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OMNICHANNEL AND METAVERSE – HOW CAN THE METAVERSE BE INTEGRATED IN A FASHION RE- TAILER’S OMNICHANNEL STRAT- EGY?

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Abstract

Omnichannel marketing and sales strategies are increasingly more common, especially in the fashion retail industry. As the metaverse is gaining in popularity through companies offering experiences in this 3D virtual world, including Gucci and Zara, the question emerges of how the metaverse can be integrated into a fashion retailer's omnichannel strategy. This paper highlights the key characteristics of both concepts and combines them in the strategy definition process that managers and decision-makers in a company go through. The strategy definition process is based on the metaverse 3.0 and on the hypothesis that the fashion retailer already has a successful omnichannel strategy in place. Expert interviews and a consumer survey provide the practical connection on which the analysis is elaborated and the conclusions are drawn. Based on the metaverse 3.0, the main findings are that fashion retailers can either fully integrate the metaverse ad-hoc or reduce the uncertainty of their investment to some extent by integrating it step by step along the customer journey. Each option has its own advantages and disadvantages and every fashion retailer needs to select the one most adequate, feasible, and acceptable for its stakeholders.

Keywords: metaverse, omnichannel strategy, fashion retail, Web3.0

Resumen Ejecutivo

Las estrategias de marketing y ventas omnicanal son cada vez más comunes, especialmente en el sector minorista de la moda. Dado que el metaverso está ganando popularidad gracias a empresas como Gucci o Zara, que ofrecen experiencias en este mundo virtual 3D, surge la pregunta de cómo puede integrarse el metaverso en la estrategia omnicanal de un minorista de moda. Este artículo destaca las características clave de ambos conceptos y los combina en el proceso de definición de la estrategia por el que pasan los responsables de la toma de decisiones de una empresa. El proceso de definición de la estrategia se basa en el metaverso 3.0 y en la hipótesis de que el minorista de moda ya cuenta con una estrategia omnicanal exitosa. Las entrevistas a expertos y una encuesta a consumidores proporcionan la conexión práctica sobre la que se elabora el análisis y se extraen las conclusiones. Basándose en el metaverso 3.0, las principales conclusiones son que los minoristas de moda pueden integrar totalmente el metaverso o reducir la incertidumbre hasta cierto punto integrándolo paso a paso a lo largo del recorrido del cliente. Cada opción tiene sus ventajas y desventajas, y cada minorista de moda debe elegir la más adecuada, factible y aceptable para sus grupos de interés.

Palabras claves: metaverso, estrategia de omnicanalidad, venta minorista de moda, Web 3.0

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Index of Abbreviations

AI.....	<i>Artificial Intelligence</i>
AR.....	<i>Augmented Reality</i>
DEI.....	<i>Diversity, Equity and Inclusion</i>
KPIs	<i>Key Performance Indicators</i>
NFT.....	<i>Non-fungible Token</i>
VR.....	<i>Virtual Reality</i>

1. Introduction

“Metaverse isn’t a thing a company builds. It’s the next chapter of the internet overall.”

– *Mark Zuckerberg*

The metaverse has gained a lot of momentum since the rebranding of Facebook to Meta even though the concept has been around since the second half of the 20th century. Fashion retailers and companies in general increasingly start to leverage this technology, which led to Gucci creating a virtual *Gucci Garden* on Roblox and Zara launching its first metaverse collection on Zepeto.

Another trend that has been influencing the fashion industry since 2015 is the implementation of omnichannel strategies to improve sales and marketing endeavors. The aim is to create a seamless user experience between the established offline and newer online channels.

Both trends represent a disruption in today’s world as they thrive to transition from brick-and-mortar stores and the metaverse in the Web2.0 to click-and-mortar omnichannel strategies and potentially an integrated metaverse in the Web3.0. If the metaverse really is the “next chapter of the internet” as stated by Mark Zuckerberg, this leads to the question, if there are potential synergies to be exploited between both advancements and therefore, if the metaverse could possibly be integrated into a fashion retailer’s omnichannel strategy.

The paper is structured in four different parts. The State of the Art analysis provides the context of the paper by defining the concepts omnichannel and metaverse. This first part includes a definition and the history of both concepts, predicted future developments, and comments on opportunities and risks. The second part elaborates on the objectives and the methodology of the paper before the third part analyses the strategy definition process of a fashion retailer potentially including the metaverse in its omnichannel strategy. The fourth and last part offers a discussion and outlook on the metaverse integration and calls for further research.

2. State of the Art

2.1 Omnichannel

2.1.1 Definition and Historical Developments

The term omnichannel is composed of the word *omni*, from the Latin *omnis*, meaning every or all, and the word channel. It refers to a concept of all channels – stores, websites, mobile applications, e-mails, among others – which an omnichannel strategy aims to integrate to create one customer experience (Castaldo & Grosso, 2020). Speaking more practically, omnichannel can be understood as “[the] ability and disposition of contemporary consumers to crisscross and avail of [...] multiple channels at various stages on their customer journeys for products and services” (Timoumi et al., 2022).

The concept *omnichannel* was first coined by Rigby (2011) and gained more momentum from 2015 onwards (Gerea et al., 2021). In Rigby’s article he envisions a frictionless personalized shopping experience that integrates different offline and online channels, including brick-and-mortar stores, websites, mobile applications, and e-mails, among others. This leads to more selection and higher transparency and information availability which are increasingly valued by customers (Rigby, 2011). Even though omnichannel emerged from the fashion retail industry, other industries are now also using it to leverage data to optimize and personalize the customer journey (Edelman & Abraham, 2022). The authors mention various examples of other industries implementing omnichannel, including JP Morgan Chase for the banking industry and Starbucks in the restaurant industry.

The development of omnichannel came naturally over time. After one-channel strategies, mainly focusing on physical stores and contact points, the rise of the internet around the mid-1990s and improved logistics companies presented the opportunity to connect the current channel with an until then isolated online channel and eventually resulted in multi-channel strategies around 2005 (Asmare & Zewdie, 2022; Gerea et al., 2021). Showroomers and webroomers are two examples of the latter and are illustrated in Figure 1 (Timoumi et al., 2022). The authors simplify and divide the customer journey into three steps, pre-purchase, purchase, and post-purchase, which will be the basis for further analysis in this paper.

The concept of showrooming refers to people conducting their search in a brick-and-mortar store but ultimately buying online. Stores can actively engage in this technique when they for example offer the client in-store to order the product online if they do not have it in stock

(Neslin, 2022). The author also extracted various reasons for showrooming from the corresponding academic literature, including the potentially lower price and wider variety online, and the reduction of risk by not being consulted personally and having to comply to social norms during the purchase itself.

Webrooming is exactly the opposite and refers to researching online while purchasing the product in-store. This concept can also be actively encouraged by retailers by offering discounts that are in-store only (Neslin, 2022). The literature analyzed by Neslin (2022) includes reasons for webrooming like the greater amount of information available, especially to customers that are new to the segment, convenience, and the feeling of being in control.

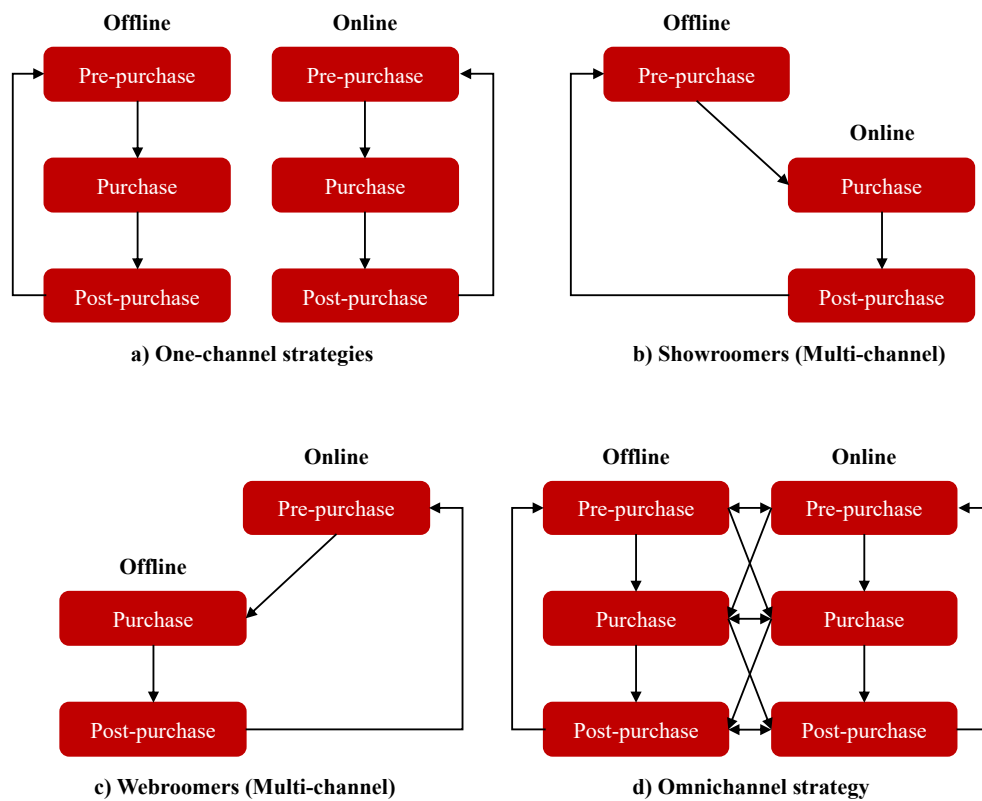


Figure 1: From one-channel to omnichannel strategies - Different types of channel integration. Adapted from Timoumi et al. (2022).

While according to Belvedere et al. (2021) an omnichannel strategy is not the right approach for every industry or company, e.g., if they are operating more Business-to-Business than Business-to-Consumer, they also acknowledge that it facilitates reaching different customer segments. Nevertheless, it is not an easy task to implement an omnichannel strategy as it includes various aspects that need to be managed simultaneously (Castaldo & Grosso, 2020).

First, the customer needs to be the center of the strategy to make it successful, which might not be a goal of the current corporate strategy and therefore requires an adjustment (Gerea et al., 2021). Second, brand consistency across the different channels that a company decides to integrate is key (Castaldo & Grosso, 2020). According to the authors, a frictionless experience as well as a strategic vision of the management to properly use the opportunities an omnichannel strategy brings are essential. Third, if companies integrate across channels, inventory and supply chain management are important factors to take into consideration (Belvedere et al., 2021). The advanced integrated inventory management of Inditex is what made the fashion retail group so successful over the past years as they have employed new technologies like radiofrequency or the Inditex Open Platform to keep track of inventory and processes (Just Retail, 2021).

