, 2020). At first glance, web3 may appear similar to Web 2.0. However, the main difference lies in its underlying philosophy, which results in changes to ownership, governance and control, possible due to evolving technologies such as blockchain (Karnoupakis, 2023). This shift is characterized by the decentralization of decision-making authorities, meaning the majority of the web's user data and content will no longer be controlled by major tech companies, but rather distributed among contributors

(Shicheng et al., 2023). The continuous innovation of the internet translates to noticeable improvements in customer relationships due to brands' capacity to develop close relationships with their consumers and increase brand awareness and identity (Nath, 2022).

2.6.1 Interaction and engagement

Fast forward to the present day, “the Metaverse represents an opportunity for marketers to engage consumers in entirely new ways” (para. 4), indicating the potential for brands to evolve the way they interact with their audiences (Hazan et al., 2022). Peterson et al. (2022) suggest that the Metaverse will facilitate new ways for consumers to co-create, interact and share the value they generate with their preferred brands and retailers. In order to interact more with consumers as they spend more time in emerging digital spaces, retailers need to be wherever the consumer is. Overall, the Metaverse could have the power to change the relationship between retailers and their consumers and redefine how to offer value (Peterson et al., 2022).

Similar to value propositions and customer segmentation, customer relationships have undergone an evolutionary journey and developed conceptually and in terms of applications (Kumar & Reinartz, 2018). Consumers are continuously becoming more empowered and digitally influenced. As a result, they continue to control marketing communication more, which supports why preparing for the future of Metaverse marketing is so important (Lee & Cho, 2020). Moreover, the continuous shift towards more interactive and immersive technologies and how users interrelate with technology's distinctive characteristics will likely generate transformative changes in how companies do marketing (Ahn et al., 2022). Although it is unlikely that anyone can predict how the Metaverse will develop, marketing will undoubtedly play a role in the virtual world (Taylor, 2022). In light of digital transformation, this evolution is only likely to continue (Kumar & Reinartz, 2018). For example, the digital transformation involving AI will allow brands to build personalized relationships and do more personalized targeting (Huang & Rust, 2021). Furthermore, customer relationships are evolving through AI to the collection and management of data, which can be used intelligently to develop long-term customer relationships, yet also create unique customer experiences by gathering, storing and using the data wisely (Boulding et al., 2005; Payne & Frow, 2005; Rababah, 2011 as cited in Ledro et al., 2022).

2.6.2 Customer experience

With the rise of the Metaverse, how consumers engage with products, services, and each other is predicted to change considerably (Hernandez et al., 2023), making it essential for

companies to understand how they can establish new customer relationships on these new virtual platforms (Duwe et al., 2022). Value proposition changes are mainly related to creating new consumer experiences (Kraus et al., 2022), and a key to any company's value proposition is that customers associate brands with memorable experiences (Peterson et al., 2022). As a result, creating a positive consumer experience should be a brand's key focus to generate more sales and build customer relationships. This entails placing consumers at the center of the design process regarding each new Metaverse experience and product. Consequently, consumer-facing businesses must learn to understand the Metaverse and contemplate adapting and evolving their value propositions accordingly or risk falling behind (Peterson et al., 2022).

Although methods for driving value online continue to evolve, the efficient engagement of consumers within the Metaverse will most likely require a different process (Hazan et al., 2022). According to Joy et al. (2022), scholars and businesses wonder how these new technologies will transform fashion companies and reinvent the customer experience as the Metaverse emerges as a new social platform. The Metaverse pushes the fashion industry towards an experience economy, where offering digital products and immersive brand experiences will be the new way to establish customer relationships (Park & Lim, 2023). Creating unique digital experiences, such as virtual exhibitions or fashion shows to enhance customer experiences, will be another crucial concept that fashion brands could adopt in the Metaverse (Snider & Molina, 2022 as cited in Park & Lim, 2023). Generally, fashion consumers are expected to have completely different shopping experiences in the Metaverse compared to the physical world due to the technological innovations and greater creativity that the Metaverse could allow (Mu et al., 2023). Fashion brands can create innovative consumer experiences, such as virtual try-ons in the Metaverse, which lets consumers engage with them in new ways. This allows them to establish relationships with consumers they may not have reached otherwise by inviting people worldwide to participate in fashion experiences in their virtual environment (Dinh, 2023).

2.6.3 Fusing digital and physical product experiences

Brands can use the Metaverse for three significant purposes (Purdy, 2023). Firstly, Metaverse technologies will help fuse physical and digital (phygital) product experiences more meaningfully and, in return, offer more extraordinary value propositions. In marketing, phygital refers to blending physical and digital customer experiences (Chrétien-Ichikawa, 2022). As the marketing industry navigates the rise of the Metaverse and web3, phygital

continues to become more relevant to offer consumers real-life experiences. Although several brands have wanted to experiment with digital tools, research shows that consumers are worried the Metaverse could make them lose touch with the real world and prefer experiences that combine both the physical and digital worlds (Hiken, 2022). Especially the fashion industry is increasing the implementation of phygital experiences (Van der Merwe, 2021 as cited in Chrétien-Ichikawa, 2022). For example, during New York Fashion Week 2022, Puma launched a phygital customer experience, where customers could interact with their Fashion Week show through a standard website as if they were there physically. The digital exhibits showcased their 3D sneakers, allowing special non-fungible token (NFT) holders to redeem their tokens for a physical pair of sneakers (Hiken, 2022). This is called digital twins, one of the most used practices to push phygital marketing into new directions (Hiken, 2022). Digital twins, which may be any virtual replicas with the same virtual properties as the physical people, places, products or objects, will play a key role (Purdy, 2023). Fashion brands have so far dominated the field of digital twins (Hiken, 2022). For example, the fast-rising fashion influencer Charli Cohen focuses on creating limited physical editions of clothing, which will be created virtually for VR, gaming and other Metaverse environments. Charli Cohen has launched Electric City, an immersive shopping experience in the Metaverse, where consumers can purchase limited editions of digital fashion wearables (Purdy, 2023). Another example is Prada who paired their monthly Timecapsule collection, featuring unique shirt prints by an Italian photographer from the 1960s and 1970s, with digital NFT versions of the apparel (Hiken, 2022; Letonja, 2023).

2.6.4 New ways for consumers to explore products

In addition to fusing physical and digital product experiences, the Metaverse can also help fashion brands create new ways for consumers to discover and explore products, such as virtual try-ons and gamification (Purdy, 2023).

2.6.4.1 Virtual try-ons

Since online purchasing was introduced, one of the biggest challenges has been consumers needing help to see how fashion items would look on them. As a response, fashion brands are implementing AR, machine learning and computer vision technologies to introduce virtual try-ons. These could become a new way for consumers to explore and preview styles from their homes, ultimately decreasing return rates (Briedis et al., 2020). Virtual try-on technology allows consumers to see how a piece of clothing or accessories will look on them before purchasing it (Jain et al., 2022). Through these new interactive technologies, fashion

brands aim to improve the digital shopping experience and engage with consumers more effectively (Koochang et al., 2023). Virtual try-ons offer more than just a new way to experience products. They also evoke emotional and behavioral reactions by enabling consumers to interact with the products entertainingly (Park & Kim, 2023). However, it is also incredibly challenging to meet consumers' expectations with virtual try-ons, as it is still challenging for the technology to automatically meet all consumers' fitting requirements, such as their body shape and posture (Jain et al., 2022).

2.6.4.3 Gamification

By incorporating elements such as gamification when interacting with consumers, the Metaverse offers an imperative opportunity for fashion brands to revolutionize the consumer experience (Purdy, 2023). Gamification features have particularly been adopted in the fashion industry to promote and launch new products. The idea derives from video games, as people are driven and moved by competitiveness and the curiosity to level up. Features such as quizzes and games offer fashion brands a new way to engage with their consumers and reveal their collections and products in more interactive, fun and engaging ways (Cedrola & Giovannetti, 2023). For example, current players in the virtual environment of Gucci Vault can compete to win vault boxes that will allow them to enter raffles for virtual currency and collectables. Another example includes that of Louis Vuitton's The Game, where millions of gamers participated in finding 200 digital candles, marking the brand's 200th anniversary, in order to enter a raffle for a chance to win one of ten digital postcards made by renowned fashion designers (Purdy, 2023).

2.6.5 Establishing connections through “digital humans”

Finally, the Metaverse can help establish significant connections between brands and their consumers through ‘digital humans’, AI-powered bots that engage with users in virtual environments (Purdy, 2023). According to Silva & Bonetti (2021), digital humans are life-like beings powered by AI who will have the ability to communicate and establish emotional connections like “any other human being” (para. 1). Especially when it comes to the fashion industry, the adoption of digital humans can offer advantages, such as knowing the fashion taste of individual consumers better and showing clothing based on the consumers' measurements. This, in return, can lower the return rates and thus help create a more sustainable future (Silva & Bonetti, 2021). Digital humans can communicate with consumers in a friendly and personal way and support customers with their requests (Abraham et al., 2023). Due to being an expensive investment, fashion businesses must be sure whether

consumers are willing to interact with digital humans in the virtual world before investing. Silva & Bonetti (2021) sought to analyze consumers' attitudes towards digital humans and concluded that fashion consumers have positive attitudes towards interacting with digital humans.

3. CONCEPTUAL MODEL

Based on the existing literature from the theoretical framework, the following conceptual model was created (figure 1). The model features the three main business model canvas elements: value proposition, customer relationships and customer segments, and was designed as a systematizing process and representation of the literature.

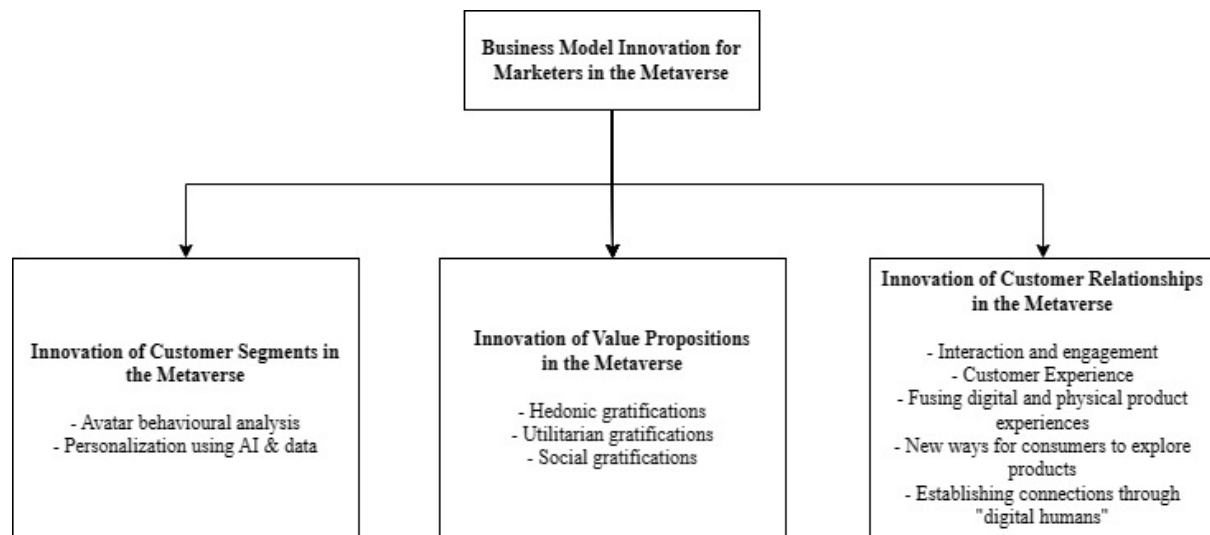


Figure 1. Conceptual model based on theoretical framework.

4. METHODOLOGY

This chapter provides a detailed description of the methodology, including a justification of the method, the research design, the validity and reliability of expert interviews and how the researcher approached the study. Furthermore, the chapter contains extensive information on the sampling method and criteria used, the data collection method, operationalization and a description of how the data was analyzed.

4.1 Research design

As the Metaverse is still in its early stages of development and implementation (Ng, 2022; Wang et al., 2022), this study is exploratory and qualitative. Exploratory research is often used when investigating new concepts that still need to be studied in depth (Creswell, 2014). Due to the exploratory nature of this topic, interviews were used, as they can offer insights into understanding how brands can offer their consumers value in the Metaverse (Dwivedi et al., 2022). Based on this background, this study uses one of the most frequent data collection methods within qualitative research, expert interviews. More specifically, semi-structured interviews with knowledgeable experts on the Metaverse were conducted to answer the research and sub-questions (Kasirye, 2022). Since the Metaverse is a substantively new field, expert interviews were the ideal method to understand the industry and its current evolution (Bogner & Menz, 2009). This exploratory study was done in collaboration with the global content, data and media powerhouse, MediaMonks (MediaMonks, 2023b), who provided access to their large network of experts within the field. As an agency that works with various global companies, including fashion brands such as Burberry and Moncler (MediaMonks, 2023a), the Metaverse is an interesting field for them to explore.

4.2 Expert interviews

Expert interviews are a form of qualitative interview based on a topical guide, which focuses on the expert's knowledge, typically an individual with specific expertise in a particular field (Meuser & Nagel, 2009). This form of data collection is frequently used for gathering data for future studies and is a crucial component for forecasting developments (Ratcliffe, 2002). Van Audenhove & Donders (2019) describe an expert interview as being “a qualitative semi-structured or open interview with a person holding expert knowledge” (p. 179). This study used semi-structured expert interviews as the primary qualitative data collection method based on this definition. While the interviews began with some standardized questions, the conversation was guided by new information obtained as the dialogue progressed (Ahlin,

2019). This method allowed the researcher to probe participants for more information and clarify their answers whenever there were complex topics or unclarities (Barriball & While, 1994).

4.3 Validity & reliability of expert interviews

When carrying out a qualitative study, it is important to consider the level of validity and reliability (Bailey, 2007; Gilbert, 2008), as this can help distinguish between high-quality and poor research (Brink, 1993). In addition, it can increase the likelihood that other scientists will regard results as trustworthy and credible. This is especially important in qualitative research, where the researcher's subjectivity can easily skew the interpretation of the data and results are frequently contested or perceived skeptically by the scientific community (Brink, 1993).