It is important to recognize that omnichannel not only refers to adding “clicks to bricks,” which means adding an online channel to a current offline business model, but also to adding “bricks to clicks,” or incorporating a mobile channel to create more customer touchpoints (Timoumi et al., 2022). An example for adding a brick-and-mortar store to a prior online marketplace is Amazon. In 2020, the company opened an Amazon Go supermarket in Seattle that does not require a check-out as all products picked up by customers are registered by a surveillance system and billed automatically (Golden, 2020). A company that approached the incorporation of a mobile channel, is Adidas. In 2017, after already having a long established brick-and-mortar presence worldwide and a webstore, Adidas decided to launch an app to stay competitive through additional customer touchpoints and create a better and more convenient customer experience (Adidas, 2017).

Every channel has its own advantages and disadvantages, and companies should find the right channels to address their selected target segments and adjust their marketing mix and strategy accordingly (Timoumi et al., 2022). Nevertheless, independent from what channels a company decides on, price consistency across channels is a key element for a successful omnichannel strategy (Rahman et al., 2022). According to Neslin (2022), price discrimination is quite common, especially between offline and online channels. The latter usually offers cheaper prices, but the consumers have to factor in shipping costs which might lead to higher prices after all. This distinction results in different cost and profitability structures for businesses, as online shopping includes last mile transportation costs of getting the products from the warehouse to the clients (Buldeo Rai et al., 2019).

2.1.2 Predicted Future Developments

The history of omnichannel shows how this concept emerged based on changing customer demands and new technological advancements. In the future, more and more businesses can be expected to apply the concept and leverage the opportunities it brings (Gerea et al., 2021). Companies that want to further continue with the development of an omnichannel strategy need to “run” and master this undertaking (Graf et al., 2021). The term “run” has been coined by Graf et al. (2021), consultants at McKinsey & Company, and their “crawl, walk, run” strategy for building an omnichannel experience. This framework states that companies have to first *crawl*, and master the basics of an omnichannel strategy, second, *walk* and increasingly embrace the concept, and third, *run* and excel in their omnichannel endeavors.

This third aspect, especially relevant for many companies in the future whose strategies are not yet fully developed, also includes expanding their omnichannel approach to new geographics and demographics (Belvedere et al., 2021). Along those lines, businesses will have to continuously work on better integrating the individual channels to fully reach the goal of one seamless user experience and raise more awareness for the concept as many clients are still unaware of its full potential or even existence (Gerea et al., 2021). Some measures already included in digital marketing strategies, like chatbots or voice assistants, are expected to be used more to increase convenience throughout the omnichannel experience for customers (Araújo & Casais, 2019; Jiménez Zarco & Pacheco Bernal, 2022).

The data collected through omnichannel is vast and will help nourish artificial intelligence (AI) which can be leveraged by companies to make better informed decisions regarding their strategy, and improve personalization (Gerea et al., 2021; Jiménez Zarco & Pacheco Bernal, 2022). Data protection in return, could be ensured by the integration of blockchain technologies in an omnichannel strategy. Cui et al. (2021) propose to increase data integrity by using a *permissioned blockchain*¹ and a shared ledger opposed to conventional methods. According to the authors, this would allow companies to have one source-of-truth for their data, avoid discrepancies, and mitigate privacy risks that customers may have through increased transparency. AI, virtual reality (VR), and blockchain will provide new possibilities for companies and already today the metaverse is seen as a new channel included in marketing strategies (Zhang et al., 2022).

¹ A permissioned blockchain is a type of blockchain network where access to participate in the network and validate transactions is restricted to a pre-approved group of participants, rather than being open to the public like a public blockchain which ultimately adds security.

2.1.3 Opportunities and Risks

There are various opportunities and risks to be considered by a company before implementing an omnichannel strategy. Even though some have been addressed before, this part will offer a condensed overview over the different aspects up for deliberation.

The general opportunities by providing a seamless and consistent experience across all channels – offline, online, or mobile – lay in increased brand awareness, customer satisfaction, and loyalty, which may ultimately lead to an increase in sales (Asmare & Zewdie, 2022; Belvedere et al., 2021). According to the authors, this also allows businesses to expand their reach and connect with new customers due to a more ample set of touchpoints available. These new and often innovative touchpoints can potentially increase customer engagement and therefore benefit the business long-term if leveraged correctly (Gerea et al., 2021). Gerea et al. (2021) demonstrate that this goes hand in hand with the data insights companies gather along the customer journey which helps them understand clients' needs better and adapt their strategy accordingly.

Additionally, an omnichannel strategy eliminates silos between departments and competing channels that exist with a multichannel approach and therefore increases efficiency through aligned operations (Castaldo & Grosso, 2020). According to the authors, a successful omnichannel strategy can only be implemented by a designated team in collaboration with different departments including but not limited to, Marketing, Operations, and Information Technology.

While omnichannel strategies may offer numerous opportunities, companies must also consider the risks involved in implementing such strategies. Internally, the integration of different channels might be challenging due to their complexity (Castaldo & Grosso, 2020). This leads to a higher required level of expertise, resources, and collaboration of different departments as decisions are much more versatile in an omnichannel environment. The implementation demands significant investments in time and capital and is a continuous process as well as any other strategy implementation (Simone & Sabbadin, 2017). Parallel to this, there may also be managers or key stakeholders internally, who are reluctant and resistant to change since an omnichannel strategy changes parts of how a company is doing business (Simone & Sabbadin, 2017).

From a customer's perspective, it is key for companies to manage the different touchpoints and their integration well, to avoid confusion and discrepancies that might negatively impact

their customer experience and brand awareness (Asmare & Zewdie, 2022). Uncertainty regarding data privacy and security also needs to be addressed by businesses to not encounter themselves with regulatory compliance issues (Simone & Sabbadin, 2017).

Different channels have different needs and possibilities, and finding the balance between them can be challenging. Nevertheless, this balance is essential as a company's goal by implementing an omnichannel strategy should be achieving incremental sales and not cannibalizing existing sales through a different channel (Castaldo & Grosso, 2020).

In summary, the omnichannel concept has steadily evolved over the past decades and is gaining in popularity. The future foresees many use cases and opportunities for omnichannel strategies, but corresponding risks need to be mitigated by a company to be successful.

2.2 Metaverse

2.2.1 Definition

The term metaverse is a portmanteau of *meta* and *universe* which can roughly be translated as *beyond the universe*, meaning that the virtual and real aspects of the world will merge (Yawised et al., 2022). Due to the undefined final dimensions of the metaverse, the current academic literature does not provide a set definition. In the following, a few examples will be highlighted to demonstrate common grounds and differences.

Hirsch (2022) describes the metaverse as “[...] a constellation of 3D virtual worlds which will be accessed through various forms of extended reality.”

Hollensen et al. (2022) offer the following definition:

[The] metaverse refers to a series of interconnected virtual worlds where users can leverage virtual and augmented reality, navigating these spaces using personal avatars who interact with each other [...]. Metaverse iterates further by placing everyone inside a ‘virtual’ or ‘3D’ version of the internet and on a nearly unending basis. In other words, we will constantly be ‘within’ the internet, rather than have access to it.

Yeo et al. (2022) define it based on two different scope extensions:

[...] [I]n a narrow sense, [...] [the metaverse] mean[s] a virtual space where socio-economic activities such as [in] the real world are possible. In a broad sense, it is defined as a fusion or connection point between virtual and reality, a repetition of the Internet revolution, or the next generation of the Internet.

All three definitions highlight the virtual aspect, with Hirsch and Hollensen et al. focusing specifically on augmented reality (AR) and VR technologies to experience the metaverse which assumes a certain kind of *immersiveness* of the metaverse. Hollensen et al. (2022) mention its persistent and omniprevalent character and the way of interacting with avatars, whereas Yeo et al. (2022) add its economic utilization and emergence from the Internet.

Two characteristics of the metaverse dominant in academic literature are interoperability and scalability (Hollensen et al., 2022). In 2013, Dionisio et al. identified the four most important attributes to be realism, ubiquity, interoperability, and scalability. Sheety & Ajmera highlighted the importance of the metaverse development going towards interoperability again in 2022. The idea behind the metaverse is to create a virtual and immersive world in which people can interact through customized avatars (Zhang et al., 2022). Therefore, Shetty & Ajmera (2022) argue, that the lack of interoperability regarding transferring assets and carrying over identities from different games, has limiting effects on the metaverse. Another obstacle is the lack of synchronicity which is needed to experience the metaverse smoothly and without time delays or cut off visualizations (Ball, 2022).

Currently, there are many different isolated metaverses, e.g., on Roblox or Decentraland, and not one fully integrated one, as this is still not technologically feasible (Elmasry et al., 2022). People can customize their avatars as seen in Figure 2, including by purchasing NFTs², but are not able to transfer them to another platform due to a lack of interoperability. In 2022 alone, JP Morgan estimated the annual spending on virtual goods to sum up to USD 54 billion (Hirsch, 2022). Therefore, the lack of interoperability has a negative impact on the time and money spent in the metaverse and still restricts its full potential.

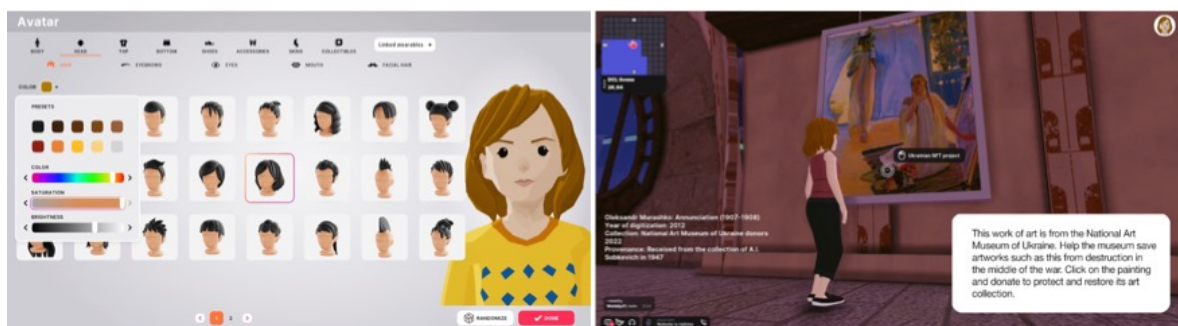


Figure 2: Customizing an avatar and the Finnish Metagallery on Decentraland.

² An NFT, short for non-fungible token, can be understood as a certificate of ownership for a digital asset. A NFT is not tradable, only sellable, and the tokenization assures the uniqueness of the asset. Upon launching an NFT, a smart contract is minted on an existing blockchain and serves as a source-of-truth for the date and time of creation and the transaction history and allows the creator to receive a commission fee with each resale.