Silverman (2011) states that reliability refers to the *soundness of methods* used throughout the study. LeCompte & Goetz (1982) argue that reliability is a difficult criterion to meet within qualitative research, as it is impossible to 'freeze' the circumstances of a qualitative study and make it replicable in the quantitative sense the term is usually used. In order to ensure as high reliability as possible, the researcher wrote out the research design and methodology in a detailed and transparent manner to allow other researchers to replicate it. Moreover, the use of standardized communication messages (Appendix B), as well as the interview guide (Appendix C), increases reliability as it allows other researchers to follow the same steps and use identical communications when sampling experts (David & Sutton, 2010).

Validity can be recognized as representing the *solidity of the results* (Silverman, 2011). In this study, "the validity of the information collected by means of expert interviews crucially depends on the quality of the experts" (Dorussen et al., 2005, p. 333). To ensure high validity, the experts were carefully selected based on the established selection criteria. To a certain degree, semi-structured interviews also enabled the participants to dictate the direction of the conversation, offering further insight into the topic, thus increasing validity further (David & Sutton, 2010). On the other hand, a disadvantage of using expert interviews was the loss of external validity due to the small sample typically associated with qualitative research (Bryman, 2012; David & Sutton, 2010). Based on this notion, it would be difficult to improve the external validity due to the limited scope of this study. Therefore, as much time as possible was stretched to gather relevant experts.

4.4 Sample

A total of 10 experts were interviewed. The participants were sampled using a non-probability sampling method, specifically purposive sampling, a strategy where individuals suitable for answering the research question are selected deliberately for the critical information they can provide (Bickman & Rog, 2009). It is typically combined with other sampling techniques (Bryman, 2012). For this study, snowball and criterion sampling were also used. Criterion sampling meant all participants needed to meet specific inclusion criteria to make the data as representative as possible (Creswell, 2007). Establishing participant inclusion criteria is a standard requirement when sampling interviewees (Patino & Ferreira, 2018). Therefore, specific inclusion criteria (table 1) were applied to determine which relevant experts to select and interview for this research.

The use of snowball sampling enabled the researcher to sample relevant participants who met the inclusion criteria, and recommended other individuals whom they also deemed a good fit for the study (Bryman, 2012). The first set of interviewees was found among the researcher's professional network and through MediaMonks. All interviewees were screened against the inclusion criteria (table 1). The experts did not need expertise in all the areas but were required to have a minimum of one year of experience in any of the mentioned fields.

Table 1. *Selection criteria*

Selection criteria (and/or)
<ul style="list-style-type: none">• Expertise within web3 marketing• Expertise in AI and its use in creating personalized consumer experiences• Knowledge of creating fashion-related consumer experiences within the Metaverse• Expertise in segmentation and data within the Metaverse• Expertise on marketing value propositions for digital fashion in the Metaverse• Knowledge of the digital fashion industry• Expertise on how Metaverse technologies innovate customer relationships by fusing digital and physical product experiences• Expertise on how Metaverse technologies offer new ways to explore products• Expertise on how AI bots can help build customer relationships in the Metaverse

4.3.1 Sample description

Table 2. *Expert descriptions*

Name	Description
Daniël van der Waals	Daniël van der Waals is the founder of <i>YOM</i> . This pioneering platform offers a peer-to-peer infrastructure for Metaverse artists and studios to create and manage custom web3 Metaverses. They aim to establish a singular infrastructure that can support multiple Metaverses running on a peer-to-peer network and become an all-encompassing infrastructure.
Hannah van Well	Hannah van Well is a fashion editor, stylist and fashion consultant passionate about building bridges between web3 and the creative industries, including fashion. She has worked for Vogue for a long time and has, over the past year and a half, become involved with web3.
Piet Kleeßen	Piet Kleeßen is the co-founder of <i>Metavalue</i> , a leading web3 marketing agency that helps companies enter the Metaverse by offering numerous consulting services such as onboarding workshops, managing and activating web3 communities, and developing digital products.
Daniel Barry	Daniel Barry is the marketing advisor at <i>MetaViu</i> , which assists web2 companies with their marketing strategies related to web3 and the Metaverse. <i>MetaViu</i> collaborates with a vast network of virtual worlds and web3 publishers to help them acquire new clients and brands. Barry is also the founder and CEO of the <i>Web3 Marketing Network</i> , with a core focus on understanding the latest developments in web3 marketing.
Nils Beers	Nils Beers is the Managing Partner of the Metaverse Venture Portfolio at <i>Mach49</i> , a growth incubator for global businesses that helps them navigate their growth journey and leverage their talent, assets and innovation to create sustainable growth engines. He helps more prominent companies build and buy start-ups related explicitly to the Metaverse and helps them come up with new products and solutions within that space.

Lars Bo	Lars Bo Granath has been working for various companies, mainly in IT. He joined Microsoft in 2002, working for almost 20 years in digital transformation. He has been responsible for the whole data and AI platform at Microsoft in Denmark for eight years.
Nathalie Brähler	Nathalie Brähler is the Chief Innovation Officer at <i>Brandingmag</i> and the advisory Chief Marketing Officer at <i>Eleatek</i> . She has been involved in test-driving creative AI tools, Metaverses and blockchain technology since 2017. She is also a qualified university teacher, teaching various subjects in the field.
Sander van der Vegte	Sander van der Vegte is the Vice President of Emerging Tech and Research & Development at <i>MediaMonks</i> , meaning that any new technology being announced, he finds out what is possible, including the do's and don'ts of the technology. He has been working at <i>MediaMonks</i> for almost ten years, is involved with the brands and all their requests, including those of the Metaverse, and has a background in game development.
Gil Regev	Gil Regev is the Chief Marketing Officer at <i>Emperia</i> , who is helping retailers power the creation and management of immersive virtual experiences across several retail sectors. He has worked in tech for about 20 years in different marketing and sales roles, mainly in SaaS (Software as a Service). He joined <i>Emperia</i> about two and a half years ago, and they are powering the creation & management of immersive virtual e-commerce experiences for retailers, working with clients such as Lacoste, Tommy Hilfiger and Ralph Lauren.
Ben Lunt	Ben Lunt is the Global Head of Experience Design & Innovation and the founding partner of FLUX <i>MediaMonks</i> ' global fashion & luxury practice, focusing on innovation, design and all things related to web3.

4.5 Data collection

Participants were offered to do the interview online or face-to-face, as both methods have lately become equally valid and trustworthy (Saarijärvi & Bratt, 2021). Nevertheless, as most participants did not live in the Netherlands or were incredibly busy, all the interviews were conducted online. Each of the interviews lasted between 45 minutes to 1 hour and 20 minutes, and were conducted over 4 weeks. The sampling and interview process continued until data saturation had been reached, meaning that the data no longer generated new significant findings (Saunders et al., 2009). Guest et al. (2006) further explain data saturation as the number of interviews needed to get “a reliable sense of thematic exhaustion and variability within data set” (Bryman, 2016, p. 426). Data saturation was reached after seven interviews. Nevertheless, the researcher carried out three more interviews as they had already been scheduled. The interviews were all conducted online with a video call upon previous agreement and recorded through Google Meet. The transcription software, Notta.ai, was used to save time with transcriptions. Each transcription was checked and corrected by the researcher using the recording to ensure the units of analysis would be transcribed correctly and be complete and reliable.

4.6 Operationalization

Following the conceptual model (figure 1), an operationalized interview questionnaire was created to conduct the semi-structured interviews. Depending on the type of expertise of the interviewee, the researcher dove further into specific topics and then focused on other topics and questions when interviewing experts fulfilling other selection criteria. The questionnaire can be found in Appendix C.

4.7 Data analysis: Thematic analysis

As one of the most frequently used approaches for qualitative data analysis, thematic analysis was used to answer the research question by identifying themes within the research data (Bryman, 2012). Due to the multi-stage process of coding interview transcripts, Braun & Clarke’s (2006) six-step process of thematic analysis was used. The researcher did the thematic analysis based on the pre-existing theoretical constructs, meaning the codes and themes were inspired by the literature from the theoretical framework, referred to as deductive reasoning. This gave the researcher a baseline for the codes and helped answer the research and sub-questions (Braun & Clarke, 2006; Friese et al., 2018).

The coding software ATLAS.ti, specifically version 22, was used to help organize and maintain coding consistency systematically while analyzing large amounts of data (Rodik &

Primorac, 2015; Vaughn & Turner, 2016). Using such coding software was helpful to free the researcher from time-consuming and manual coding while also improving the verifiability and validity of the research (St John & Johnson, 2000). Additionally, it assisted the researcher in gaining a better data overview while facilitating the coding process and generating more precise data (Rodik & Primorac, 2015).

During the first phase of the six-step process, the researcher became familiarized with the data throughout the data collection and transcription process. Then, initial impressions were noted while reading the transcriptions and checking them against the original recordings for accuracy (Braun & Clarke, 2006; Maguire & Delahunt, 2017). Phases 2 and 3 involved creating an ATLAS.ti project, uploading each transcript, creating initial codes, and eventually grouping the codes into possible themes to build the code structure. The data was coded at a semantic level, meaning the researcher did not look for any deeper meaning in the words of the experts but rather at the explicit meanings of the data (Braun & Clarke, 2006). The codes primarily derived from the literature in the theoretical framework and the structure of the conceptual model (figure 1). This helped provide a general direction and move towards answering the research and sub-questions (Braun & Clarke, 2006; Friese et al., 2018). Nonetheless, some codes were also generated from the data (inductive reasoning), as a few themes emerged while interviewing the experts that had yet to be explored during the initial literature stages before data collection (Bryman, 2012).

The themes were revised and improved in phase 4. This phase consisted of two stages, as suggested by Braun & Clarke (2006). In the first stage, each theme's coded data was revised to ensure they all formed a coherent pattern, and the final themes were included in a thematic map (Appendix D). During the second stage, the complete data set was reviewed to confirm that the thematic map accurately represented the overall meaning of the data. In addition, some last codes that had yet to be identified in previous coding stages were added to particular themes. In contrast, others were excluded from the analysis as they did not contribute to answering the research question. The researcher concluded the coding process once no further substantial refinements were needed and proceeded to the subsequent phases (Braun & Clarke, 2006).

In the last phases, 5 and 6, the researcher defined and labelled the themes to present the dataset. These themes were created through coding and helped reveal the significance of the dataset and identify crucial findings regarding the research question. Finally, the researcher wrote out the results and started writing up the discussion and conclusion of the results during phase 6 (Braun & Clarke, 2006).

4.8 Research ethics

There are four primary ethical principles for research studies that need to be considered: informed consent, harm to participants, invasion of privacy, and deception (Diener & Crandall, 1978). Each participant was provided with an informed consent form (Appendix A) that they had to read and provide either written or verbal consent to before the interview. The form contained information on the study and informed participants of their rights and the risks and benefits associated with it. The informed consent form was made as detailed as possible to avoid deceiving the participants, which helped prevent the infringement of any human values and sensibilities (Bryman, 2012). This also ensured that the research project met the guidelines of the Code of Conduct for Research Integrity guidelines, as set forth by the Netherlands Association of Universities (VSNU). Finally, at the end of each interview, participants were asked whether they wished to preserve their data and anonymity or would be open to their names appearing in the paper. All participants consented to having their identity be part of the research.

5. RESULTS

The following chapter offers a thorough account and interpretation of the research data collected during the interviews. Thirty-two codes were assigned after going through the first phases of Braun and Clarke's (2006) six-step process of thematic analysis. Over the subsequent phases, these were condensed to 4 themes and their relevant sub-codes by grouping codes or eliminating the ones that did not appear frequently enough to be significant. The final themes and sub-codes support answering the central research question: How can consumer-facing fashion brands create value for their customers within the Metaverse?

5.1 The Metaverse

As previously revealed in the theoretical framework, there are countless ways to define the Metaverse, as there is no universal definition (Park & Lim, 2023). Although this chapter does not have a dedicated sub-question, it examines the various definitions elaborated by experts throughout the interviews. It aims to offer fashion brands a further understanding of the Metaverse before exploring the findings on how to innovate their customer segments, value proposition and customer relationships within the Metaverse.

5.1.1 Metaverse definitions

Throughout the interviews, various definitions of the Metaverse emerged. As stated by multiple experts, there are various expectations of the Metaverse, including the ideation and function it will have. Experts concurred that there is no universal definition of the concept and that professionals within the field have distinctive views on what the Metaverse is or will be. For example, Daniel Barry explained that he listens to experts during conferences and seminars who each “have two totally different takes on what the Metaverse or Metaverses really are.” Personally, Barry sees the Metaverse as “something that doesn't per se really exist”, but that will be a “major tech shift”. Gil Regev, Chief Marketing Officer at Emperia, sustained the proposition that there are various definitions of the Metaverse by explaining that:

The definition for the Metaverse is a very interesting one. I can tell you because I'm doing a lot of those conferences when you listen to people on stage, there can be six different people sitting on stage. Each one of them has a different definition of what a Metaverse is. So, some of them are defining it by those platforms you have today. The

Roblox, and so on. Some of them are defining it as this parallel universe where things are kind of happening as kind of this new wave of internet.

The common factor that the experts' statements shared is that they all, in one way or another, believe that the Metaverse will make a significant impact within technology. Furthermore, the interviewees discussed how the Metaverse will be the next evolution of the internet and that the digital transformation will not happen from one day to the next but rather gradually until we use it the same way as we use the internet now. For example, when asked why she thinks people will use the Metaverse, fashion consultant Hannah van Well explained that:

I think people will use it because that's simply going to be the Internet in the future. So, it's the same reason why we use the Internet now. It's going to be the Internet, but it's going to be evolving into this more immersive, blockchain based Internet. So, we're just going to keep using it like we do today, and this transition is going to happen gradually. So, it will not be like, oh, now there is a Metaverse. Should I go in or should I not? It's just going to be the Internet. But then more immersive and based on blockchain. So, you will use it because it's probably going to be the way to communicate with your friend and to be part of stuff. And just like today, you cannot really live without the Internet if you want to be part of culture and if you want to meet people and educate yourself and be part of communities.

Overall, these extensive accounts from different experts show no one true definition of the Metaverse. This sustains the literature by Park & Lim (2023), which suggests that most people are still trying to understand what the Metaverse is, yet on an intangible level, the Metaverse has been proclaimed the next evolutionary generation of the internet, integrating our physical and digital lives in a virtual world (Hazan et al., 2022; Smart et al., 2007), which experts sustained. Moreover, experts shared the same view of the Metaverse as the original proposition by Stephenson that it will be a 3D virtual world (Stephenson, 1992). For example, VP of Emerging Tech and Research & Development at MediaMonks, Sander van der Vegte, explained that people could “browse it (the Metaverse) like I would browse the Internet, but then in 3D.” Similar to Cheng et al. (2022), some experts argued that the technology is not yet sufficient to fulfill the “grand version of the Metaverse” (para. 1), which Barry referred to as the “true Metaverse” and van der Vegte described as the “promise of the Metaverse”. Nevertheless, the experts' statements coincided with the literature suggesting

that the Metaverse will evolve naturally due to continuous technological innovations (Taylor, 2022).

5.2 Innovation of customer segments in the Metaverse

As previously explained, the existing literature suggests that the customer segmentation process will evolve with the Metaverse (Verdenhofs & Tambovceva, 2019). This research section aims to gain a deeper understanding of the evolution customer segmentation will face with the rise of the Metaverse. It addresses the following sub-question: How can consumer-facing fashion brands segment their customers within the Metaverse?

5.2.1 Avatar behavioral analysis

Half of the interviewees discussed that when analyzing the behavior of individual avatars for segmentation purposes in the Metaverse, some challenges and benefits need to be considered. The findings represent a fundamental split in how consumers behave in the Metaverse, which needs to be addressed by fashion brands when segmenting their customers within the Metaverse. Nathalie Brähler, advisory Chief Marketing Officer at Eleatek, stated that there are roughly "two flavors". There are the people that want an avatar that resembles them, which she referred to as a "digital twin", and there are other's that "want to play around" with the chance to be someone else. This argument caused a further discussion on whether avatars reflect the consumers behind them, to which she responded, "not at all". What other respondents pointed out as well when discussing avatar behavior, was the online aspect. Experts argued that when it comes to customer segmentation based on avatar behaviour, fashion brands need to consider that consumers' avatar behavior does not reflect their behaviour of the physical world. Sander van der Vegte argued that avatars' "behavior in the Metaverse is completely different than in real life." Interesting to highlight is that two participants, Nils Beers and Daniel Barry, disagreed with the other experts, and favored using avatar behavioral analysis for customer segmentation. Nils Beers maintained that the avatars are "part of our identity" and "the way avatars behave online (...) makes us the perfect target for these kind of personas", referring to customer segmentation. Similarly, when asked whether he thinks consumers' avatar behavior in the Metaverse reflects their real-life behavior, Daniel Barry responded: "I think it will. 100%."

All in all, Barry & Beers' statements, agree with the existing literature (Periyasami & Periyasamy, 2022). In contrast, the remaining statements of the three other experts contradict the theory from the theoretical framework. Especially when it comes to targeting consumers' avatars the same way as in the real world (Periyasami & Periyasamy, 2022), only two of the

experts fully support this, while the three other participants disagree with the literature that suggests there is a similar link between the behavior of a virtual avatar, and how consumers act in real life (Periyasami & Periyasamy, 2022; Ratan et al., 2020). However, Nathalie Brähler maintained that this also depends on whether consumers wish to have a digital twin or to “play around” and be somebody else virtually. These results suggest that while consumer-facing fashion brands can sometimes segment their customers according to their avatars’ behavior in the Metaverse, they also need to be careful, as not all avatars’ behavior reflects that of the consumer.

5.2.2 Personalization using AI & data

Another prominent theme from the interviews was the personalized targeting that fashion brands could do through more in-depth data collection using AI technology in the Metaverse. All ten interviewees affirmed this as a new possibility of targeting consumers more individually, thus creating more customer engagement between the consumers and the fashion brand. Overall, experts discussed the new large amounts of data that will be possible to collect with the help of emerging technologies, such as AI. As stated by Ben Lunt:

So, we're heading towards a point where you're able to get a sense of who has owned what, when, how long, what else they were owning at the time they owned that? what else they were wearing? Where were they wearing it, too? Who else did they interact with at that event?

While this data will help fashion brands understand their consumers better and consequently segment them more efficiently, the interviewees also mentioned that it is not so much about customer segmentation anymore but rather about offering everyone a personalized and customized experience through data collection. This could mean a complete evolution in how fashion brands segment customers by using technologies such as AI to target every consumer individually and offer them garments and accessories that fashion brands know they will like. Gil Regev pointed out that:

You can pull data from anywhere (...) the idea is really to make sure that this store fits exactly what it is that you're looking for. That you don't need to look through hundreds and hundreds of products walking around those huge spaces. So, everything is kind of customized to the specific user. (...) I think that when it comes to personalization, AI is definitely going to be that sweet spot for those kinds of stores where we're going to be able to use it.

Other participants further supported this statement by elaborating on the degree of personalization possible through data. They explained that fashion brands should focus on creating user environments that reflect their interests and needs. According to Sander van der Vegte:

The biggest difference is you can change the environment based on certain interests. You can gauge how you interact with it. And then you can come to a conclusion whether or not a person is interested in whatever object you have presented.

Overall, the experts' statements coincided with the literature from the theoretical framework. When it comes to offering users the fashion garments they want, experts agree that fashion brands will be able to use data to determine which products consumers want based on how they style themselves with fashion (Rathore, 2023). On the other hand, contradictory to Rathore (2023), suggesting that data collection may help organizations better understand the needs of customer segments and thus target different consumer categories, experts concurred that it is not so much about customer segmentation anymore but rather about offering personalized experiences to consumers through data. This coincides with Verdenhofs & Tambovceva (2019), who suggest that the focus will shift away from customer segmentation and become more focused on offering personalized targeting and experiences for everyone, arguably abolishing customer segmentation as we know it. Experts further sustained the literature by Harreis et al. (2023), who indicate that the technological evolutions of AI and methods for collecting data will allow fashion brands to become more productive and serve their consumers faster and better. Concerning this, Gil Regev affirmed:

You look for a black dress, we can show you a room full of black dresses of different brands or for the specific brand, depends on which store you're visiting. So in that sense, AI is extremely, extremely important. (...) So everything is kind of customized to the specific user.

Regev's statement further aligns with the literature by Yang et al. (2022), suggesting that brands can use data to provide tailored clothing recommendations to their consumers based on their preferences.

5.2.3 Emerging code: *Community segmentation*

While many respondents argued that customer segmentation is shifting towards more personalized experiences, the topic of community also emerged as a new way for fashion brands to segment their consumers. This was especially interesting to explore further, as the

theme emerged in 6 out of 10 interviews without being raised as a question by the interviewer. The concept of community organically appeared when addressing customer segmentation and the evolution that customer segmentation is undergoing. Since numerous experts raised the topic, the researcher coined the term “community segmentation” and asked participants whether the evolution could be considered a shift towards *community segmentation* rather than customer segmentation. Daniel Barry, Nils Beers and Piet Kleeßen each agreed, voicing the words "1000%" and "definitely". Daniel Barry further explained "web3 is going to start being more and more about (...) the community aspect.". Hannah van Well also elaborated on this by saying, "I think a lot of us in web3 believe that the consumer, as we traditionally approached consumers in fashion and as marketers and as brands, that's going to change. They're going to be part of your community." Overall, experts explained that many of these communities already exist on platforms such as Discord, where users engage with each other and chat about shared fashion interests. Besides engaging with pre-existing communities, experts mentioned that fashion brands can also build their own and engage with them to offer exclusive experiences, co-create fashion products, and chat with them to understand their consumers even better.

Furthermore, experts explained that while the Metaverse should be about offering personalized experiences and products, fashion brands should also focus on bringing consumers together, yet not in the traditional way of splitting them based on behavioral, demographic, geographic, or psychographic data (Cooil et al., 2008), but in terms of their interests for the individual fashion brand. Gil Regev reasoned that: "the sense of community is becoming extremely, extremely important when it comes to virtual stores." Van Well further explored this, arguing that consumers "want to be part of the community. You want to belong somewhere, and you want to find like-minded people who are also a fan of the same stuff".

5.3 Innovation of value propositions in the Metaverse

In order to explain the innovation of value propositions in the Metaverse, the theoretical framework explored the uses & gratifications theory to help understand how consumers feel and intend to use the Metaverse as a channel for shopping (Lim & Ting, 2012). The theory helps us understand why people may select and use the Metaverse to receive gratification from having needs or goals fulfilled (Stafford, 2008 as cited in Chen et al., 2010). This research section aims to understand the hedonic, utilitarian and social gratifications ((Hossain et al., 2019; Wongkitrungrueng & Suprawan, 2023) that fashion consumers may gain from

the Metaverse. It does so by answering the following sub-question: How can consumer-facing fashion brands offer hedonic, utilitarian and social gratifications within the Metaverse?

5.3.1 Hedonic gratifications

Entertainment was the second-most mentioned use case and value proposition of fashion consumers in the Metaverse. This topic was discussed by seven participants, all of whom had the detail in common that they believed entertainment to be a substantial reason consumers would use the Metaverse and want to engage with fashion brands in the virtual world. When asked why people will use the Metaverse, Nils Beers, reasoned that “it’s just fun”, which was also sustained by Piet Kleeßen, Daniël van der Waals, and Lars Bo Granath, who each used words such as “entertainment” and “fun” to describe why consumers may seek out Metaverse platforms, such as Decentraland or Roblox. Sander van der Vegte went into more detail on the customer journey and explored that consumers need to have a purpose for being in the Metaverse. He argued that “there needs to be a reason. And the reason could be I’m being entertained”. Rounding up the conversation on this topic, van der Vegte was asked whether he would say entertainment is the most prominent use case for consumers, to which he responded: “It’s the easiest and most tangible form of getting people to get into your Metaverse”.

The experts further explored the different types of entertainment that would be possible through the Metaverse. They argued that gamification would be one of the most effective methods when trying to entertain consumers. Sander van der Vegte explained that consumers liked whenever there is a “little challenge involved”, as this is “part of the fun”. These results on entertainment as a hedonic gratification support the literature by Hossain et al. (2019), who suggest that entertainment is vital to virtual worlds. The findings also sustain Patil et al. (2022), who describe that fashion brands and shopping experiences in the Metaverse are associated with “fun”. Furthermore, the theme supports the theory by Wongkitrungrueng & Suprawan (2023), especially in relation to gamification, as this can make the user experience fun and enjoyably through brand related activities and games such as quests and events. The topic of gamification will be explored further in section 5.4, which discusses gamification as a new way for consumers to explore products.

The theme of passing the time in the Metaverse as a use case by consumers was only supported by Daniël van der Waals, who stated that he was “100%” sure that passing time would be a part of being in the Metaverse, either by “just like doing game experiences and trying to win like an NFT”, or “just by hanging out”. Since passing the time was only

explored by one expert, these findings arguably contradict the literature by Hossain et al. (2019), who suggest that passing time is an important gratification users get from virtual worlds. While this result suggests that this is not a hedonic gratification users want from the Metaverse, it might also be that it simply did not come up in other interviews.

5.3.2 Utilitarian gratifications

Using the Metaverse for gaining information was explored by Lars Bo Granath, Daniël van der Waals and Daniel Barry during the interviews. While it was not covered in too much depth by experts, they each agreed that fashion brands could use the Metaverse to offer their consumers information and consumers could use the Metaverse to gain information on the fashion brands. Granath and van der Waals each mentioned information seeking in passing while discussing consumers wanting to get “information”, “insights” or “knowledge” from AI bots on the individual brand. However, Daniel Barry explored it in more depth. He argued that consumers are likely to use the Metaverse to obtain valuable information, such as there being a sale going on for a specific fashion brand. He explained that since there will be a lot of data collection, it is possible for the technology to “get a lot of information from around you” and provide you with specific information that may be interesting to you. These findings sustain the literature by Hossain et al. (2019), which suggests that consumers can use the Metaverse to gain valuable, new or helpful information. Furthermore, the results show that consumers can use the Metaverse to gain more information on a fashion brand’s sales (Wongkitrungrueng & Suprawan, 2023). Nevertheless, as more experts did not mention it, it also shows that this is not the most considerable use and gratification users seek from fashion brands in the Metaverse. However, similar to the gratification on passing time, it might also be that it simply did not come up in other interviews.

5.3.3 Social gratifications

Finally, social gratifications such as using the Metaverse for social status and using virtual fashion to enhance one’s virtual identity was a recurring use case that experts suggest consumers seek to gain from the Metaverse. Nine experts explored the notion of consumers using the Metaverse to express themselves and their identity, through their digital twins, virtual garments, skins and accessories. Nils Beers suggested that the Metaverse is all about “this notion of you wanting to express yourself in front of a group of people”, which was similarly worded by other experts. Furthermore, experts explored how the notion of consumers wanting to express themselves in the Metaverse is interrelated with users wanting to use the Metaverse as a new platform for social status and flexing. hey explained that it is

the same virtually, similar to people wanting to show off their new clothes in the real world. Piet Kleeßen shared that:

The next step for young kids is they want to show not only in real life that they are like cool, they also want to flex in the Metaverse, which is like yeah. They have like two characters; one is okay what do you wear in school? And the other thing is, how do you look in Roblox or Fortnite? So it's also a world they care about because they spend a lot of time in there and want to be the coolest kids.

Several experts supported Kleeßen by suggesting that the Metaverse will be a place where people can share their identity and wealth with the world. Sander van der Vegte argued that it is about being able to “boast” and “flex” and “show other people that they can afford it”, which was also reinforced by Hannah van Well, who said consumers “want to show it off to the world”. She explained that the value proposition for fashion consumers by brands is “all about status, signaling and exploration of identity”. Ben Lunt further elaborated on this by saying that “it is a form of self-expression, self-codification, social signaling. This is my vibe; this is my tribe. I earn this much. I'm into these things. It's about exploring and expressing your identity and your personality.”

These findings back the literature on the relationship between social gratification and fashion and consumers using shopping to shape their identity and social status in the Metaverse (Firat & Venkatesh, 1993; Smith & Colgate, 2007). Consumers want to boast about their purchases and share their social status (Smith & Colgate, 2007) by showing off and flexing how much they could spend on a particular item in the Metaverse. Furthermore, the results reveal that consumers will use the Metaverse to self-express their personalities and preferences (Bischoff et al., 2019; Smith & Colgate, 2007).