It is important to differentiate the concept *metaverse*, from the concepts of AR and VR and Web3 (Elmasry et al., 2022). AR and VR, as mentioned above, are two technologies to experience the metaverse. Nevertheless, they are not the only ones available to operate, interact, and immerse in the metaverse (Elmasry et al., 2022). Technologies like cloud infrastructure, AI, blockchain, and the Internet of Things also continuously impact and build the metaverse (Shetty & Ajmera, 2022).

The concept Web3 is derived from the evolution of the internet that is often clustered into Web1.0, Web2.0, and Web3.0 (Grider & Maximo, 2021). According to the authors, these three different evolutionary stages differ in that Web1.0 refers to the internet in its initial and simplest form – reading and accessing information without restrictions. Web2.0 is seen as an advancement of the latter and allows users to not only read, but also create and contribute to the internet with their own content (Grider & Maximo, 2021). This led to the rise of social media platforms like Facebook and Instagram (Hirsch, 2022), which could only be accessed with an account including a username and password (L'Oréal Groupe, 2022).

Web3.0 is the newest and currently ongoing revolution of the internet and enables users to read, write, and own content and digital assets (Grider & Maximo, 2021). Elmasry et al. (2022) show that Web3.0 is based on decentralization and interoperability which are two factors that will help facilitate the development of the metaverse to its envisioned final stage of “interconnected virtual worlds” as defined by Hollensen et al. (2022).

Nevertheless, the metaverse is not there yet from a technological standpoint and according to Grider & Maximo (2021) there are currently two different versions of the metaverse. The first being a Closed Corporate Metaverse, based on Web2.0, and the second an Open Crypto Metaverse, based on Web3.0. The difference from the first to the latter, is that Web2.0 is centralized and easier to access, whereas Web3.0 is envisioned to be decentralized and to be accessed only with a cryptocurrency wallet³ (Elmasry et al., 2022; L'Oréal Groupe, 2022).

³ A cryptocurrency wallet enables the user to store its private keys, that function as passwords for his or her transaction addresses required for transactions on the blockchain. As there is no way to access digital assets without the private keys, the assets will be lost if the key is forgotten. Therefore, a cryptocurrency wallet provides a secure storage space to prevent this from happening.

2.2.2 Historical Developments

The history of the metaverse is quite complex as it evolved from various technologies and visions. The term metaverse first appeared in Neil Stephenson's science-fiction book *Snow Crash* in 1992 (Accenture, 2022; Elmasry et al., 2022). It was facilitated by prior publications addressing the topics digital reality and cyberspaces (Elmasry et al., 2022). Already in 1965, an interactive VR experience named VIDEOPLACE (Accenture, 2022) and in 1978, a virtual multiplayer world called MUD1 (Elmasry et al., 2022), were released, setting the scene for technological advancements in the real world.

Second Life, a platform that enables its users to live in a digital world, was released in 2003 and attracted over one million active users (Accenture, 2022; Elmasry et al., 2022). That same year, Roblox was founded, which today allows users to create their own digital worlds as illustrated in Figure 3 (Elmasry et al., 2022). Bitcoin was released in 2009 and presented new opportunities for the metaverse to further evolve technologically (Accenture, 2022).

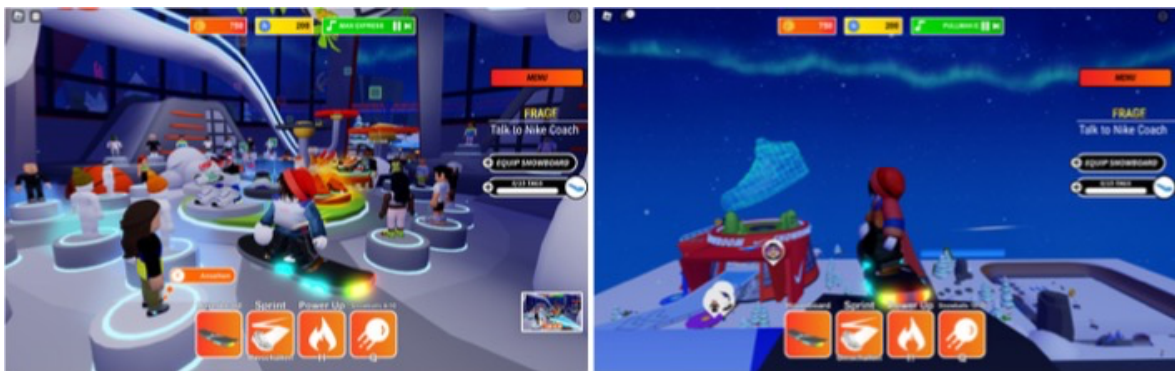


Figure 3: Nikeland on Roblox.

Even though the concept of the metaverse emerged mainly from the gaming industry (Elmasry et al., 2022), already in 2014 Facebook acquired Oculus, known for its glasses and VR advances, to tap into the business opportunities this technology could present when reaching its final stage based on the Web3.0. In 2021, Facebook changed its name to Meta and announced to invest more than USD 10 billion into the development of this new VR social platform (Accenture, 2022; Elmasry et al., 2022).

In 2016, The Pokémon Company released Pokémon Go, a mobile game which uses AR as a layer over the real world to allow its users to collect Pokémon (Gray, 2021). This allowed the players to get out and meet with other users in the real world which strengthened the fan community and was one of the first major mass use case for AR alongside Snapchat filters. Both continue to be used today and therefore oppose Meta's VR vision to a certain extent.

Facilitated by the COVID-19 pandemic, and a more ample set of use cases, the concept of the metaverse has been gaining momentum and attention in the business world and companies in nearly all industries started exploring and investing into the metaverse. According to McKinsey, this led to a total investment into the metaverse of over USD 120 billion in 2022 (Elmasry et al., 2022). As illustrated in Figure 4, Gucci opened a virtual *Gucci Garden* on Roblox for two weeks where they sold a Gucci handbag as an NFT for a price higher than its real-world counterpart (Hirsch, 2022). The Italian luxury brand also launched a *Gucci House* on Zepeto, the same VR platform that the Spanish fast-fashion retailer Zara used to launch its first collection in the metaverse (Bennett, 2022). Accenture initiated the onboarding of new hires in the metaverse (Accenture, 2022), and BMW is creating a *digital twin*⁴ of 31 of its factories together with Nvidia to facilitate the reconfiguration of factories in case of a new car launch (Caulfield, 2021).



Figure 4: Gucci's presence in the metaverse on Roblox and Zepeto. Gucci.com.

Nevertheless, as the metaverse is closely linked to the vision of Meta and its CEO Mark Zuckerberg, and to the developments in the crypto world, the idea of the metaverse has been viewed ambiguously, especially in November 2022. Meta laid off more than 11,000 employees to become more “capital efficient” and focus on the development of AI technologies and the metaverse (Vanian, 2022). Additionally, the cryptocurrency trading-platform FTX filed for bankruptcy and its founder Sam Bankman-Fried is being charged with fraud and money laundering (Brooks, 2022). This could potentially slow further investments in the metaverse, yet the outlook has generally been optimistic (Hussain, 2022).

⁴ A digital twin is a virtual representation of a physical object, system or process that mimics its real-world behavior, characteristics, and attributes. It allows for monitoring, simulation, and analysis of the physical counterpart, providing valuable insights and enabling predictions, optimizations, and improvements.

2.2.3 Predicted Future Developments

McKinsey estimates the value of the metaverse to reach USD 5 trillion by 2030 (Elmasry et al., 2022). Goldman Sachs even assigns the business opportunity a value of USD 8 trillion (Sheridan, 2021), whereas Grayscale Investments published a lower estimation of USD 1 trillion (Grider & Maximo, 2021). The wide range of assessments demonstrates the uncertainty that continues to revolve around the metaverse and the opportunities it could potentially bring to businesses worldwide. Many companies have already advanced with this new technology in its Web2.0 form, yet according to Yawised et al. (2022), the biggest question for businesses remains: Does the metaverse present a big enough opportunity for our business model to include it in our corporate strategy, or will it only be an assisting tool?

The metaverse still presents many challenges as the technology needed is not yet fully developed (Elmasry et al., 2022) and the internet is not “ultrafast” enough to provide access for everyone (Hollensen et al., 2022). Companies are considering not only *if*, but also *when* they should enter the metaverse. They are contemplating if it is worth being a relatively first-mover in their industry and gain experience or if they would rather wait and see what the competition is doing (Gauttier et al., 2022). The authors assume that only time will tell and that there is currently no way of knowing what will happen in the future. Accenture is more optimistic in this regard and highlights the existing actionability of the metaverse (Accenture, 2022). They argue that if businesses fall short of embracing the uncertainty of the metaverse, they will have to comply with rules that others defined for them in the future.

The metaverse presents different use cases today, which are expected to multiply in the future. It can be used as an additional digital marketing channel (Zhang et al., 2022), a space for holding concerts and events, or an office space where coworkers meet and receive training (Grider & Maximo, 2021). As an example, the healthcare sector utilizes the metaverse for the practical training of doctors. The virtual metaverse environment allows them to simulate surgeries in a safe environment and helps them to become better surgeons and add value to society (Frellick, 2022).

There are a vast number of questions that remain for the future of the metaverse, including if it is going to stay and what its shape will be (Zhang et al., 2022). There are various options like individual metaverses without any connection, individual metaverses with improved or even full interoperability, or one fully integrated metaverse. If the latter occurs, the question of ownership is still pending to be determined (Zhang et al., 2022).

2.2.4 Challenges

There are numerous opportunities associated with the metaverse, such as incorporating it into an omnichannel strategy to connect with younger clients and using it to overcome geographical restrictions, allowing people to easily communicate with friends and colleagues across the world (Gauttier et al., 2022; Zhang et al., 2022). Additionally, the metaverse has the potential to advance various sectors, including healthcare (Frellick, 2022).

Along these lines, a McKinsey survey found that “95 percent of senior executives expect the metaverse to have a positive impact” (Elmasry et al., 2022). Nevertheless, the metaverse also presents challenges that businesses and entrepreneurs must take into consideration while progressing in the development of the new platform. The regulators have not yet provided a legal framework which leaves many unresolved questions (Gauttier et al., 2022).

As a cyberspace, the metaverse, in its Web2.0 and Web3.0 version, is going to face the same issues that already exist on the internet today. Data protection and cybersecurity are problems and there have been concerns about the applicability of the European General Data Protection Regulation in the metaverse (Gauttier et al., 2022). The authors also highlight, that even though the growing creator community for digital assets and its facilitated copyright tracking through smart contracts is a positive development, the protection of intellectual property will be an obstacle to overcome. Illegal and harmful behavior appears everywhere and also needs to be addressed by regulators in the metaverse (Madiega et al., 2022).