5.4 Innovation of customer relationships in the Metaverse

This section looks at the evolution of customer relationships with the current innovations surrounding the Metaverse, based on the theoretical notion that customer relationships evolve as digital transformations progress (Kumar & Reinartz, 2018). The theoretical framework explored the evolution of marketing, the rising importance of customer experience, and the three significant purposes for which brands can use the Metaverse to build customer relationships, including fusing digital and physical product experiences, introducing consumers to new ways to explore products, and establishing connections through digital humans (Purdy, 2023). This research section aims to understand how building customer

relationships is evolving and seeks to answer how consumer-facing fashion brands can build relationships with their consumers within the Metaverse.

5.4.1 Interaction and engagement

5.4.1.1 Data

The representation of the Metaverse as an opportunity for marketers to engage consumers in new ways, as suggested by Hazan et al. (2022), was discussed in 7 interviews, during which experts mainly focused on the evolution that is happening in marketing with access to gather and use more data than ever. The interviewees shared that this digital transformation will enable fashion brands to interact and engage with consumers in a much more personalized manner and do more targeted marketing. Daniel Barry stated that “as brands start getting an understanding of how that data is going to be, what data they can get and how they're going to be getting it I think campaigns and marketing is going to change dramatically.” Lars Bo Granath sustained this by arguing that “data is definitely going to be having a huge role in the way companies are targeting marketing toward customers.” Experts further acknowledged that this marketing development would considerably impact customer relations. They explained that fashion brands could understand their consumers better and use the data to build deeper relationships. For example, Gil Regev explained that:

When it comes to your customer relations (...) there's really no limit to it and you can keep in touch as much as you want with them. And you can always get back to them knowing that you're collecting so much data about how they're shopping and what they're shopping for and what they're looking for. You can always touch base with them and see if they found what they needed. You can do via social. You can do it via emails, but it gives so much more depth into your relationship with your clients.

Moreover, experts provided examples of the large volumes of data that will be possible for fashion brands to obtain from their consumers through the help of AI technology. Their statements revealed that the data that can be collected in the Metaverse is extensive and will allow fashion brands to interact and engage a lot more personally with their consumers. For example, Ben Lunt provided insight into the depth of data that can be gathered:

What worlds are they in? What parts of the world are they in? What are they doing in those worlds? What are they wearing in those worlds? Who are they hanging out with in those worlds? How long are they spending in each of them? What are the interests that we can infer that people might have from all of that data?

The pattern surrounding data and its influence on the shift within marketing aligns with the literature by suggesting that customer relationships are evolving through the collection and management of data. The data points allow brands to use them to develop strong and long-term customer relationships (Boulding et al., 2005; Payne & Frow, 2005; Rababah, 2011 as cited in Ledro et al., 2022). Furthermore, it supports the literature by Huang & Rust (2021), which emphasizes how the impact of the digital transformation surrounding AI will allow brands to build personalized relationships, and hence do more personalized targeting.

5.4.1.2 Co-creation

Another pattern that emerged from the expert interviews concerning building more engaging and interactive customer relationships was co-creation. In total, 4 of the experts discussed the evolution of fashion brands co-creating with their consumers. Each interviewee's statement emphasizes the importance of fashion brands adapting these evolutionary marketing strategies to build successful customer relationships. The core message of this pattern was to involve consumers more in the decision-making process to ensure they would get access to products they had been part of co-creating with the fashion brand. Hannah van Well kicked off this topic very strongly by saying that:

A lot of us in web3 believe that the consumer, as we traditionally approached consumers in fashion and as marketers and as brands, that's going to change. They're going to be part of your community. And they're going to be the ones that really care. They're going to be involved with making decisions. There's this whole idea of co-creation and co-ownership. It's not just telling them like, oh, this is the new style for this season and here you can buy it. It's like giving them the choice.

Due to the rising importance of co-creation experts affirmed the necessity for fashion brands to interact more with consumers to get an understanding of what they want and become more consumer focused. For example, Piet Kleeßen stated that:

What I see appearing at the moment is a lot of product development in cooperation with the community. So the community has the possibility to vote or to share their opinion and the brands really read them, give them the possibility to decide and develop a product together with the brand, which is then of course, really customer centric. (...) It's about listening, interacting and then you get to know what the consumers, what your community wants for experiences, for example, or what products.

These results support the literature by Peterson et al. (2022), who suggest that the Metaverse will facilitate new ways for consumers to co-create and interact with their preferred fashion brands and retailers. Furthermore, it shows the importance of brands to be where consumers are (Peterson et al., 2022) and adapt their marketing accordingly as users become more interactive with the brand (Ahn et al., 2022). Finally, the results show that there will be an evolution in how brands interact with their consumers and that marketers should prepare to engage with consumers in new ways, such as co-creating and interacting with them (Hazan et al., 2022).

5.4.1.2 Emerging code - NFTs to build customer relationships

A theme emerged in using NFTs for building customer relationships. Experts referred to NFTs as a vital technology that will help fashion brands target their consumers differently. 5 out of 10 participants discussed the relevance of NFTs and how this technology is changing the marketing landscape and how fashion brands build customer relationships. According to Daniel Barry, NFTs “help you build community”. For example, when a consumer has an NFT from a fashion brand such as Gucci, they automatically become part of Gucci’s “ecosystem”, and “part of the club”. Piet Kleeßen explained that this is a new way of “targeting” consumers and that some fashion brands, such as Adidas and Nike, have already started “giving out NFTs” to build communities. Hannah van Well further supported this, saying that “a lot of big fashion brands have already started experimenting with NFTs”. She explained that these could take many different forms:

It can be a digital garment, but it can also just be a digital collectible or it can even be a sort of membership pass. There is a whole section of innovations that relate to retail. So, there are NFT chips and digital ideas linked to them which will contain information about the garment upon scanning it. Sometimes these are also linked to an NFT on the blockchain.

As the interviews progressed, this became an important theme to write about as experts explained that the NFTs will play a large role in fashion brands determining who gets access to exclusive consumer experiences. For example, Gil Regev provided a case of Lacoste and explained that “they have a web3 community that's called underwater. So, we created a specific room that was only accessible with a Lacoste NFT.”

Overall, these findings support the literature by Hazan et al. (2022), who suggest that “the Metaverse represents an opportunity for marketers to engage consumers in entirely new

ways” (para. 4). While the topic of NFTs may not have been extensively explored in the theoretical framework, it was mentioned as being a significant digital transformation and technological innovation regarding the fashion industry (Joy et al., 2022). Furthermore, the results sustain the notion that the technological evolutions surrounding the Metaverse will help fashion brands build stronger customer relationships (Rathore, 2023). This indicates that the Metaverse has the power to change the relationship between retailers and their consumers and potentially redefine how fashion brands can offer value (Peterson et al., 2022).

5.4.1.3 Emerging code – Community relationships

Another recurring theme from the interviews was fashion brands establishing relationships with their consumers through communities. This topic was explored by six different experts during data collection and emerged as an imperative tool for building customer relationships within the Metaverse. Communities were described as fashion brands grouping people with a shared passion for the brand. For example, Nils Beers described the point of community as brands identifying a group of customers “that have a shared passion, and then create something around that shared passion”. He further explained that if fashion brands want to build momentum in the Metaverse “you need to own a community and you need communities. And your business model is no longer about selling actual clothes, it's about selling online fashion to a community that you've created.”

Experts dove into the topic further by arguing that the focus is shifting to fashion brands co-creating with their consumers through the community. They suggested that it is all about collaborating with the consumers and understanding their wants, needs and wishes to build successful customer relationships and put the customer at the center of the decision-making process. Piet Kleeßen stated that:

What I see appearing at the moment is a lot of product development in cooperation with the community. So, the community has the possibility to vote or to share their opinion and the brands really read them, give them the possibility to decide and develop a product together with the brand, which is then of course, really customer centric. And it's all about customer centricity at the moment.

Hannah van Well further supported this argument of co-development and customer centricity by suggesting that fashion brands should include consumers so that they are:

Going to be involved with making decisions. There's this whole idea of co creation and co ownership. It's not just telling them like, oh, this is the new style for this

season and here you can buy it. It's like giving them the choice. And that might be scary for brands because they're giving kind of their power away a little bit, but at the same time, it's really liberating for the consumer.

Van Well explained that many communities are currently on *Discord*, which helps brands “keep in touch with the people who buy your stuff” or even the ones “who are not able to buy your stuff, but who really love your stuff”, which are equally important part of the community, as they will share positive messages about the brand. She provided the case of fashion corporate Balenciaga and justified that:

I can imagine if Balenciaga has like an online community, there will be a lot of people who really want to be a part of that, because even if they cannot afford a Balenciaga bag or a Balenciaga dress, maybe they post Balenciaga on their timeline all the time just because they associate themselves with the aesthetic and they love it. And they are actually important for the brand as well because they help spread the message and they keep the brand relevant because they post about it.

Once these communities have been established, experts argued that fashion brands need to stay engaged and maintain the customer relationship, which van Well suggested would be good to do by hosting a regular “town hall”, where consumers can ask the brand questions. She shared that in her company, they host a “town hall every two weeks” with the CEO and other important people in the company, during which they get to be in touch and “directly communicate with their consumers.”

This theme was interesting to explore as experts argued it would become one of the most substantial ways fashion brands build consumer relationships. While it is an emerging code, as the topic was not elaborately addressed in the theoretical framework, the theme coincides with the literature on social gratifications by Patil et al. (2022). They propose that retail brands are typically keen to have a social connection with consumers and use communities to retain loyal customers. Consequently, brands can facilitate shared experiences with consumers through communities.

5.4.2 Customer experiences

All experts (10 out of 10) discussed the importance of customer experiences for establishing customer relationships. They argued that fashion brands need to continue finding ways to improve the brand experience so that their consumers will continue coming back and feeling connected with the brand. For example, Ben Lunt argued that “targeted rewards and

experiences” were a big part of brands building connections with their consumers so that consumers would feel engaged with the brand. Nils Beers elaborated on this, explaining that fashion brands could build “all sorts of small experiences and test what is it that people love? Why did they come back? What is the connection that they feel to your brand?” Sander van der Vegte also supported this by arguing that fashion brands must ask themselves “what kind of fun game can we create (...) that levels up this brand experience?”

Additionally, experts discussed the impact the Metaverse could have on customer relationships in the future, as fashion brands will be able to turn all their creative ideas into experiences that have no limitations once the technology has evolved further. For example, Daniel Barry talked about the power of technology and explained that once there is a “true Metaverse”, there will be no limitations to what is possible. For example, fashion brands might be able to create experiences such as fashion shows that align with their brand and clothing line:

For a brand, maybe like being in a rainforest kind of a thing accentuates what they're really trying to sell with their particular line for that year so you could have the entire experience be in the rainforest, and you're there and you could hear the animals.

Interestingly, the interview with Gil Regev showed that fashion brands do not necessarily have to wait for the true Metaverse to come around, but that there already now “is really no limit” because fashion brands can “break out of the physical store barrier”, by having virtual events, during which fashion brands can offer “personal shopping events for different clients”.

Experts also discussed the opportunities that arise by having more virtual events. More specifically, they addressed the potential for fashion brands to develop new, improved personal relationships with their consumers. For example, Regev shared that “virtual shopping means that your customer relationship doesn't end in the store.” This statement emphasizes the possibilities for fashion brands to build relationships and stay in contact with their consumers continuously. Additionally, experts talked about the importance of offering consumers exclusive experiences virtually, as these will make consumers feel appreciated by the brand and continue being loyal customers. For example, Piet Kleeßen argued that fashion brands are especially “really based on the idea of exclusivity. And that's what they can trigger with the Metaverse with these specific people because they give a really customer oriented, exclusive experience as no one else has.”

Furthermore, he discussed the importance of exclusive brand experiences and shared cases of what some fashion brands already do. He mentioned that Hugo Boss give “people who spend a lot of money for them every year, exclusive experiences”. The experts each provided examples of what exclusive experiences could entail. The patterns revealed that the experiences could be anything from access to special events to early access to limited edition products or virtual experiences. Furthermore, experts explained that the experiences could be virtually as well as in person to blend the phygital customer experience. For example, Piet Kleeßen described that these experiences can be mixed and are primarily offered to NFT holders to reward them with an exclusive experience, which can be anything from:

Exclusive access to products, to events, to virtual experiences, but also in person events to get a possibility to meet people you would never meet in another case so they can play a lot with this exclusivity thing. (...) Every brand at the moment, and especially the fashion brands are bringing exclusive experiences to their core fans who are into NFTs at the moment. And of course, this number is growing.

The notion of fashion brands offering consumers memorable experiences to maintain customer relationships (Kraus et al., 2022) aligns with the findings from the interviews on the importance of exclusivity and providing consumers with experiences they will remember. Furthermore, the findings correspond with the literature by Park & Lim (2023), who argue that the Metaverse is moving towards an experience economy where brand experiences will be the new way for fashion brands to establish customer relationships. Moreover, the results show that the Metaverse will allow consumers to have entirely different shopping experiences, compared to the physical world, due to the more significant amounts of creativity the technological innovations would allow (Mu et al., 2023). This also aligns with the findings that creating unique digital experiences, such as the ones suggested by Barry with fashion shows in a rainforest, will be crucial for fashion brands to adopt to establish strong customer relationships and customer loyalty (Dinh, 2023; Snider & Molina, 2022 as cited in Park & Lim, 2023).

5.4.3 Fusing digital and physical product experiences

Eight experts mentioned the fusion of digital and physical product experiences. Each expert discussed how the merging between physical and digital (phygital) is happening more and more frequently. They further explained that in order to create value for consumers in the Metaverse, fashion brands would not just have to offer experiences to consumers online yet

also physically. Nils Beers stated that "we're going to see a further and further merge of our physical and digital lives". Furthermore, when consumers are part of a community, they can access "exclusive content, experiences and products (...), some of which are digital and some of which are physical" according to Ben Lunt. He explained that the real "value unlock is not just in the digital and virtual realms. It's also in the real world". Gil Regev provided a relevant phygital example of what his company, Emperia, had recently done with luxury fashion brand Tommy Hilfiger:

Basically what we did for virtual fashion week for them is create six different experiences on different platforms. (...) We connected all of them through a hub, which was sitting on their own website. So, on the hub, you could actually purchase physical products on those platforms. You could purchase the virtual twins.