The regulator perspective also includes challenges regarding cryptocurrency and metaverse legislation and competition laws from the business side, as well as health concerns regarding vulnerable individuals, especially children and teens, that could be negatively affected without additional protection (Madiega et al., 2022). This directly leads to issues regarding diversity, equity, and inclusion (DEI) as the metaverse and its creation need to be accessible to all and not exclude parts of the world’s population (Hackl, 2022). According to Hackl (2022) it is key to involve different genders, ethnicities, and age groups in the development to ensure an inclusive environment. A first step in this direction has been taken at the World Economic Forum in May 2022, by an initiative that includes companies like Meta, Sony, Microsoft, and LEGO, to ensure DEI in the metaverse (Baker, 2022).

Climate change and its environmental impact are additional consequences that must be considered while constructing the metaverse (Wiggers, 2022). As it is already known from, e.g., the mining of Bitcoin, the blockchain consumes a lot of energy (Wiggers, 2022). Technology

servers are currently estimated to contribute two percent of global carbon emission – equal to the global aviation industry (Wiggers, 2022). He concludes, that the metaverse, as a blockchain based platform, is going to have a negative environmental impact that can barely be mitigated. That in turn, collides with the Sustainable Development Goals of the United Nations that many companies have committed to (The, 2022).

In summary, companies face different opportunities and challenges with and in the metaverse, which makes it indispensable to conduct further analysis and research in this regard to reduce uncertainty to the greatest extent possible. Businesses need to be able to take an informed decision weighing the pros and cons of the metaverse technology for their individual business model.

3. Objectives

The main goal of this paper is to predict the metaverse's 3.0 future as part of a fashion retailer's omnichannel strategy as the academic literature has not yet explored this area. The goals mentioned in continuation are formulated to contribute to a multifaceted conclusion on the main goal and advance research in this regard.

The State of the Art section describes the history, current developments, and the outlook on the omnichannel and metaverse concepts as well as their opportunities and risks. This part aims at reflecting on the question if the metaverse is here to stay and what its future development may look like.

The objective of the second part is focused on exploring strategy options of how a company can integrate the metaverse based on Web3.0 as an additional channel in its omnichannel strategy. Furthermore, the goal is to discover how a company selects one of those strategic options, implements it, and controls and adjusts it afterwards. This practical part is designed as a guideline to aid companies in their decision process of defining the role of the metaverse in their omnichannel strategy.

The final discussion offers a reflection to determine the firmness of the analyses conducted and to apply selected concepts from the State of the Art section to the strategy definition process.

This paper is based on the hypothesis that the fashion retailer going through the strategy process has already successfully implemented its omnichannel strategy and can therefore directly start with the metaverse integration if applicable.

4. Methodology

This paper follows an explorative research approach and is additionally nurtured by qualitative but also quantitative methods of investigation. Apart from extensive literature review, which is the base for this paper, two expert interviews help gain more practical insights into the concepts omnichannel and metaverse, especially the latter due to the shortage of peer-reviewed articles. The two experts interviewed are:

- a. *Joaquín Ruipérez*, CEO of estudiofuture, who provide services of bringing AI, VR, and related technologies to companies worldwide. The interview was conducted on 03 February 2023.
- b. *Alberto Valle*, Director at Accuracy, a financial and strategic consultancy firm operating worldwide. The interview was conducted on 25 January 2023.

A survey about the aptitudes of consumers adds a quantitative component and empirical support to the thesis which facilitates grasping the current state of both concepts in the consumers' minds and apply the findings to the business world.

The survey was conducted from 06 February to 08 February 2023 via Google Forms and the questionnaire is attached at the end of this paper under *Appendix – Survey Questionnaire*. The universe included everyone older than 18 without any geographical restrictions. The sample size of 108 was selected randomly on a convenience basis. Therefore, the sample error with an applied confidence interval of 95 percent rounds to 10 percent.

The survey analysis included in this paper has been conducted via Excel as the data did not demonstrate any significant statistical difference while being analyzed with jamovi. The variables were mostly based on single or multiple choice questions, enriched by two qualitative open answer questions. The results are illustrated by different frequency tables, arithmetic means, percentage distributions or directly integrated in the text.

5. Omnichannel and Metaverse – How Can the Metaverse Be Integrated in a Fashion Retailer’s Omnichannel Strategy?

5.1 Initial Considerations

Before starting the process of exploring options to integrate the metaverse in an omnichannel strategy of a fashion retailer, each company individually needs to define which type of metaverse it is referring to. As Joaquín Ruipérez stated in the interview, the metaverse 3.0, which per definition is supposed to be immersive, is not quite there yet for the client-facing side. Alberto Valle also highlighted this as he finds the current metaverse 3.0 to be too unprofessional to be a channel for interacting with clients. Joaquín Ruipérez explained that the current use cases of fully immersive metaverses are more focused on internal operations, which are out of scope for an omnichannel strategy. For the client side, businesses are currently experimenting with Closed Corporate Metaverses, the metaverse 2.0, which sets them up for potentially switching to an Open Crypto Metaverse, the metaverse 3.0. This differentiation has to be clear for a fashion retailer in order to initiate its strategy formulation. The following analyses will exclusively be focusing on the metaverse 3.0 as this is per definition the envisioned final outcome.

Additionally, each fashion retailer has to define its unique value proposition and goals that it hopes to achieve through the metaverse integration into its omnichannel strategy. Online shopping can be seen as a solution to many inconveniences that consumers are experiencing when they are shopping in brick-and-mortar stores, including the time spent in stores, queuing for the fitting rooms, and the necessity to physically go to the store. The integration of an online channel increased convenience and accessibility as it has reduced the time it takes to shop as it can now be done everywhere, at home in front of the television or on your way to work. This change led to an increase in sales but also does not come without additional inconveniences as online shopping augmented last mile shipping costs for the fashion retailers and consumers usually have to return some items as they have not tried on the clothes before, which plays a significant role in contaminating the environment.

The hypothesis is that integrating the metaverse into a fashion retailers omnichannel strategy tackles exactly those inconveniences of the online channel. The metaverse could potentially allow consumers to try on clothes for real world delivery in the virtual 3D world, which is expected to decrease returns, increase customer satisfaction, and increase sales but especially profit. The metaverse would therefore improve the customer journey, the results of the fashion retailer, and the sustainability of the fashion industry at least from the client facing side.

5.2 Exploration of Strategy Options

The parting point for a company is the definition of what it is looking to achieve by integrating the metaverse as an additional channel. Joaquín Ruipérez emphasized that businesses must have clarity on the suitability of such a strategy with their target segment or otherwise all efforts taken would neither be expedient nor successful. The objectives need to be clearly defined and aligned with the company’s mission and vision to not create confusion on the different levels of strategy – corporate, competitive, and functional (Johnson et al., 2017). Alberto Valle argued that even though for some companies in the leisure or real estate sector an inclusion of the metaverse in their corporate strategy already makes sense, for many others, including the fashion retail industry, it still does not, and they are for now better off by only including it in their competitive strategy. Joaquín Ruipérez generally went along that line of reasoning as well, as he stated that the metaverse is not mature enough to be included on a corporate strategy level, but every company should at least start to gain initial experience with AI, VR, and immersive worlds if it fits its target segments.

After having set precise objectives, the fashion retailer continues the strategy exploration process which can be aided by selectively applying internal and external analysis frameworks to establish a SWOT analysis. For the external analysis and a conclusion on opportunities and threats, a PEST(EL) can help to better understand the current macro-economic environment and consumer mindsets regarding the metaverse and omnichannel strategies. A non-exhaustive selection of questions businesses can include is illustrated in Figure 5.

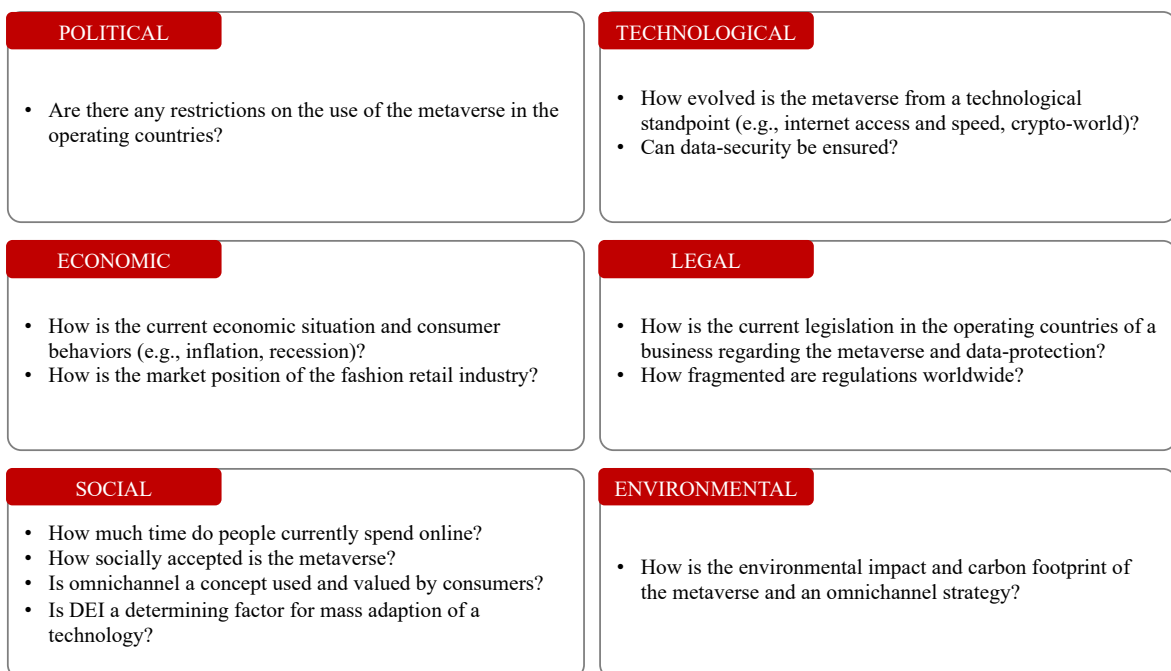


Figure 5: PESTLE analysis and questions to ask in the exploration process of strategic options.