The interviewees also shared that NFTs will continue evolving and play an important role for fashion brands when it comes to offering phygital products and experiences. For example, Daniel Barry explained that "at some point in let's say ten years from now, (...) like 90% of just about everything is going to be if you buy something, there's going to be an NFT twin." Furthermore, Daniël van der Waals argued that fusing the digital and physical world did not have to be very complicated but that it would be as easy as "buying your T-shirt virtually as an NFT for your avatar, and then get the same t-shirt sent over to you at home" by fashion brands.

The findings reveal that phygital will indeed become an important part of marketing and be about blending physical and digital customer experiences (Chrétien-Ichikawa, 2022). Moreover, the interview results coincide with the research article by Purdy (2023) by showing that fashion brands should merge digital and physical product experiences to build strong customer relationships within the Metaverse. This includes experiences such as offering digital twins to consumers, yet also offering consumers access to specific content and experiences in the physical and digital world (Hiken, 2022). Finally, the findings coincide with the literature in that fashion brands should focus on offering NFT versions of products as simple as t-shirts, including t-shirts from a specific type of collection (Hiken, 2022).

5.4.4 New ways for consumers to explore products

As previously mentioned, virtual try-ons and gamification are new opportunities for fashion brands in the Metaverse to offer consumers new ways to explore products (Briedis et al., 2020; Cedrola & Giovannetti, 2023; Purdy, 2023).

5.4.4.1 Virtual try-ons

Virtual try-ons were extensively discussed by 3 out of 10 interviewees, Gil Regev, Sander van der Vegte and Hannah van Well. Interestingly, there was a split in the opinions of the experts, as Regev and van Well were both in favor of virtual try-ons. At the same time, van der Vegte was more critical of their current uses due to the limits of technology. More specifically, van der Vegte argued that the moment a brand is offering virtual try-ons “they’re also giving the opportunity for the user to influence the garments. I can move around and then it needs to update. And if it's not done, absolutely perfect then it is considered to be worse than a picture.”

In contrast, Hannah van Well discussed how “virtual try-ons for online shopping” will impact shopping by using the evolving technology within augmented reality to allow users to try on clothes virtually. Gil Regev sustained this by arguing that the technology for virtual try-ons is getting better and more accurate. He reasoned that his company, Emperia, is “tracking return rate to make sure that those things are actually working and they're accurate.” When asked for numbers to back up his statement, he stated that “the return rate on virtual stores on average can be reduced by about 50%”, a substantial number based on the implementation of virtual try-ons.

Overall, Gil Regev and Hannah van Well both support Koohang et al. (2023) in that virtual try-ons will become substantial to engage more with consumers and give them the power to explore products before purchasing them. Regev’s statement on lowering return rates further sustains the literature, as users can virtually try on their garments and see if they would fit before ordering them (Briedis et al., 2020). On the other hand, van der Vegte supported the critical literature by Jain et al. (2022), who argue that the technology is not yet at the point where it can meet the challenges involving fitting requirements such as each consumer's body shape and posture. Nevertheless, unlike van der Vegte, Regev and van Well work in the fashion industry daily, observing the efficiency of virtual try-ons, such as the higher conversion rates (Gonzalez, 2019).

5.4.4.2 Gamification

Four interviewees talked about the introduction of gamified experiences with the rise of the Metaverse. They further discussed gamification's effectiveness in building customer relationships and offering consumers an entertaining experience, one of the most important uses and gratifications, as mentioned above. For example, Sander van der Vegte explored how “90%” of Metaverse initiatives “offer these types of game like mechanics”, which involve “challenges” that consumers need to solve. Daniël van der Waals echoed this opinion by claiming that a large part of the Metaverse will be “gamified experiences”, which will especially be “fun” for consumers if they can “win something”. Furthermore, experts also discussed how some of these gamified experiences will be phygital. For example, when asked about how she felt brands would use gamification to build relationships with their consumers, Hannah van Well explained that:

I think that's going to be one of the most creative parts for marketers to play around with because obviously you can sort of create kind of video game like things like Gucci did with Gucci Vault or in Roblox you also had like a Gucci Town and people could do a motorcycle race in the Metaverse or customize their sneaker or handbag whatever digitally or learn about the brand and through doing all these kind of tasks, they can earn rewards. Or if you earn like ten rewards, maybe you can enter a raffle for a bigger price or whatever. But I think it can even go back to reality where, for example, if you enter a shop and you have augmented reality glasses, maybe you can have gamified stuff in the shop where you can check out different sections of the shop to check out the shoe section and earn this reward.

These findings correspond with the literature that gamification will revolutionize how brands interact with consumers and provide them with even more of an experience (Cedrola & Giovannetti, 2023). Similar to the literature, Hannah van Well specifically mentioned Gucci Vault as an example, where participants could compete to win vault boxes that will allow them to enter raffles for virtual currency and collectables (Purdy, 2023). This shows that while only four experts talked about gamification, it is a good way to attract and motivate consumers to engage with the products and revolutionize the customer experience (Purdy, 2023).

5.4.5 Establishing connections through “digital humans”

7 out of 10 participants discussed brands’ use of digital humans, AI bots, to establish a relationship and connection with their consumers. There were mixed feelings about using AI bots and their benefits in establishing customer relationships. Some participants resonated with each other, while other experts offered opposite opinions and views. For example, Hannah van Well, Piet Kleeßen and Lars Bo Granath favored using AI bots with a balance of also using humans to connect with consumers. Granath argued that sometimes “it’s really relevant for us to interact with software, like a bot.” He contended that using bots as a brand might be useful, especially “if you want to scale”, since software such as bots will help you reach “a much broader audience”. He elaborated that bots can be useful for automation. Yet it is also important when trying to “get close to the customer” that there is a more personal experience and “human interaction”. Kleeßen supported this and explained that when it comes to interacting with people, brands should:

Invest in building relationships with your customers, with your community. And that means not hiring the best bot out there it means like real people being there and building relationships and interacting with the people because you want to build personal relationships.

Hannah van Well also resonated with Granath and Kleeßen, yet offered an additional perspective, where she argued that “you need both”, referring to AI Bots as well as humans for brands to establish a connection with their consumers. She explicitly outlined the differences the two could be used for by saying that:

You can have these AI Bots for more day to day helping people out who have questions or pointing them to the right channel or whatever. But I think it's very important that there's also a community team who actually interact with the people on a more personal level.

Daniël van der Waals & Nathalie Brähler went in a different direction, addressing deceit and regulations as a topic. Van der Waals said how “there should be some legislation and rules about that so that you know that you’re talking to an AI, NPC or digital human.” He focused on the fact that although AI bots can be used “to get some information or insights or knowledge, there may come a time where “you cannot make the distinction between the two in the Metaverse, so you're not sure if you're talking to a real person or not.” In this regard, “it’s important to avoid that deceit”, and make sure that people know whether they are

”talking to an AI, NPC or digital human.”. This was also addressed by Piet Kleeßen who said that "people want to know if they are interacting with a human or with a bot." Nathalie Brähler echoed both of these opinions and suggested that the solution might be the digital ID (DID):

So the moment that (...) your social score through the DID - the DID is actually technology, and then you have some kind of a social score - is big, then it's okay to interact with an avatar of someone. Now through the DID you can establish if it's a human being behind it or a factory behind it. (...) So if we look at bots then through the DIDs, they could potentially, I have to say, be separated from humans, which is to my opinion, a good thing.

In contrast to these opinions, Gil Regev was a spokesperson for automatization and AI bots and stated that “the more automation, the better”. He argued that when it comes to brands establishing connections with their consumers, AI bots can be “very helpful as far as customer assistance”. Furthermore, he indicated that this is also saving money and thus beneficial for the brands, as they “don’t need as much staff to actually support that person to walk through the door of the virtual space”.

This topic divided experts regarding their opinions on the use of AI-powered bots. While some experts, such as Regev, agreed that AI bots could engage with users in virtual environments (Purdy, 2023), and thus have the power to enhance the user experience (Silva & Bonetti, 2021), others, such as Brähler and van der Waals argued that brands should still be careful with using AI bots too much before more regulations are introduced or at least make sure to “avoid deceit” and make sure consumers knew whether they were talking to a bot or not. This supports the literature suggesting that through the collection of so much data in order for the AI bot to help consumers, fashion brands need to consider challenges related to data security (Aei, 2022; Merre, 2022 as cited in Dwivedi et al., 2022). Furthermore, the argument that there should be a balance between human connection and the use of AI bots and that they could be used for answering support questions sustains the literature by Abraham et al. (2023), suggesting digital humans can be used to communicate with customers and support them with their requests.

6. DISCUSSION AND CONCLUSION

This research aimed to explore how the Metaverse will impact and reshape the consumer-facing side of fashion brands' business models, including value proposition, customer segmentation and customer relationships. With these elements as the theoretical foundation, this paper sought to understand how fashion brands and their marketers can use the Metaverse and the technological innovations surrounding it to create value for their consumers. This study has aimed to answer the following research question: How can consumer-facing fashion brands create value for their customers within the Metaverse? This chapter includes the most recurring findings from the expert interviews and their theoretical implications. Subsequently, it discusses the limitations of the study and presents potential future research that could be done. Finally, it addresses the societal implications of the results for fashion brands.

6.1 Significant findings & theoretical implications

The findings provide valuable insights for fashion brands and their marketers on what aspects are important to consider when building relationships with and creating value for consumers in the Metaverse. Moreover, this study offers valuable theoretical insights for the academic field as it is unique in researching the customer segmentation, value proposition, and customer relationship components from the business model canvas concerning the Metaverse and fashion brands.

Regarding customer segmentation for fashion brands in the Metaverse, the interview results show that there will be a shift in brands targeting consumers individually rather than using traditional customer segmentation. Although some existing literature suggests that brands will continue to segment customers (Rathore, 2023), other literature suggests that the innovation of AI and machine learning will allow brands to automate their customer segmentation process and offer customers personalized experiences through real-time data analytics (Yang et al., 2022). The latter is more in line with the results, and thus it is noteworthy to share that real-time data analytics will enable marketers and fashion brands to create experiences within the Metaverse tailored to the individual preferences of the consumers (Rathore, 2023). One of the most noteworthy findings surrounding customer segmentation was that while experts agreed that fashion brands would offer more personalized experiences, they also argued that there would be a shift to targeting communities. During this discussion, the researcher asked experts whether this could be seen as a change toward *community segmentation*, which three interviewees agreed with. As a

result, the researcher coined the term *community segmentation*, which refers to the interviewees' observation that fashion brands will move away from segmenting consumers based on their characteristics, e.g. behavioral, demographic, geographic, or psychographic data (Cooil et al., 2008), and more towards grouping consumers into communities with shared interests for individual fashion brands. This term and research finding has opened a door for academics to explore the prospect of *community segmentation* further concerning fashion brands.

The discussion around what hedonic, utilitarian and social gratifications consumers would want to get fulfilled from the Metaverse was based on the uses and gratifications theory, which can be linked to value proposition as both focus on fulfilling consumers' needs and desires (Katz et al., 1974; Kotler & Keller, 2016). The findings showed that two of the most substantial gratifications fashion brands can offer their consumers in the Metaverse are social and hedonic gratifications. While fashion consumers may also want utilitarian gratifications to be fulfilled, the results suggest these are not nearly as important as the other two. Social gratifications such as self-expression and social status were the most recurring use cases that experts mentioned fashion brands could offer their consumers. Through offering virtual garments and digital twins, fashion brands give consumers the opportunity to express their identity in the virtual world (Firat & Venkatesh, 1993; Smith & Colgate, 2007), which experts argue will become just as crucial as self-expression in the physical world for future generations. By offering branded experiences, experts argued that consumers' connection and loyalty towards the brand will increase, as consumers can express themselves and learn more about the brand (Han et al., 2021, as cited in Wongkitrungrueng & Suprawan, 2023).

In addition, the findings show that fashion brands can fulfill hedonic gratifications such as entertainment through gamification. According to the experts, one of the biggest reasons consumers will use the Metaverse is to have fun and be entertained by brands. Gamification is one of the ways to ensure that fashion brands can offer their consumers an entertaining experience. By offering gamified experiences such as challenges, quests, raffles and much more, fashion brands can offer consumers rewards that allow users to get to know the brand better or win access to exclusive experiences that can be offered digitally and physically. This will help fashion brands to build stronger customer relationships and connect with their consumers within the Metaverse while organically generating stronger brand loyalty, which aligns with the literature (Cedrola & Giovannetti, 2023; Purdy, 2023).

Elaborating further on customer relationships, experts coincide with Patil et al. (2022) in that fashion brands should use communities to retain consumers and build strong relationships. Experts argued that this can be done by identifying fans that are the most enthusiastic about the brand and rewarding them with exclusive experiences, such as access to a fashion show or personal shopping events. By approaching and building new communities via channels such as Discord and hosting regular meetups with their consumers, fashion brands will be able to engage more with their consumers, listen to their opinions, and understand them. Moreover, while certain experts maintained that digital humans are beneficial to use in the communities, the majority argued that AI bots should only be used to provide certain basic services or answer support questions, which matches Abraham et al. (2023). While AI bots may be valuable and necessary for fashion brands to implement when reaching a critical follower point, consumers are still seeking a personal and human connection, making it vital to employ people dedicated to engaging with the online community. This contradicts the literature by Silva & Bonetti (2021), suggesting that digital humans can be used to build relationships with consumers and that they have positive attitudes to digital humans.

Finally, experts argued that marketing is undergoing a momentous evolution, which fashion brands must adapt to. This supports the literature by Hazan et al. (2022), who suggest that “the Metaverse represents an opportunity for marketers to engage consumers in entirely new ways” (para. 4). First, experts explained that technology, such as AI, will enable fashion brands to gather and analyze more data than ever before, and can be used to build deeper customer relationships, as there will be no limit to understanding the consumer and what fashion garments they are looking for. This coincides with the literature suggesting that brands will be able to create unique customer experiences by using the data wisely (Boulding et al., 2005; Payne & Frow, 2005; Rababah, 2011 as cited in Ledro et al., 2022). Secondly, experts continued reiterating that fashion brands’ focus should be on co-creation and developing products in collaboration with their consumers. These results were unsurprising, considering the existing literature predicting that brands co-creating products with their consumers will substantially shift (Peterson et al., 2022). Fashion brands should involve consumers more in the decision-making process and allow them to interact more with the brand and product design, which aligns with Ahn et al. (2022), to create value within the Metaverse. Lastly, experts explained that NFTs will enable brands to target consumers differently and give NFT holders access to special experiences. Although NFTs were only

briefly mentioned in the literature as a significant technological innovation (Joy et al., 2022), they will change the marketing landscape, according to half of the experts.