Additionally, the competitive landscape, which is derived as a dimension from the Porter's Five Forces framework, is something fashion retailers should look at externally. It is directly linked with the decision of being a first, second or later mover in including the metaverse in an omnichannel strategy. Gauttier et al. (2022) find that there is no clear opinion in this regard as every option has its advantages and disadvantages. If a company is the first, a fashion retailer might be able to lock in its clients and benefit from the "first-mover advantage" in general, while being second allows a company to reduce uncertainty and profit from the experience of the competitors (Gauttier et al., 2022). Alberto Valle believes that a business does not necessarily have to be the first entrant into the metaverse in its industry, but if there is a use case, it also should not be last to not be lagging behind industry-trends and risk losing customers. Joaquín Ruipérez adds the component of a company's size to the discussion as he argues that to reduce uncertainty, small businesses should generally wait longer to enter the metaverse than bigger ones. Nevertheless, one could argue that larger corporations may be less agile and slower to adapt due to more hierarchical and complex structures.

To internally identify strength and weaknesses that can be useful when integrating the metaverse as an additional channel in its omnichannel strategy, a fashion retailer has to analyze its internal resources and capabilities in this specific context. Here, especially *dynamic marketing capabilities* are important as a company thus will be able to adapt quickly to the market and customer's needs (Yawised et al., 2022). As mentioned in part 2.1.3, different departments need to work together to create a successful omnichannel strategy, which is also true when integrating the metaverse. Therefore, a fashion retailer that has a clear structure and fosters collaboration between departments in general, has better capabilities for implementing such a project than any competitor who does not. Also, if the company has more financial resources that it can dedicate to innovation and therefore integrating the metaverse in its omnichannel strategy, it will be more likely to succeed as the investment will not be crucial for its core business.

As already touched upon with the concept of dynamic marketing capabilities, it is key to consider customers perspectives and necessities as any endeavor in the metaverse needs to be accepted by the clients. According to the survey conducted, this seems to be an essential task, since the uncertainty revolving the metaverse and the missing knowledge and awareness of the technology might hinder the success of such undertakings. As visualized in Figure 6, the median of the answers to the question *How familiar are you with the metaverse?*

on a scale from one to five is two, which demonstrates limited awareness for the metaverse within the sample group of $n = 108$. The fact that the respondents gave an average score of 2.68 out of five in response to the question of whether they would consider using the metaverse as an additional shopping channel also indicates that they are generally less inclined to embrace this technology.

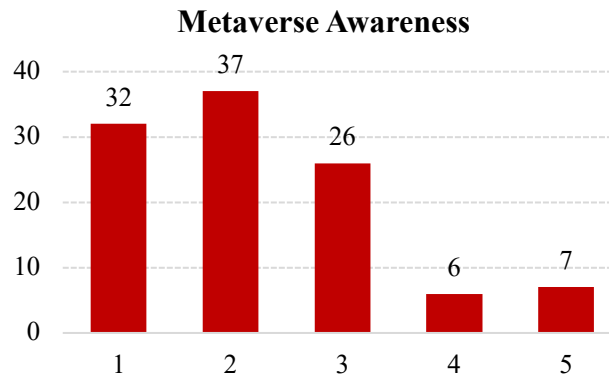


Figure 6: Survey Analysis - How familiar are you with the metaverse?

The exploration process results in a detailed SWOT analysis which is the basis of defining different strategy options between which a company can choose. The two main ones are: (a) integrating the metaverse at once as a full new channel into an omnichannel strategy, and (b) integrating the metaverse step by step into an omnichannel strategy. The latter, which means using the metaverse now for only one or two of the pre-purchase, purchase, or post-purchase stages, gives the company more flexibility as it can experiment and see what works and what does not and later switch to a full channel integration if it sees fit. This allows the fashion retailer to limit its investment and reduce uncertainty. Whereas if it integrates the metaverse as an alternative to all parts of the customer journey right away – pre-purchase, purchase, and post-purchase – this might be overwhelming for clients and reduce customer response. Nevertheless, no matter which option a company decides to choose, it will be costly to develop a client facing metaverse 3.0.

The customer journey in the metaverse can be built in different ways. If a business wants to implement all three steps directly, it can bring digital twins of their physical stores to the metaverse. This allows consumers to look at clothes and accessories, try them on, buy them in the metaverse for delivery in the real world, and receive customer support after the purchase. If a company is looking for a more isolated approach first, it can hold virtual events and create pop-up stores to implement the pre-purchase and purchase phase in the metaverse. For pre-purchase only, a fashion retailer has the option to implement virtual showrooms for

marketing endeavors, for purchase only, it can think of offering virtual clothes and accessories as NFTs or metaverse shopping with real world delivery, and for post-purchase only, it can opt for exclusively offering customer service in this immersive 3D world (Elmasry et al., 2022).

The decision between the strategy options (a) and (b) mentioned above, is based on the analyses conducted and the further adequacy, feasibility, and acceptability analyses (Johnson et al., 2017). Consumption in the fashion retail industry is hard to predict, as purchase decisions are often based on emotions and not on the necessity itself (Yin, 2022). Therefore, the following analysis provides a perspective that has to be adjusted individually to a fashion retailers strategy and its customer segments.

5.3 Selection of Strategy Options

5.3.1 Adequacy

The adequacy analysis is majorly based on the results from the exploration phase and therefore the SWOT analysis (Johnson et al., 2017). The authors state that a strategic option is adequate if it focuses on the opportunities a company currently has and uses its strengths to “capitalize” on it while also mitigating the impact of potential threats. Therefore, a fashion retailer must determine if the metaverse, depending on its customer segments, is a legitimate opportunity for its business, and see if the strengths identified in the internal analysis help to exploit one of the two options.

Based on the survey conducted, 57.1 percent of the respondents over the age of 40 would not be interested in learning more about the metaverse, compared to only 28.7 percent of the age-group under 40. This finding is exemplary and shows that the metaverse integration for a fashion retailer targeting customers over the age of 40 is most likely not adequate as it does not add enough value for the clients. Nevertheless, companies targeting groups under the age of 40, which still only show a 71.3 percent willingness to embrace the metaverse, need to conduct further research. The goal is to determine whether they (a) should now fully integrate the metaverse in their omnichannel strategy, or (b) should integrate the metaverse step by step to test and adapt to customer’s needs.

There are different ways of determining the adequacy for option (a) or (b) further. They are not meant to be exclusive but rather inclusive to give the strategy makers a more holistic overview of the future impact of their decision. As the integration of the metaverse into a fashion retailers omnichannel strategy is subject to uncertainty, a *scenario analysis* could be

suitable (Johnson et al., 2017). This helps the decision-makers to evaluate the two possibilities and see how changes in the macro- and microenvironment potentially influence the outcome.

Another way is to take a more detailed look at the fashion retailers' resources and capabilities and try to determine which metaverse strategy could be a source of competitive advantage (Johnson et al., 2017). The managers can base their analysis on the *VRIO framework* and compare both strategies on the criteria of value, rarity, imitability, and organization for their potential to produce a sustainable competitive advantage (Johnson et al., 2017). Option (a) of directly integrating the metaverse as an additional channel is most likely more rare and harder to imitate for competitors, but as the State of the Art analysis shows, the value of such an endeavor might be limited as there is still a lack of professionalism, scalability, and interoperability. Option (b) is not as rare and easier to imitate as the business decides to add only one or two parts of the customer journey in the metaverse, but based on current technologies, this might bring more value for the customers and requires less investment from an organizational perspective. As many other side effects also play into these considerations, each fashion retailer needs to evaluate both options individually.

Additionally, a fashion retailer can conduct a *life cycle analysis* based on its competitive position in the market (Johnson et al., 2017). As the fashion industry is currently in a phase of maturity, players positioned differently in the market are suggested to take distinct actions. Businesses with a "strong competitive position" are less reliant on innovation and differentiation which might make it dispensable to be a first mover to fully integrate the metaverse in its existing omnichannel strategy (Johnson et al., 2017). They can slowly but steadily increase their metaverse engagement and therefore mitigate the uncertainty to a certain extent. Fashion retailers with a "middling" or "weak" position need to work on establishing themselves in the mature market and can potentially do so by finding a niche or differentiating their value proposition (Johnson et al., 2017). One possibility in this regard is to embrace the metaverse as a full channel to take advantage of the potential spill-over marketing effects. Nevertheless, due to their weaker positioning, a restriction on the availability of human and financial resources needs to be taken into account which might plead for option (b) and only starting off with a partial integration. This consideration on resource availability directly leads to the next one of whether either of the strategies is more feasible.

5.3.2 Feasibility

The feasibility of a strategy refers to the capability of a business of successfully implementing it (Johnson et al., 2017). The authors mention the importance of sufficient financial resources, employees with the right set of skills, and the possibility of integrating different resources into the business. According to Johnson et al. (2017) it is normal that a company does not have all the resources and capabilities at hand for such an innovative project. Therefore, the feasibility of strategy options (a) and (b) “needs [to] be considered in terms of the ability to obtain and integrate such resources” as otherwise reputational damages might follow (Johnson et al., 2017).

From a financial perspective, option (a), launching a fully functional metaverse channel simultaneously with the other existing channels, requires a significant upfront investment. The metaverse needs to be developed ad-hoc which requires the suitable workforce and technology, including servers and a high-speed connection that is not yet fully available. Option (b), to gradually integrate the metaverse into an omnichannel strategy, requires less upfront investment as it allows the fashion retailer to test and adapt its strategy. As the whole strategy will take more time to implement, this in return means that the amortization period of the metaverse integration will be longer, whereas in option (a) the fashion retailer can capitalize on the metaverse integration more quickly. Accurately estimating the cash flows associated with metaverse integration is crucial for both options, as it helps determine the required capital, which a fashion retailer will most likely need to procure externally due to the size of the investment (Johnson et al., 2017). According to the authors, the resulting costs of capital will depend and vary on the life cycle stage of the fashion retailer itself. Mature businesses are more likely to be able to use leveraging structures while growing fashion retailers tend to experience higher costs depending on their future perspectives.

From a human resource perspective, both options require a team of skilled professionals with expertise in metaverse development, such as AR, VR, and user experience design. Finding and hiring such talent can be challenging and costly. A fashion retailer might decide to collaborate with an external partner to build the metaverse and therefore avoid hiring experts directly. Externalizing the metaverse integration needs to be carefully considered as having the resources and capabilities organically within the company more likely provides a base of sustained competitive advantage (Johnson et al., 2017). Especially for (b), the step by step integration, the skills should be available within the organization as an external collaboration might be too costly in the long run. Fashion retailers can start with hiring a small team of

skilled professionals and gradually scale up as needed. This approach allows them to build up internal expertise deliberately and should lower costs in the long run. Option (a) may be better suited for external consulting since it can be challenging to quickly build the necessary expertise internally and find the best talent in the current highly competitive recruiting environment. Nevertheless, fashion retailers choosing this option should not rely on external sources forever as this will reduce their competitive edge. Having the capabilities directly available at any time helps a fashion retailer to build better relationships with different stakeholders, which leads to the analysis of the acceptability of the strategy (Johnson et al., 2017).

5.3.3 Acceptability

The last step of selecting a strategy is to analyze if different stakeholders would potentially accept the proposed strategy based on their estimated returns (Johnson et al., 2017). The authors introduce the concept of “3 Rs’: Risk, Return and stakeholder Reactions” that companies can use to evaluate their strategy options.

The *risk assessment* is directly linked to the evaluation of the return due to the “risk-return trade-off” (Johnson et al., 2017). According to the authors it is a difficult task to determine the level of risk a fashion retailer wants to engage in, and it is not enough to only look at the financial risk. In case of the metaverse integration into its omnichannel strategy, it is essential to also consider reputational, technical, and legal risks. Option (a) is revolved by even more risk in this regard than option (b) as e.g., technical compatibility issues can be adjusted more easily in the latter. To determine the most appropriate solution for a fashion retailer, it is necessary to analyze the level of uncertainty and risk associated with both options in detail.

A first possibility is to conduct a sensitivity analysis which includes altering hypothesis integrated in the strategy and tracking their different outcomes (Johnson et al., 2017). A business can test their underlying assumptions and evaluate if distinct results would change its decision. This is essential as there is no professional metaverse for the client facing side available yet and the development of a such will require a significant amount of investment and high expectations for customer adaption.

Regarding the financial risk, a business can examine the leverage, i.e., debt-equity-ratio, of both strategies and its influence on the company’s liquidity (Johnson et al., 2017). If the fashion retailer finances the metaverse integration mayorly with debt, it risks not being able to repay interest when its results are not as expected. If it finance the metaverse mayorly with cash, it reduces liquidity since the company has to finance the innovation in advance,

while only expecting returns from the metaverse in the future. This risk is greater for option (a) as the capital exposure is higher. When the cash flow calculations have been done accurately during the feasibility analysis, the company can conduct a break-even analysis on that data and therefore put different financing structures and the associated risk into perspective (Johnson et al., 2017). The choice of option (b) also does not come without risk, especially since adjusting the strategy might lead to a higher capital intensiveness than expected which results in cash flows that are harder to forecast until reaching the full metaverse integration.

The *return assessment* identifies the “financial effectiveness of a strategy” and therefore helps the fashion retailer determine the acceptability by different stakeholder groups which have different expectations regarding the return (Johnson et al., 2017).

A company has various ways to conduct its analysis but according to Johnson et al. (2017) the calculation of the return on capital employed, the payback period, and the discounted cash flow model are the most common ones. The authors also acknowledge that the hypothesis on which these models are based can vary, which makes a sensitivity analysis indispensable for both strategic options, especially due to the high uncertainty of the metaverse integration. The company needs to estimate the revenue potential of the metaverse while also considering possible cannibalizations and reduced operational costs in the long term. Joaquín Ruipérez stated in the interview that he expects cannibalization of physical stores by the metaverse to occur once the metaverse 3.0 is fully implemented by a company, which would correlate with strategic option (a). For option (b) cannibalization can most likely be neglected in the beginning as it is not a full alternative to the existing offline and online channels yet. Additionally, a fashion retailer can specifically calculate the shareholder value or a cost-benefit ratio if applicable to its business model (Johnson et al., 2017).

An important step in the return assessment is the consideration of “real options” and not only analyzing the strategies (a) or (b) in an isolated manner (Johnson et al., 2017). A fashion retailer might identify additional opportunities after having already started with the implementation which could increase value. For option (b), which follows a trial and error approach, companies are aware that unexpected benefits may emerge, so this is not a significant issue. If having selected option (a), this is harder to accomplish as the whole strategy has been set and there might be resistance to change. Also, real options do not only consider financial aspects, but intend to go further to align strategic and financial evaluations.

The last pillar of the acceptability analysis is the *reaction of stakeholders* which can be identified through stakeholder mapping (Johnson et al., 2017). If the mapping is adjusted to the metaverse integration into the fashion retailers omnichannel strategy, the stakeholders should be characterized by their interest in the strategical advancement and their power to influence such a decision. There are many different important stakeholders, including employees, owners and shareholders, and clients. Employees need to embrace the new metaverse technologies, which can cause resistance to change. Owners or shareholders might have concerns about the potential financial risks and benefits of the metaverse integration and might veto against the investment if they lack information and awareness on the topic.

The clients are of essential importance as they need to be open to accept and adapt the metaverse as a new channel to shop. The survey conducted shows that 52 percent of the participants still prefer going to a physical store while 48 percent prefer using online shopping, including the website and mobile application. The results, when asked more specifically if they have used different omnichannel concepts, are illustrated in Figure 7. Even though those concepts have been around for a while, the acceptance and usage rates are only around 50 percent for each option. This data demonstrates that companies need to carefully evaluate the acceptance by their target segments, as low customer engagement might lead to bad financial results which could risk a successful implementation and monetarization of the metaverse. This especially holds true since integrating the metaverse also adds a component to the customer journey that many clients are not familiar with and might therefore be more reluctant to use.

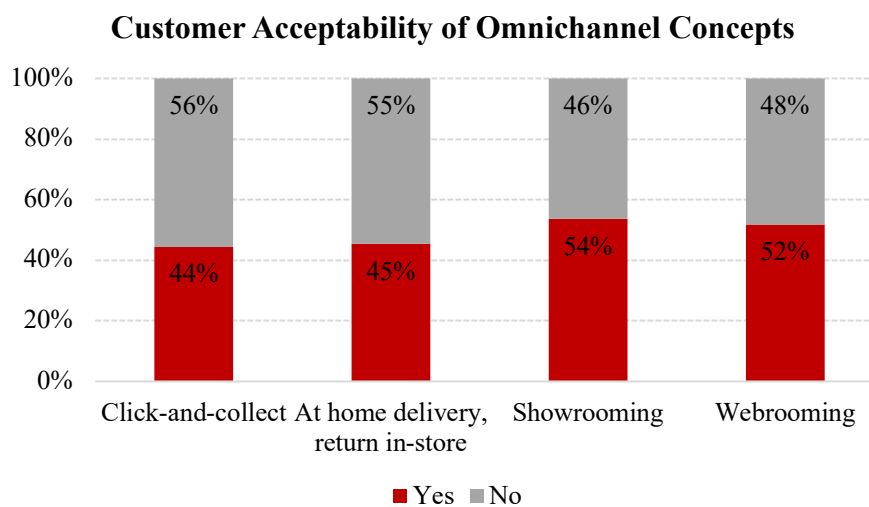


Figure 7: Survey Analysis - Current use of omnichannel concepts in the retail sector by participants.

In conclusion, the acceptability of option (b) might be higher, as it allows clients to adapt step by step and the owners or shareholders do not take on as much risk as with option (a). The employees are also more likely to accept option (b) as they have time to adjust, build, and hone their skills regarding the metaverse and its technologies, and because the new strategy is not as disruptive due to the gradual integration of the metaverse. The following Table 1 summarizes the findings of the adequacy, feasibility, and acceptability analysis of either option.

	Option (a): Full Integration	Option (b): Gradual Integration
Adequacy	More likely to be a source of a sustainable competitive advantage due to restricted imitability; lower value for customers	Less likely to be a source of a sustainable competitive advantage due to easier imitability; higher value for customers
Feasibility	Less feasible from a financial and human resource perspective due to higher investment and larger workforce required	More feasible from a financial and human resource perspective due to gradually scaling up the investment and workforce
Acceptability	Higher risk, potentially higher return, but also expectation of more negative stakeholder reactions	Lower risk, potentially lower return, but also expectation of more positive stakeholder reactions

Table 1: Exploration of Strategy Options - Summary of analysis results.

5.4 Implementation of Strategy

Once the fashion retailer has decided as to which option, (a) or (b), it wants to proceed with, the preparation and later the implementation of the metaverse strategy itself is a crucial and fundamental step. The following analysis, based on the McKinsey 7-S framework as illustrated in Figure 8, can be applied to either option, which makes any additional distinctions in this regard redundant.

The 7-S framework is a useful tool when it comes to understanding the organizational effectiveness during a change process (Bryan, 2008). The seven categories provide a multi-dimensional approach to not only address the structure but also other important success factors when managing the integration of the metaverse into a fashion retailers omnichannel strategy

(Johnson et al., 2017). There is no hierarchical order between the dimensions but rather they all facilitate and influence each other (Bryan, 2008).

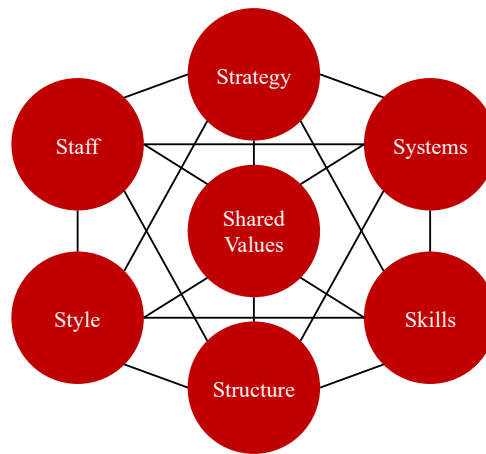


Figure 8: The McKinsey 7-S Model. Adapted from Bryan (2008).

A fashion retailer integrating the metaverse needs to define *shared values* that align with the company's mission and vision and ensure that they are reflected in the metaverse integration strategy. The values need to be communicated openly and not be viewed as separate, but as part of the new corporate culture. Looking at the nature of the endeavor to integrate the metaverse, potential shared values could be innovation, creativity, and collaboration. Integrating the metaverse into an omnichannel strategy is an innovative step as no fashion retailer has fully integrated it before. Therefore, the workforce must rely on creativity since there is no existing model to imitate. They also need to collaborate across various departments to verify the viability of their ideas from both technological and marketing standpoints.

Regarding the *strategy*, the company should have defined the specific goal of integrating the metaverse, like improving customer engagement or driving sales, in the beginning of the process. During the analysis of the adequacy of the strategic options (a) and (b), the fashion retailer already determined if it sees fit within its target group to integrate the metaverse. Nevertheless, a more specific definition of the targeted segments might be appropriate. Additionally, a fashion retailer needs to choose the platform it wants to build the metaverse on. According to Joaquín Ruipérez, currently the only option would be to build a new metaverse platform, since there is no platform for external use based on the concepts of Web3.0 available yet. The strategy also needs to elaborate on a specific plan for communicating the strategy and on how to get the right talent externally or internally, which includes educating the employees to have the required skill sets.