These findings call for fashion brands to innovate the consumer-facing side of their business model to create value for their consumers within the Metaverse. By implementing strategies such as creating personalized experiences using real-time data analytics, offering consumers the chance to be entertained through gamification and express their identity, and co-creating products by collaborating with consumers through online communities, fashion brands will be able to differentiate themselves from others, create value and build long-lasting relationships with their consumers.

6.2 Limitations

While the researcher has clearly outlined the methodology, one of the key aspects that typically affects the reliability and validity of a study is error, which is inherent in all research (David & Sutton, 2010). Consequently this research also includes some limitations.

One of the limitations of this study was finding participants working both in the web3 and fashion industry. Since this topic is still in its early development phases, experts who work both in the Metaverse and digital fashion are scarce, and those who do are in high demand. As a result, several experts that were approached did either not respond to the researcher's correspondence or did not have time to participate in the study. Consequently, this study only included three experts who work in the digital fashion domain and thus see the developments currently happening in the Metaverse up close. The remaining participants did not work in fashion. Nevertheless, five of the experts knew about some fashion case studies that they could share, and only two interviewees did not consider themselves knowledgeable on fashion. Overall, assessing the accuracy and trustworthiness of the information provided by respondents is an important and challenging aspect of expert interviews. Although experts are generally considered knowledgeable and competent, not all experts may have been equally well-informed on the digital fashion industry (Dorussen et al., 2005). By only having three experts working within digital fashion, it is fair to assume that the remaining experts' lack of knowledge of the fashion industry may have somewhat influenced the results. Finding experts with a similar background in digital fashion might have meant more consensus throughout the results and subsequently provided further understanding of the research question.

Lastly, the social dynamics of the interview are another factor that could have impacted the results. It is limited how much attention has been dedicated to how social

structural factors such as gender-specific speech, age, behavior, and much more could have influenced the direction and flow of the interviews (Manderson et al., 2007). Factors such as the interviewer's gender, class, race, appearance, and behavior may have influenced the experts' responses (David & Sutton, 2010).

6.3 Future research

Drawing on the findings from the interviews and the limitations, various possibilities for future research can be proposed.

As *community segmentation* is a term coined from this study, it could be worth exploring the concept within the context of fashion brands aiming to enter the Metaverse. A deeper understanding of how these communities are built and how fashion brands can effectively find existing communities and engage with consumers is needed. This could be further related to a study on virtual community relationship management. Due to the growing concept of brands keeping in touch with consumers through online Metaverse communities, it could be valuable to explore the most effective strategies for brands to manage and nurture their communities. Researchers could then also investigate how fashion brands can influence communities to build stronger customer relationships and grow their sales.

While this study has used experts to understand which hedonic, utilitarian and social gratifications fashion brands can offer their consumers within the Metaverse, it would be valuable to gain the consumers' perspective. Are consumers mainly hoping to get hedonic and social gratifications through entertainment and an opportunity for self-expression from fashion brands in the Metaverse? Or are there any other uses and gratifications they would like fulfilled?

6.4 Societal implications

This research shows that the most meaningful societal implication for fashion brands operating within the Metaverse will be the need to adapt their business model. As virtual environments become increasingly intertwined with our daily lives, it becomes crucial for fashion brands to understand how they can create value, engage with consumers, and build relationships within these virtual worlds. Only by welcoming digital innovation and transforming how they work will fashion brands thrive and even "maintain a wide and persistent gap" in their performance and productivity (Manyika et al., 2016, para. 3).

The findings from this study highlight that the Metaverse will allow fashion brands to connect with their consumers more than ever before. First, fashion brands need to build online communities and co-create products with their consumers to better understand their

wishes. Although it may be challenging for fashion brands to give up their autonomy, this will allow them to build stronger relationships by giving their consumers the power to decide. Furthermore, fashion brands should implement gamified experiences to make users feel entertained and more engaged with the brand, resulting in more loyalty. Moreover, they should use NFTs, and sell virtual garments and accessories, to give their consumers the opportunity to self-express themselves in the Metaverse and show off their identity through fashion virtually and physically. In addition, by leveraging technologies, such as AI, fashion brands will be able to use extensive data analytics and adapt to the evolving needs of their consumers in the virtual world. Other technological advancements, such as NFTs, should also be used to offer NFT holders exclusive experiences, such as access to fashion shows, making consumers feel unique and more loyal to the brand.

Finally, another societal implication that emerged from the interviews is that through the technologies such as AR within the Metaverse, fashion brands can reduce the return rate of clothing by as significantly as 50%. This is a positive development that could also have a significant sustainability impact. Currently, the return rates in e-commerce are incredibly high (Conley, 2022), which harms profits and the environment. As a result, the Metaverse could benefit fashion brands by becoming more environmentally friendly and reducing the costs associated with returning products.

REFERENCES

- Abovitz, R., Banerjee, S., Gilliland, G., Liu, C., Sackey, E., Timashkov, A., & Trollinger, R. (2022, July 13). *How the metaverse will remake your strategy*. BCG Global.
<https://www.bcg.com/publications/2022/impact-of-metaverse-on-business>
- Abraham, J., Frade, M., Lajous, T., Amar, J., & Atsmon, Y. (2023). *The AI-native telco: Radical transformation to thrive in turbulent times*. McKinsey & Company.
<https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/the-ai-native-telco-radical-transformation-to-thrive-in-turbulent-times>
- Ahlin, E. (2019). *Semi-structured interviews with expert practitioners: Their validity and significant contribution to translational research*. SAGE Publications Ltd.
<https://doi.org/10.4135/9781526466037>
- Ahn, S. J. (Grace), Kim, J., & Kim, J. (2022). The bifold triadic relationships framework: A theoretical primer for advertising research in the metaverse. *Journal of Advertising*, 51(5), 592–607. <https://doi.org/10.1080/00913367.2022.2111729>
- Anderson, J., & Rainie, L. (2022, June 30). The metaverse in 2040. *Pew Research Center: Internet, Science & Tech*. <https://www.pewresearch.org/internet/2022/06/30/the-metaverse-in-2040/>
- Bailey, C. A. (2007). *A guide to qualitative field research* (2nd ed.). Pine Forge Press.
- Barriball, L. K., & While, A. (1994). Collecting data using a semi-structured interview: A discussion paper. *Journal of Advanced Nursing*, 19(2), 328–335.
<https://doi.org/10.1111/j.1365-2648.1994.tb01088.x>
- Berman, S. J. (2012). Digital transformation: Opportunities to create new business models. *Strategy & Leadership*, 40(2), 16–24. <https://doi.org/10.1108/10878571211209314>

- Bickman, L., & Rog, D. J. (Eds.). (2009). *The SAGE handbook of applied social research methods* (2nd ed.). SAGE Publications Inc.
- Bischoff, J., Berezan, O., & Scardicchio, L. (2019). The digital self and customer loyalty: From theory to virtual reality. *Journal of Marketing Analytics*, 7(4), 220–233.
<https://doi.org/10.1057/s41270-019-00065-4>
- Bleize, D. N. M., & Antheunis, M. L. (2019). Factors influencing purchase intent in virtual worlds: A review of the literature. *Journal of Marketing Communications*, 25(4), 403–420. <https://doi.org/10.1080/13527266.2016.1278028>
- Bogner, A., & Menz, W. (2009). The theory-generating expert interview: Epistemological interest, forms of knowledge, interaction. In *Interviewing Experts* (pp. 17–42). Palgrave Macmillan. https://doi.org/10.1057/9780230244276_2
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Briedis, H., Kronschnabl, A., Rodriguez, A., & Ungerman, K. (2020). *Adapting to the next normal in retail: The customer experience imperative*. McKinsey & Company.
<https://www.mckinsey.com/industries/retail/our-insights/adapting-to-the-next-normal-in-retail-the-customer-experience-imperative>
- Brink, H. I. L. (1993). Validity and reliability in qualitative research. *Curationis*, 16(2), 35–38. <https://doi.org/10.4102/curationis.v16i2.1396>
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Cedrola, E., & Giovannetti, M. (2023). Fashion and gamification. *Pubblicazioni Aperte Digitali*, 1–14. <https://u-pad.unimc.it/handle/11393/307430>
- Chen, K., Chen, J. V., & Ross, W. H. (2010). Antecedents of online game dependency: The implications of multimedia realism and uses and gratifications theory. *Journal of*

Database Management (JDM), 21(2), 69–99.

<http://dx.doi.org.eur.idm.oclc.org/10.4018/jdm.2010040104>

Cheng, R., Wu, N., Varvello, M., Chen, S., & Han, B. (2022). Are we ready for metaverse? A measurement study of social virtual reality platforms. *Proceedings of the 22nd ACM Internet Measurement Conference*, 504–518.

<https://doi.org/10.1145/3517745.3561417>

Chrétien-Ichikawa, S. (2022). Shanghai fashion and post-1990s youth through the phygital lens. In S. Chrétien-Ichikawa & K. Pawlik (Eds.), *Creative Industries and Digital Transformation in China* (pp. 117–146). Palgrave Macmillan.

https://doi.org/10.1007/978-981-19-3049-2_6

Conley, P. (2022, January 25). *Retailers look for answers as returns grow more complex and costly*. Digital Commerce 360.

<https://www.digitalcommerce360.com/2022/01/25/retailers-look-for-answers-as-returns-grow-more-complex-and-costly/>

Cooil, B., Aksoy, L., & Keiningham, T. L. (2008). Approaches to customer segmentation. *Journal of Relationship Marketing*, 6(3–4), 9–39.

https://doi.org/10.1300/J366v06n03_02

Cordes, C. (2015). Evolutionary economics. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)* (pp. 430–436).

Elsevier. <https://doi.org/10.1016/B978-0-08-097086-8.81019-3>

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). SAGE.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). SAGE.

- David, M., & Sutton, C. (2010). *Social research: An introduction* (2nd ed.). SAGE Publications Ltd.
- Diener, E., & Crandall, R. (1978). *Ethics in social and behavioral research*. University of Chicago Press.
- Dinh, T. L. H. (2023). *Customer behaviors toward metaverse/metaverse as a stimulus for customer experience: Implications for marketing*. Università Ca' Foscari Venezia. <http://hdl.handle.net/10579/22921>
- Dorussen, H., Lenz, H., & Blavoukos, S. (2005). Assessing the reliability and validity of expert interviews. *European Union Politics*, 6(3), 315–337. <https://doi.org/10.1177/1465116505054835>
- Duwe, D., Busch, M., & Weissenberger-Eibl, M. A. (2022). Enabling the metaverse. Whitepaper on international user preferences, business models and innovation processes in the metaverse. *Fraunhofer-Institut Für System- Und Innovationsforschung ISI, Karlsruhe*. <https://doi.org/10.24406/publica-220>
- Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D. P., Gustafsson, A., Hinsch, C., Jebabli, I., ... Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66, 1–55. <https://doi.org/10.1016/j.ijinfomgt.2022.102542>
- Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., Dutot, V., Felix, R., Filieri, R., Flavián, C., Gustafsson, A., Hinsch, C., Hollensen, S., Jain, V., Kim, J., Krishen, A. S., ... Wirtz, J. (2022). Metaverse marketing: How the metaverse will shape the future of consumer research

and practice. *Psychology & Marketing*, 40(4), 750–776.

<https://doi.org/10.1002/mar.21767>

Eighmey, J. (1997). Profiling user responses to commercial websites. *Journal of Advertising Research*, 37(3), 59–66.

<https://go.gale.com/ps/i.do?id=GALE%7CA19773984&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00218499&p=AONE&sw=w&userGroupName=anon%7Ed8de7f0b&aty=open+web+entry>

Elmasry, T., Hazan, E., Khan, H., Kelly, G., Srivastava, S., Yee, L., & Zemmell, R. W.

(2022). *Value creation in the metaverse: The real business of the virtual world*.

McKinsey & Company.