Those skill sets need to be determined by which *systems* and technologies the fashion retailer decides to use as the basis for the metaverse. As mentioned before, an individual platform needs proprietary technology which has to be developed by metaverse experts. It is essential that the systems can be integrated with the current offline and online channels a fashion retailer has, which demonstrates how many different components have to be taken into consideration when building the appropriate technology. The survey demonstrated that 61 percent of the respondents imagine the interaction in the metaverse to be based on customized avatars created by a 3D body scan. This means that the fashion retailer has to provide its customers with the technology to realize such a body scan and develop a platform to enable such individualized avatars. Regarding the payment type, the survey shows that 49 percent expect to be able to pay with online payment services like PayPal or Bizum. The company therefore needs to explore if this is feasible in a decentralized blockchain based metaverse or if cryptocurrencies are the only option. If the latter occurs, only 16 percent showed a disposition for this payment type within the sample group.

The systems used require different *skills* for the metaverse integration into a fashion retailers omnichannel strategy. The strategy needs to include a plan on how to get the right talent, but those specific criteria defining the *right talent* have to be agreed on beforehand. They may include knowledge of VR implementation and customer journey design. On that basis, a business can explore its internal capabilities and decide to up-skill its current omnichannel workforce or add new external expertise. Using the internal workforce may help with the acceptability of the strategy and provoke less resistance to change as the people feel included in the implementation.

A change in strategy influences the organizational *structure* of a fashion retailer which needs to be adapted accordingly. In this case, the integration of the metaverse changes the omnichannel strategy since a partial or full additional channel is integrated. Therefore, a structure change could involve adding a dedicated team with expertise on the metaverse to the workforce responsible for the omnichannel strategy. Or it could mean educating existing teams and only adding a single expert for the metaverse implementation. There are too many options available to name all of them since every fashion retailer's original structure and expertise is different. Parting from distinct structures, no matter how identical the strategy might be for two fashion retailers, it requires an individual adaption of the organizational chart of the team dealing with the omnichannel strategy. A clear definition of responsibilities helps the company to align its workforce and avoid confusions.

For effectively changing an omnichannel strategy, the fashion retailer needs to determine the culture and *style* required to drive the metaverse integration strategy forward. A culture based on the shared values of embracing innovation and being creative could empower teams to experiment and take risks. The leadership needs to be aligned with the strategy and communicate the change by being collaborative and participative (Johnson et al., 2017).

Lastly, it is essential to ensure that the *staff* is aligned with the metaverse integration strategy and has the necessary resources, support, and information available to execute it effectively. This could involve creating a training program and actively letting them participate in the change of the omnichannel strategy. It might be necessary to give incentives to align the staff as a certain degree of resistance to change is normal. Especially key employees and managers need to be on-board to communicate the metaverse integration through the different layers of corporate structures.

The following Table 2 summarizes the findings of the 7-S analysis. When the seven dimensions are successfully addressed and integrated, resources are allocated accordingly, and the change in strategy is communicated effectively there is only one last step missing in the strategy process: including efficient control mechanisms (Johnson et al., 2017).

	Summary
Shared Values	Alignment with corporate values; fostering innovation, creativity, and collaboration within the employees responsible
Strategy	Definition of specific goals, target segments, a communication strategy, and human resource planning
Systems	Decision on which systems to build the metaverse on while ensuring interoperability and adding customer value (3D body scans)
Skills	Definition of the essential skill sets and areas of expertise needed
Structure	Adaption of the current responsible workforce for the omnichannel strategy to include a metaverse expert or team
Style	Directionality of leadership to embrace culture and strategy shift
Staff	Involvement of staff in the change process and open communication

Table 2: Implementation of Strategy - Summary of analysis results.

5.5 Control of Strategy

The control of the new omnichannel strategy has to happen on three different levels – corporate, competitive, and functional – which results in different time frames of revisions. On a functional level, the fashion retailer needs to constantly check if the resources are allocated correctly and in a targeted way. This process can be supported by implementing a planning system that helps to monitor the resources used for the integration (Johnson et al., 2017). The resources are most likely of a financial nature, but it is essential to also include others.

On a competitive level, the company needs to verify occasionally if option (a) of fully integrating the metaverse directly or (b), a step by step integration, are still valid based on the analysis conducted. It might be that the fashion industry determines that they do not see a use case for a fully integrated metaverse or vice versa, that all the competitors are fully implementing it, so the fashion retailer has to adapt accordingly.

On a corporate level, where the revision usually happens in a middle to long term time horizon, the fashion retailer has to see if the integration of the metaverse would eventually make sense to be included in the corporate strategy itself. To determine this, the company needs to look at its mission, vision, and objectives and see if the alignment is given or if the strategic path of the company should be different. As of now, both experts argue that the metaverse is better off being placed in a competitive frame, but revisions need to be conducted in the future.

To verify the strategy, planning systems and specific performance targets measured through key performance indicators (KPIs) may be useful. As mentioned before, it is important to not only include financial KPIs but to also include other dimensions like KPIs referring to clients, processes, and resources as included in the Balanced Scorecard (Johnson et al., 2017). According to the authors, this helps a fashion retailer to include targeted KPIs that measure the right things in the right way and give a more holistic overview of the business.

In the expert interview, Alberto Valle stated that KPIs for business performance in the metaverse, and of the strategy itself, will be very similar to the ones already used today in real life. From a financial perspective a fashion retailer can measure the revenues within the metaverse or even relate investments made or events held in the metaverse to revenue to determine the return on investment. In addition, a company can decide to include metrics on the customer lifetime value or the average order value. The client perspective adds performance indicators like customer engagement and satisfaction with the metaverse presence,

including the net promoter score, or brand awareness. From a process standpoint, in this case mayorly focused on technology, the fashion retailer can add the loading time of the virtual store in the metaverse, a KPI on security effectiveness, or a measure of synchronicity. Lastly, resource based KPIs might include the inventory turnover in virtual NFTs or physical stock.

6. Discussion and Further Research

This paper aims to visualize how a strategic definition process of a fashion retailer can look like when deciding on a metaverse integration into its omnichannel strategy or not. The first argument to be made is that fashion retailers need to fully understand what it means to be in the metaverse before starting the strategy process. Fashion retailers like Gucci or Nike claim to already be present in the metaverse today, but what they forget is that it is the metaverse 2.0 and therefore not the metaverse as by definition – an immersive and interoperable virtual world. What they are claiming is by no means wrong, as the Closed Corporate Metaverse also exists, but it often seems to be more of a marketing slogan of being in *the* metaverse, which does not aid in educating consumers but rather adds more confusion as many people do not know how to distinguish the two. The survey underlines this to a certain extent as the respondents do not find the current metaverse initiatives of companies convincing. This is reflected in a score of 1.99 on a scale from one to five. Additionally, the knowledge for metaverse 2.0 platforms or different games using VR or AR varies greatly. Figure 9 demonstrates that only really successful and scalable metaverse initiatives are known by the broad mass today and more niche ones continue to stay hidden. This makes it harder for fashion retailers to scale their individual metaverses as it requires big marketing and awareness campaigns to communicate its existence to their clients.

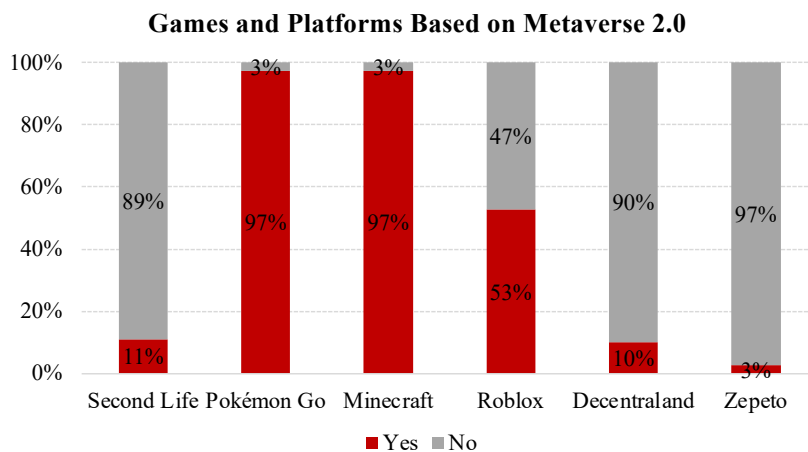


Figure 9: Survey Analysis - Different games and platforms in the metaverse 2.0 and their prominence among participants.

As the analysis on *How can the metaverse be integrated in a fashion retailer's omnichannel strategy?* shows, there are different options to incorporate the metaverse 3.0, but both (a) and (b) are revolved by indefinite uncertainty and require a substantial investment. The technology is not yet fully developed, and asynchrony continues to be a hindrance to experienc-

ing many games in the Web2.0 today as server and broadband capacities are not yet sufficient. Investing in the technological development required to enable the metaverse is a massive undertaking, and for a fashion retailer, it does not align with its core business and therefore jeopardizes its business model. There are more suitable companies to develop the necessary technologies which included tech companies like Meta, Google, and Microsoft, among others. Their business models are naturally focusing on tech-topics like AI, AR, VR, Internet of Things, cloud computing, and the necessary server infrastructure.

There is no denying that the endeavors in the metaverse 2.0 are valuable as they can set the fashion retailer up for success when eventually migrating to an Open Crypto Metaverse. Even if they decide not to, the company has at least gathered more data points to base their informed decision on and has familiarized their customers slightly with a 2D virtual world which will likely result in better adoption and client responses for a 3D world. The metaverse development has gained momentum since the speech of Mark Zuckerberg in November 2021 but one can argue that the momentum is more intense for the metaverse 2.0 than the metaverse 3.0 as the Web2.0 technologies and platforms like Roblox, Decentraland, and Zepeto are available for companies to use.

One needs to acknowledge, that the initial hypothesis of having an omnichannel strategy already successfully implemented is flawed. As the State of the Art analysis showed, the omnichannel concept has only emerged since 2015 and it is a long and enduring process to change the marketing and sales structure from a multichannel to an omnichannel one. For example, the Amazon Go stores were a legitimate approach by Amazon to enter the offline world, but by now many of their stores in the United States have been closed and they tried a different approach offline by acquiring Whole Foods. Therefore, a company needs to be honest with themselves and verify that the omnichannel strategy is sustainably and firmly implemented and that all stakeholders, including the clients, make use of the options available to them. If this is not the case it may make sense for a fashion retailer to first allocate resources to the integration of its brick-and-mortar stores and its online website or mobile application presence, before also adding the metaverse and making the structure more complex.