<https://www.mckinsey.com/~/media/mckinsey/business%20functions/marketing%20and%20sales/our%20insights/value%20creation%20in%20the%20metaverse/Value-creation-in-the-metaverse.pdf>

Fagerberg, J. (2009). Innovation: A guide to the literature. In *The Oxford Handbook of Innovation* (pp. 1–26). Oxford Academic.

https://www.researchgate.net/publication/24134940_Innovation_A_Guide_to_the_Literature

Firat, A. F., & Venkatesh, A. (1993). Postmodernity: The age of marketing. *International Journal of Research in Marketing*, 10(3), 227–249. [https://doi.org/10.1016/0167-8116\(93\)90009-N](https://doi.org/10.1016/0167-8116(93)90009-N)

Friese, S., Soratto, J., & Pires, D. (2018). Carrying out a computer-aided thematic content analysis with ATLAS.ti. *MMG Working Papers*, 18(2).

https://www.researchgate.net/publication/324720405_Carrying_out_a_computer-aided_thematic_content_analysis_with_ATLASi

- Gabisch, J. A. (2011). Virtual world brand experience and its impact on real world purchasing behavior. *Journal of Brand Management*, 19(1), 18–32.
<https://doi.org/10.1057/bm.2011.29>
- Gilbert, N. (2008). *Researching social life* (3rd ed.). SAGE.
- Gobble, M. M. (2018). Digitalization, digitization, and innovation. *Research-Technology Management*, 61(4), 56–59. <https://doi.org/10.1080/08956308.2018.1471280>
- Gonzalez, P. (2019). *Digital fashion in the metaverse* (pp. 1–67). Politecnico di Milano.
<https://www.politesi.polimi.it/handle/10589/188809>
- Hagedoorn, J. (1996). Innovation and entrepreneurship: Schumpeter revisited. *Industrial and Corporate Change*, 5(3), 883–896. <https://doi.org/10.1093/icc/5.3.883>
- Harreis, H., Koullias, T., Roberts, R., & Te, K. (2023). *Generative AI in fashion*. McKinsey & Company. <https://www.mckinsey.com/industries/retail/our-insights/generative-ai-unlocking-the-future-of-fashion>
- Hazan, E., Kelly, G., Khan, H., Spillecke, D., & Yee, L. (2022). *Marketing in the metaverse: An opportunity for innovation and experimentation*. McKinsey & Company.
<https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/marketing-in-the-metaverse-an-opportunity-for-innovation-and-experimentation>
- Henz, P. (2022). The psychological impact of the metaverse. *Discover Psychology*, 47(2).
<https://doi.org/10.1007/s44202-022-00061-3>
- Hernandez, R., Likens, S., Priest, D., Korizis, G., Panjwani, V., & Rivet, E. (2023). *Demystifying the metaverse: What business leaders need to know and do*. PwC.
<https://www.pwc.com/us/en/tech-effect/emerging-tech/demystifying-the-metaverse.html>

- Hiken, A. (2022). How phygital marketing is merging digital and real-life experiences in the metaverse. *Advertising Age*, 93(13), 8. <https://link-gale-com.eur.idm.oclc.org/apps/doc/A723428497/ITOF?u=erasmus&sid=bookmark-ITOF&xid=e00ead07>
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101. <https://doi.org/10.2307/1251707>
- Hossain, M. A., Kim, M., & Jahan, N. (2019). Can “liking” behavior lead to usage intention on facebook? Uses and gratification theory perspective. *Sustainability*, 11(4), 1166. <https://doi.org/10.3390/su11041166>
- Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, 49(1), 30–50. <https://doi.org/10.1007/s11747-020-00749-9>
- Hwang, R., & Lee, M. (2022). The influence of music content marketing on user satisfaction and intention to use in the metaverse: A focus on the SPICE model. *Businesses*, 2(2), 141–155. <https://doi.org/10.3390/businesses2020010>
- Jain, R., Kumar, A., Chauhan, P., & Sood, A. (2022). *Anthropometrical virtual try-on: A survey on virtual try-ons and human body dimension estimation*. 231–238. <https://eudl.eu/doi/10.4108/eai.16-4-2022.2318169>
- Joy, A., Zhu, Y., Peña, C., & Brouard, M. (2022). Digital future of luxury brands: Metaverse, digital fashion, and non-fungible tokens. *Strategic Change*, 31(3), 337–343. <https://doi.org/10.1002/jsc.2502>
- Karnoupakis, E. (2023). *NFTs, the metaverse, and everything web 3.0*. O’Reilly Media, Inc. <https://www.oreilly.com/library/view/nfts-the-metaverse/9781098140090/>

- Kasirye, F. (2022). *The importance of needs in uses and gratification theory*. Advance.
<https://doi.org/10.31124/advance.14681667.v2>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523. <https://doi.org/10.1086/268109>
- Kim, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141–144. <https://doi.org/10.1080/15252019.2021.2001273>
- Koohang, A., Nord, J. H., Ooi, K.-B., Tan, G. W.-H., Al-Emran, M., Aw, E. C.-X., Baabdullah, A. M., Buhalis, D., Cham, T.-H., Dennis, C., Dutot, V., Dwivedi, Y. K., Hughes, L., Mogaji, E., Pandey, N., Phau, I., Raman, R., Sharma, A., Sigala, M., ... Wong, L.-W. (2023). Shaping the metaverse into reality: A holistic multidisciplinary understanding of opportunities, challenges, and avenues for future investigation. *Journal of Computer Information Systems*, 63(3), 735–765.
<https://doi.org/10.1080/08874417.2023.2165197>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (14th ed.). Shanghai People's Publishing House.
- Kraus, S., Kanbach, D. K., Krysta, P. M., Steinhoff, M. M., & Tomini, N. (2022). Facebook and the creation of the metaverse: Radical business model innovation or incremental transformation? *International Journal of Entrepreneurial Behavior & Research*, 28(9), 52–77. <https://doi.org/10.1108/IJEER-12-2021-0984>
- Kumar, V., & Reinartz, W. (2018). *Customer relationship management—Concept, strategy, and tools* (3rd ed.). Springer. <https://link.springer.com/content/pdf/10.1007/978-3-662-55381-7.pdf>
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research*, 52(1), 31–60.
<https://doi.org/10.3102/00346543052001031>

- Ledro, C., Nosella, A., & Vinelli, A. (2022). Artificial intelligence in customer relationship management: Literature review and future research directions. *Journal of Business & Industrial Marketing*, 37(13), 48–63. <https://doi.org/10.1108/JBIM-07-2021-0332>
- Lee, H., & Cho, C.-H. (2020). Digital advertising: Present and future prospects. *International Journal of Advertising*, 39(3), 332–341.
<https://doi.org/10.1080/02650487.2019.1642015>
- Letonja, T. (2023, February 28). Prada drops its tenth exclusive timecapsule NFT, with the conclusion of the Enzo Ragazzini print trilogy. *Numéro Netherlands*.
<https://www.numeromag.nl/prada-drops-its-tenth-exclusive-timecapsule-nft-with-the-conclusion-of-the-enzo-ragazzini-print-trilogy/>
- Lim, W. M., & Ting, D. H. (2012). E-shopping: An analysis of the uses and gratifications theory. *Modern Applied Science*, 6(5), 48–63. <https://doi.org/10.5539/mas.v6n5p48>
- Luo, M. M., & Remus, W. (2014). Uses and gratifications and acceptance of web-based information services: An integrated model. *Computers in Human Behavior*, 38, 281–295. <https://doi.org/10.1016/j.chb.2014.05.042>
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3). <https://ojs.aishe.org/index.php/aishe-j/article/view/335>
- Manderson, L., Bennett, E., & Andajani, S. (2007). The social dynamics of the interview: Age, class, and gender. *Qualitative Health Research*, 16(10), 1317–1334.
<https://doi.org/10.1177/1049732306294512>
- Mäntymäki, M., & Riemer, K. (2014). Digital natives in social virtual worlds: A multi-method study of gratifications and social influences in Habbo Hotel. *International Journal of Information Management*, 34(2), 210–220.
<https://doi.org/10.1016/j.ijinfomgt.2013.12.010>

- Manyika, J., Pinkus, G., & Ramaswamy, S. (2016, January 21). The most digital companies are leaving all the rest behind. *Harvard Business Review*. <https://hbr.org/2016/01/the-most-digital-companies-are-leaving-all-the-rest-behind>
- McKechnie, D. S., Grant, J., & Shabbir Golawala, F. (2011). Partitioning service encounters into touchpoints to enhance quality. *International Journal of Quality and Service Sciences*, 3(2), 146–165. <https://doi.org/10.1108/17566691111146069>
- MediaMonks. (2023a). *FLUX.Monks are reimagining the fashion industry*. <https://media.monks.com/articles/fluxmonks-are-reimagining-fashion-industry>
- MediaMonks. (2023b). *Home Media.Monks*. <https://media.monks.com/home>
- Meuser, M., & Nagel, U. (2009). The expert interview and changes in knowledge production. In A. Bogner, B. Littig, & W. Menz (Eds.), *Interviewing Experts* (pp. 17–42). Palgrave Macmillan. https://doi.org/10.1057/9780230244276_2
- Mu, X., Zhang, H., Shi, J., Hou, J., Ma, J., & Yang, Y. (2023). *Fashion intelligence in the metaverse: Promise and future prospects*. <https://www.researchsquare.com/article/rs-2594075/v1>
- Nath, K. (2022). *Evolution of the internet from web 1.0 to metaverse: The good, the bad and the ugly*. TechRxiv. <https://doi.org/10.36227/techrxiv.19743676.v1>
- Ng, D. T. K. (2022). What is the metaverse? Definitions, technologies and the community of inquiry. *Australasian Journal of Educational Technology*, 38(4), 190–205. <https://doi.org/10.14742/ajet.7945>
- Niinimäki, K. (2010). Eco-clothing, consumer identity and ideology. *Sustainability Development*, 18(3), 119–181. <https://doi.org/10.1002/sd.455>
- Olson, E., Arendt, S., Fitzpatrick, E., Hauser, S., Rainville, A., Rice, B., & Lewis, K. (2019). Marketing mechanisms used for summer food service programs. *Journal of Nonprofit*

& *Public Sector Marketing*, 32(5), 465–487.

<https://doi.org/10.1080/10495142.2019.1589632>

Osterwalder, A., & Pigneur, Y. (2003). Modelling value propositions in e-business. *ACM International Conference Proceeding Series.*, 50, 429–436.

<https://doi.org/10.1145/948005.948061>

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: A handbook for visionaries, game changers, and challengers*. John Wiley & Sons, Inc.

<https://learning.oreilly.com/library/view/business-model-generation/9780470876411/>

Overby, J. W., & Lee, E.-J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intentions. *Journal of Business Research*, 59(10), 1160–1166. <https://doi.org/10.1016/j.jbusres.2006.03.008>

Papacharissi, Z., & Rubin, A. M. (2000). Predictors of internet use. *Journal of Broadcasting & Electronic Media*, 44(2), 175–196. https://doi.org/10.1207/s15506878jobem4402_2

Park, H., & Kim, S. (2023). Do augmented and virtual reality technologies increase consumers' purchase intentions? The role of cognitive elaboration and shopping goals. *Clothing and Textiles Research Journal*, 41(2), 91–106.

<https://doi.org/10.1177/0887302X21994287>

Park, H., & Lim, R. E. (2023). Fashion and the metaverse: Clarifying the domain and establishing a research agenda. *Journal of Retailing and Consumer Services*, 74, 103413. <https://doi.org/10.1016/j.jretconser.2023.103413>

Patil, K., Bharathi S, V., & Pramod, D. (2022). Can metaverse retail lead to purchase intentions among the youth? A stimulus-organism-response theory perspective. *2022 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETISIS)*, 314–320.

<https://doi.org/10.1109/ICETISIS55481.2022.9888929>

- Patino, C. M., & Ferreira, J. C. (2018). Inclusion and exclusion criteria in research studies: Definitions and why they matter. *Jornal Brasileiro de Pneumologia*, 44(2), 84. <https://doi.org/10.1590/S1806-37562018000000088>
- Payne, A., Frow, P., & Eggert, A. (2017). The customer value proposition: Evolution, development, and application in marketing. *Journal of the Academy of Marketing Science*, 45(4), 467–489. <https://doi.org/10.1007/s11747-017-0523-z>
- Perez, C. (2010). Technological revolutions and techno-economic paradigms. *Cambridge Journal of Economics*, 34(1), 185–202. <https://www.jstor.org/stable/24232030>
- Periyasami, S., & Periyasamy, A. P. (2022). Metaverse as future promising platform business model: Case study on fashion value chain. *Businesses*, 2(4), 527–545. <https://doi.org/10.3390/businesses2040033>
- Peterson, B., Bonelli, F., & MacSweeney, R. (2022). *How meeting customers in the metaverse can unlock lasting value*. EY. https://www.ey.com/en_no/consumer-products-retail/meet-customers-in-the-metaverse-to-unlock-lasting-value
- Piepponen, A., Ritala, P., Keränen, J., & Maijanen, P. (2022). Digital transformation of the value proposition: A single case study in the media industry. *Journal of Business Research*, 150(1), 311–325. <https://doi.org/10.1016/j.jbusres.2022.05.017>
- Purdy, M. (2023, April 3). Building a great customer experience in the metaverse. *Harvard Business Review*. <https://hbr.org/2023/04/building-a-great-customer-experience-in-the-metaverse>
- Ratan, R., Beyea, D., Li, B. J., & Graciano, L. (2020). Avatar characteristics induce users' behavioral conformity with small-to-medium effect sizes: A meta-analysis of the proteus effect. *Media Psychology*, 23(5), 651–675. <https://doi.org/10.1080/15213269.2019.1623698>

- Ratcliffe, J. (2002). Scenario planning: Strategic interviews and conversations. *Foresight*, 4(1), 19–30. <https://doi.org/10.1108/14636680210425228>
- Rathore, B. (2023). Digital transformation 4.0: Integration of artificial intelligence & metaverse in marketing. *International Peer Reviewed/Refereed Multidisciplinary Journal (EIPRMJ)*, 12(1), 42–48. <https://doi.org/doi.org/eiprmj>
- Rathore, B. (2022). *Impact of green marketing on sustainable business development*. Cardiff Metropolitan University. Presentation. <https://doi.org/10.25401/cardiffmet.19782652.v1>
- Rehm, S.-V., Goel, L., & Crespi, M. (2015). The metaverse as mediator between technology, trends, and the digital transformation of society and business. *Journal For Virtual Worlds Research*, 8(2), 1–6. <https://doi.org/10.4101/jvwr.v8i2.7149>
- Rodik, P., & Primorac, J. (2015). To use or not to use: Computer-assisted qualitative data analysis software usage among early-career sociologists in Croatia. *Forum: Qualitative Social Research*, 16(1), 1–21. <https://doi.org/10.17169/fqs-16.1.2221>
- Saarijärvi, M., & Bratt, E.-L. (2021). When face-to-face interviews are not possible: Tips and tricks for video, telephone, online chat, and email interviews in qualitative research. *European Journal of Cardiovascular Nursing*, 20(4), 392–396. <https://doi.org/10.1093/eurjcn/zvab038>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (Vol. 5). Pearson Education.
- Sharma, S., & Verma, H. V. (2018). Social media marketing: Evolution and change. In G. Heggde & G. Shainesh (Eds.), *Social media marketing: Emerging concepts and applications* (pp. 19–36). Springer. https://doi.org/10.1007/978-981-10-5323-8_2
- Shen, B., Tan, W., Guo, J., Zhao, L., & Qin, P. (2021). How to promote user purchase in metaverse? A systematic literature review on consumer behavior research and virtual

commerce application design. *Applied Sciences*, 11(23), 1–29.

<https://doi.org/10.3390/app112311087>

Shicheng, W., Lin, H., Gan, W., Chen, J., & Yu, P. (2023). *Web3: The next internet revolution*.

https://www.researchgate.net/publication/370001063_Web3_The_Next_Internet_Revolution

Silva, E. S., & Bonetti, F. (2021). Digital humans in fashion: Will consumers interact? *Journal of Retailing and Consumer Services*, 60, 1–11.

<https://doi.org/10.1016/j.jretconser.2020.102430>

Silverman, D. (2011). Credible qualitative research. In *Interpreting qualitative data. A guide to the principles of qualitative research* (4th ed.). SAGE.

Smart, J., Cascio, J., Paffendorf, J., Bridges, C., Hummel, J., Hursthouse, J., & Moss, R. (2007). *A metaverse roadmap: Pathways to the 3D web: A cross-industry public foresight project*.

https://www.academia.edu/266307/A_Metaverse_Roadmap_Pathways_to_the_3D_Web_2007

Smith, J. B., & Colgate, M. (2007). Customer value creation: A practical framework. *Journal of Marketing Theory and Practice*, 15(1), 7–23. <https://doi.org/10.2753/MTP1069-6679150101>

St John, W., & Johnson, P. (2000). The pros and cons of data analysis software for qualitative research. *Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing*, 32(4), 393–397.

<https://doi.org/10.1111/j.1547-5069.2000.00393.x>

Stephenson, N. (1992). *Snow Crash*. Random House Worlds.

- Storsul, T., & Krumsvik, A. H. (2013). *Media innovations: A multidisciplinary study of change*. Nordicom. <http://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-10052>
- Sultan, A. (2018). Orchestrating service brand touchpoints and the effects on relational outcomes. *Journal of Services Marketing*, 32(6), 777–788.
<https://doi.org/10.1108/JSM-12-2016-0413>
- Taylor, C. R. (2022). Research on advertising in the metaverse: A call to action. *International Journal of Advertising*, 41(3), 383–384.
<https://doi.org/10.1080/02650487.2022.2058786>
- Taylor, S. A., Hunter, G. L., Zadeh, A. H., Delpechitre, D., & Lim, J. H. (2020). Value propositions in a digitally transformed world. *Industrial Marketing Management*, 87, 256–263. <https://doi.org/10.1016/j.indmarman.2019.10.004>
- Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2), 172–194. <https://doi.org/10.1016/j.lrp.2009.07.003>
- Van Audenhove, L., & Donders, K. (2019). The palgrave handbook of methods for media policy research. In M. Puppis, H. Van den Bulck, K. Donders, & L. Van Audenhove (Eds.), *The palgrave handbook of methods for media policy research* (pp. 179–197). Palgrave Macmillan. <https://link.springer.com/book/10.1007/978-3-030-16065-4>
- Vaughn, P., & Turner, C. (2016). Decoding via coding: Analyzing qualitative text data through thematic coding and survey methodologies. *Journal of Library Administration*, 56(1), 41–51. <https://doi.org/10.1080/01930826.2015.1105035>
- Verdenhofs, A., & Tambovceva, T. (2019). Evolution of customer segmentation in the era of big data. *Marketing and Management of Innovations*, 1, 238–243.
<https://doi.org/10.21272/mmi.2019.1-20>

- Wang, Y., Su, Z., Zhang, N., Xing, R., Liu, D., Luan, T. H., & Shen, X. (2022). *A survey on metaverse: Fundamentals, security, and privacy*. TechRxiv.
<https://doi.org/10.36227/techrxiv.19255058.v3>
- Witt, U. (2008). What is specific about evolutionary economics? *Journal of Evolutionary Economics*, 18(5), 547–575. <https://doi.org/10.1007/s00191-008-0107-7>
- Wongkitrungrueng, A., & Suprawan, L. (2023). Metaverse meets branding: Examining consumer responses to immersive brand experiences. *International Journal of Human–Computer Interaction*, 1–20. <https://doi.org/10.1080/10447318.2023.2175162>
- Yang, Q., Zhao, Y., Huang, H., Xiong, Z., Kang, J., & Zheng, Z. (2022). Fusing blockchain and AI with metaverse: A survey. *IEEE Open Journal of the Computer Society*, 3. <https://doi.org/10.1109/OJCS.2022.3188249>
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22.
<https://doi.org/10.2307/1251446>
- Zhang, D., Chadwick, S., & Liu, L. (2022). The metaverse: Opportunities and challenges for marketing in web3. *SSRN*. <https://doi.org/10.2139/ssrn.4278498>

APPENDIX A – INFORMED CONSENT FORM

CONSENT REQUEST FOR PARTICIPATING IN RESEARCH

FOR QUESTIONS ABOUT THE STUDY, CONTACT:

Sophie Breusch RASMUSSEN
592598sr@student.eur.nl
+31 6 15 35 38 36

DESCRIPTION

You are invited to participate in a master thesis research study about the Metaverse. The purpose of the study is to understand how fashion brands and their marketers can create value for their consumers in the Metaverse.

Your acceptance to participate in this study means that you accept to be interviewed. My questions during the interview will be related to your view and expertise on data collection materializing in the Metaverse, what value the Metaverse will offer to fashion consumers, and the move towards creating customer experiences in the Metaverse.

Unless you prefer that no recordings are made, I will make a video recording of the interview. I will use the material from the interview exclusively for academic work, such as further research, academic meetings and publications.

RISK AND BENEFITS

There are no risks associated with participating in this research. You are free to choose whether I should or should not use your name or other identifying information (such as your position in the organisation) in the study. If you prefer, I will make sure that you cannot be identified, by using a pseudonym. You are always free not to answer any particular question, and/or stop participating at any point.

TIME INVOLVEMENT

Your participation in this study will take approximately 1 hour. You may interrupt your participation at any time.

PAYMENTS

There will be no monetary compensation for your participation.

PARTICIPANTS' RIGHTS

If you have decided to accept and participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty. You have the right to refuse to answer particular questions. If you prefer, your identity can be made anonymous in all written data resulting from the study. Otherwise, your individual identity (name and surname) will be maintained in all published and written data resulting from the study.

CONTACTS AND QUESTIONS

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish – my thesis supervisor Matthijs Leendertse, at leendertse@eshcc.eur.nl

SIGNING THE CONSENT FORM

If you sign this consent form, your signature will be the only documentation of your identity. Thus, you **DO NOT NEED** to sign this form. In order to minimize risks and protect your identity, you may prefer to consent orally at the beginning of your interview. Your oral consent is sufficient.

I hereby give consent to be video recorded during this study:

Name: _____

Signature: _____ **Date:** _____

I hereby give permission for my identity (name and surname) to be revealed in all written data resulting from this study.

Name: _____

Signature: _____ **Date:** _____

APPENDIX B - COMMUNICATION

The messages below include all the different standardized communications that were sent out to participants, and shared on LinkedIn to search for the first set of participants.

LinkedIn post to find potential interviewees	<p>Dear network,</p> <p>I am reaching out to you as I am looking for experts I can interview for my master thesis on my latest topic: Consumer Value Proposition in the Metaverse for Fashion Brands. I am particularly looking for individuals with expertise in preferably one of the following areas:</p> <ul style="list-style-type: none">• Knowledge of the digital fashion industry• Expert in web3 marketing• Expert in artificial intelligence and its use in creating personalized consumer experiences• Creating consumer experiences within the Metaverse• Expert in segmentation and data• Expert with knowledge on value proposition on digital fashion/retail <p>With the rise of the Metaverse, my thesis aims to gain a comprehensive understanding on how fashion brands and their marketers can create value for their consumers within the Metaverse, specifically focusing on value proposition, customer relationships and experiences, and customer segmentation. If you, or anyone you know, think you could help me with this topic, I would love to hear from you!</p> <p>By agreeing to participate in my study, you would get access to my results section, providing you insights from various literature and other experts on any of the above mentioned topics. Furthermore, should you be interested, I would like to return the favour and do a guest presentation at your company to share the results.</p>
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E-mail

Subject: MA Thesis research – Erasmus University Rotterdam

Dear (name of expert),

I am contacting you as I am researching how fashion brands and marketers can create value for consumers within the Metaverse. I am particularly interested in learning more about value proposition, customer relationships and customer segmentation within the Metaverse due to the current significant focus on the next web3.

In this context, I am interested in interviewing professionals with expertise in one of the following areas:

- Knowledge of the digital fashion industry
- Expert in web3 marketing
- Expert in artificial intelligence and its use in creating personalized consumer experiences
- Creating consumer experiences within the Metaverse
- Expert in segmentation and data
- Expert with knowledge on value proposition on digital fashion

Should you feel you are a good fit for this, I would be thrilled if you would have the time to participate in an interview. It would last around 1 hour and be recorded, transcribed and analyzed for my research project. By agreeing to participate in my study, you would get access to my results section, providing you insights from various literature and other experts on the above mentioned topic. Furthermore, should you be interested, I would like to return the favour and do a guest presentation at your company to share the results.

Are you willing to participate in an interview? We can arrange a virtual or in-person meeting whenever works best for you.

If you have any questions or wish to receive further information about my research, please do not hesitate to contact me anytime.

I look forward to hearing from you.

Kind regards,

Sophie Breusch RASMUSSEN

Tel: 06 15 35 38 36 | E-Mail: sbr@pt.lu

APPENDIX C – INTERVIEW GUIDE

Introduction

Thank you for taking the time to meet with me (researcher) today and participating in this research. The purpose of this interview is to get an understanding how fashion brands and their marketers can create value for consumers within the Metaverse. By talking with you it will help me gain a more comprehensive understanding of this topic. So I appreciate you taking the time.

In this interview, I would like to focus on your experience with the Metaverse, and how you believe it is likely to evolve. So it is important for me to tell you that there are no right or wrong answers, and you are welcome to add anything that you feel might be worth mentioning at any time.

The interview should take around an hour, depending on how much we end up talking. As a friendly reminder, I want to tell you that this interview is voluntary and that you can at any time let me know if you wish to stop the interview, and you can also choose not to answer a question. Finally, I want to confirm with you if it's okay that I record the interview?

Do you have any questions before we start the interview?

Questionnaire

<i>Topics</i>	<i>Questions</i>
<i>Icebreaker</i>	What do you think of the Metaverse?
	Where do you see the Metaverse heading?
<i>Customer Segmentation</i>	<i>Measured by asking the following questions:</i>
	Do you think there are or will be new ways to collect data in the Metaverse? If yes, which ones?
	How do you see data collection materializing in the Metaverse?
	How do you think the use of AI data within the Metaverse might change customer segmentation? <ul style="list-style-type: none">- No segments, yet personalized experiences for each individual based on data

	<p>What role do you think individual avatars might play in customer segmentation?</p> <ul style="list-style-type: none"> - Avatar Behavioral Analysis
<i>Value Proposition</i>	<p><i>Measured by asking the following questions:</i></p> <p>Why do you think people will use the Metaverse? E.g.:</p> <ul style="list-style-type: none"> - Entertainment - Pass Time - Information-Seeking - Self-presentation <p>What, if any, value will the Metaverse offer to fashion consumers?</p>
<i>Customer Relationships</i>	<p><i>Measured by asking the following questions:</i></p> <p>Marketers in the Metaverse are moving towards creating experiences for their users, is this something you are working on?</p> <p>How do you see customer experiences materializing within the Metaverse?</p> <p>How do you think the shopping experience offered by brands in the Metaverse will change for consumers?</p> <p>How do you think fashion brands can use the technologies of the Metaverse to establish strong customer relationships?</p> <p>How do you think the fusion of digital and physical product experiences within the Metaverse fashion industry will change customer relationships?</p> <ul style="list-style-type: none"> - Digital Twins <p>How do you think the Metaverse will offer new ways for fashion consumers to explore products?</p> <ul style="list-style-type: none"> - Virtual try-ons - Gamification <p>What role do you think AI bots will play for brands in establishing connections with consumers within the Metaverse?</p> <ul style="list-style-type: none"> - Digital Humans (How do you see the adoption of digital humans materializing in the Metaverse in the near future?)

End of Interview

- We are reaching the end of our interview. Is there anything you would like to add before we end it?
- Thank you for so much for your time, and for all of the valuable information, it will assist me a lot with my research.
- Would you like me to anonymize your data, or are you okay with me mentioning your name in my paper?
 - If not, I was wondering if you would like to pick your own pseudonym for my paper? It can be any name you want, which you will then be known as in the paper.
- Do you have any final questions you would like to ask?

APPENDIX D – THEMATIC MAP

Main code	Sub-code(s)	Definition
The Metaverse	Metaverse definitions	The various definitions provided by experts of the Metaverse during interviews
Customer Segments	Avatar Behavioral Analysis	Is it relevant for brands to analyze the behaviours of their consumers avatars? Experts discussing both the positives and challenges of analyzing avatar behaviour.
	Personalization using AI & data	Getting rid of customer segmentation and rather targeting each individual separately through data with personalized experiences possible through AI technology.
	Community Segmentation	Rather than looking at customer segmentations in the traditional fashion, this sub-code looks at segmentation as something that should be done on a community basis, grouping consumers that have a shared interest in a particular fashion brand.
Value Propositions	Hedonic Gratifications	Entertainment and passing time in the Metaverse are the hedonic gratifications users can get from shopping experiences & fashion brands. With entertainment being the most recurring one.
	Utilitarian Gratifications	Information seeking, meaning consumers looking to obtain new helpful information and insights or knowledge on the fashion brand in the Metaverse e.g. sale
	Social Gratifications	Self-expression, social status and flexing are social gratifications that focus on users wanting to establish themselves and show off in the Metaverse as much as they want to show off in the real world. E.g. important how they look, and what they wear in the Metaverse.

Customer Relationships	Interaction & Engagement	This code refers to evolution marketing is undergoing and how it will change how fashion brands interact and engage with their consumers within the Metaverse. Data and NFTs were referred to as two technologies that would help fashion brands target their consumers in more personalized manners and thus interact with consumers more exclusively. Furthermore, building relationships through co-creation and online communities are additional themes explored in this code.
	Customer Experience	Creating experiences for consumers in order for them to feel engaged with the fashion brand through exclusive experiences incl. access to special products, physical & virtual personal shopping events and virtual experiences
	Fusing Digital & Physical Product Experiences	Establishing customer relationships through the fusion of digital and physical experiences, including the offer of digital twins, and offering experiences such as fashion shows that can be both physical and virtual.
	New ways for consumers to explore products	Based on the theoretical framework and the findings these include virtual try-ons and gamification.
	Establishing connections through “digital humans”	AI bots that will be able to engage with users in virtual environments and build connections with users. Nevertheless, participants argued they should mainly be used for customer service, and that when establishing a relationship human connection would still be required.