The survey conducted showed that the respondents expect the things they like least when shopping – the crowds, the time and effort it takes, sizes and colors not being available, trying on clothes in general, and that sizes differ from brand to brand – to be eliminated with

the integration of the metaverse as an additional channel. Some participants expect their avatars to be based on a 3D body scan to ensure “inclusivity in sizing as well as realistic fits.” The NBA already launched an AR initiative that lets users project themselves onto the basketball court by replacing one of the players on the field via a prior done 3D body scan, (McCaskill, 2023). A fashion retailer might be able to leverage this existing technology and adapt it to its specific needs. The consumers want products that fit them perfectly in the real world and request for the products to be realistically depicted in fabric and size. In general, many responded that they want all products that are offered in-store or through the app or website also in the metaverse. One German male respondent also mentioned that he would like to be able to style his avatar and receive recommendations on how to make the look better. He suggested that this could be done by collecting cookies or even linking one’s personal Instagram page to the metaverse. A Moroccan female would like to see “impossible clothes” in the metaverse, not for delivery in the real world, but rather to be creative and experiment in this virtual world beyond the “laws of physics” and what is possible in reality.

The metaverse is something for fashion retailers to explore but it might be too early to advance in the metaverse 3.0 as the survey demonstrated that the respondents would in general only be willing to purchase VR-glasses to experience the metaverse with a mean score of 2.33 on a scale of 5. The clients would need a crypto wallet if the metaverse is based on a decentralized blockchain which presents an additional entry barrier. There are still controversies remaining that have to be addressed before diving into the metaverse integration. As already mentioned under point 2.2.4, issues regarding the environmental impact, data security, and DEI continue to be unresolved. When asked about the different issues, the survey participants demonstrated different levels of concern as illustrated in Figure 10. Out of the three problems, the respondents worry most about data security with a mean of 3.54 and the least about DEI with a mean of 2.31. The environmental concerns lay in the middle with a mean of 2.63.

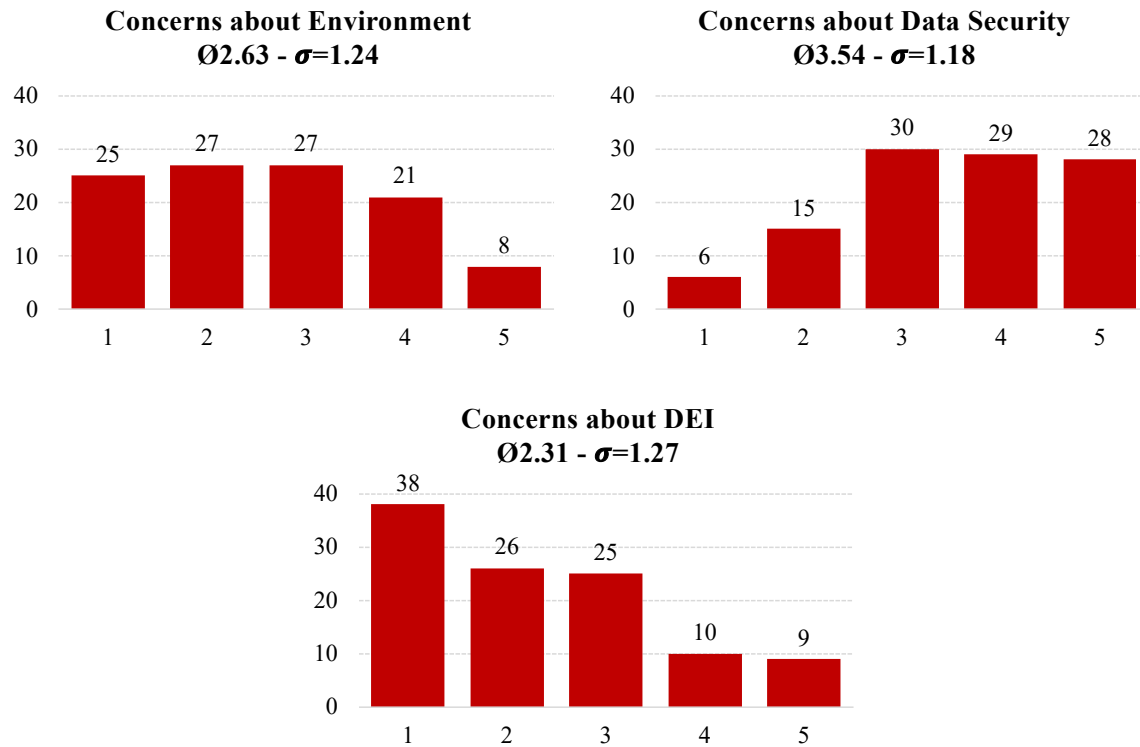


Figure 10: Survey Analysis - Participants rating their concerns regarding the environmental impact, data security, and DEI concerns in the metaverse.

Especially the importance of the environmental impact depends on the business model of each fashion retailer. For example, the Spanish fashion brand Ecoalf, which offers sustainable fashion, has clients putting more weight on the environmental friendliness of any metaverse endeavor than the customers of a fast fashion chain like H&M or Zara. One opportunity the metaverse does present regarding the environment and therefore somewhat offsets concerns about the climate impact of the increased server usage, is the reduction of return shipments when the customers can virtually try on their clothes on a true to size 3D body scanned avatar. If the client has already tried on its order in the metaverse with its avatar which is based on his or her own body shape, the likelihood of a product being returned is lower, even more so when the fabrics are represented realistically as mentioned in the survey.

As of now, no one knows where the metaverse is going to be in ten years, but one can imagine different scenarios. It is uncertain if the metaverse 3.0 will be a full success, an additional channel not only limited to the fashion retail industry, or if it turns out to be a big bluff.

In scenario 1, the metaverse is here to stay and everyone can use the interoperable and synchronous virtual worlds for every aspect of their lives, including education, leisure, and shopping by simply putting on glasses. Especially for shopping clothes, that would mean 3D

scanning one's body once to create a digital avatar which the consumers can then use in every fashion retailer's metaverse. There are various metaverses owned by the individual companies, but the interoperability enables seamless connection and exchanges between them. The metaverse is fully integrated into the omnichannel strategy and the pre-purchase, purchase, and post-purchase phases. New collections are additionally presented at a Metaverse Fashion Week or in a virtual showroom and purchasing includes shopping for clothes with real world delivery but also for one's avatars clothes through NFTs and digital fashion. The customer assistants are powered by AI to support the purchasing process but also the post-purchase customer service. Designers are protected by intellectual property rights minted on a decentralized blockchain which limits fraud in the industry.

In scenario 2, the metaverse takes longer to develop as expected and it remains difficult to enable interoperability, scalability, and synchronicity. The user experience is therefore lagging, and consumers are reluctant to adapt to the use of the metaverse. For fashion retailers this continued absence of professionalism leads to the decision to not integrate the metaverse into their omnichannel strategy. They might continue experimenting and offering their clients experiences in the metaverse 2.0 but the metaverse 3.0 does not provide enough promise to invest in and later monetarize on the opportunity.

At this moment it is not clear if the metaverse is going to stay. The ambiguous scenarios demonstrate the need for further research to reduce the uncertainty regarding the metaverse. Academics should shed more light on the metaverse and its different characteristics, research practical differences between the metaverse 2.0 and 3.0 in consumer environments, and analyze the potential of combining the metaverse with technologies like 3D printing or AI. Additionally, the influence of digital fashion and deepfake technologies on social media platforms and the resulting consumer behaviors is an area that should be addressed by academics. The topic of the metaverse integration into an omnichannel strategy of a business, but especially of a fashion retailer, has not yet been addressed in academic literature. The use case is sometimes mentioned but no further investigation has been conducted to better grasp this concept. Due to the likelihood of the metaverse staying, and eventually being technologically ready for client facing use cases, research has to explore the opportunities the metaverse brings as a channel and compare it to the risks that a fashion retailer needs to face. Examples of research areas in this regard might include how the Balanced Scorecard can be applied and managed in the metaverse or how specific marketing strategies in the metaverse should be designed to be successful.

7. Conclusion

The metaverse continues to be revolved by uncertainty which should not allow businesses to step back and wait until their competitors act. Every company needs to analyze what its resources and capabilities are regarding the metaverse and how it could potentially benefit it in the future. There is no harm if the company decides that there is no use case for the metaverse in its business model, but it at least examined the opportunity from the beginning on. A company needs to decide on a metaverse strategy as well as it has to decide on a sustainability strategy or an AI strategy which is currently experiencing momentum through the introduction of ChatGPT.

This paper on *Omnichannel and Metaverse – How can the metaverse be integrated in a fashion retailer’s omnichannel strategy?* determines two options for fashion retailers in the metaverse 3.0, (a) fully integrating the metaverse ad-hoc or (b) integrating the metaverse step by step. The final choice depends on the fashion retailer itself weighing the advantages and disadvantages, the current state of its omnichannel strategy, and the future technological developments. The developed strategy in this paper can be used as a guideline for a fashion retailer to follow when it is in the process of exploring the metaverse and its potential.

Currently, it is hard to predict the business opportunity of the metaverse with a 100 percent certainty, as consumer adaption may vary. Only time can tell what happens, and if the metaverse is essentially named the *Street* as in the novel *Snow Crash* or the *Oasis* as in the movie *Ready Player One* is only a minor matter. After many fashion retailers and businesses were slow to acknowledge the potential of the Internet as a new technology in the beginning of this century, the only thing certain is that they need to explore their options *now* to not miss out on yet another potential opportunity with the metaverse.

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Appendix – Survey Questionnaire

Title: Omnichannel and Metaverse

I am in my final year studying International Management at ICADE in Madrid and currently working on my thesis. The following survey should not take you more than 5 minutes, and your answers are completely anonymous. Your participation is voluntary but highly appreciated. There is no right or wrong in your answers and I will not ask you to provide any personal information. I will not save any of your information and will not sell or forward the answers you provide to a third party. You have no benefits or risks while taking part in this survey. By submitting your responses, you agree to take part in this survey and agree to the data protection clause under the European GDPR.

I really appreciate your input! Thank you for participating!

Introduction

1. How old are you?
 - Under 18 → End of Survey
 - 18 or older
2. What's your current country of residence?

Metaverse

3. How familiar are you with the metaverse? Please indicate your answer on a scale from 1 to 5.
4. Have you ever heard of the following platforms or games? Please select all that apply.
 - Second Life
 - Pokémon Go
 - Roblox
 - Decentraland
 - Zepeto
 - Minecraft
5. Would you be generally interested in learning more about the metaverse?
 - Yes
 - No

Omnichannel

6. How familiar are you with the concept omnichannel? Please indicate your answer on a scale from 1 to 5.
7. Which channels do you use for shopping for clothes? Please select all that apply.
 - In-store
 - Desktop Website
 - Mobile Website
 - Mobile App
 - Other
8. Which is your preferred channel for shopping for clothes?
 - In-store
 - Desktop Website
 - Mobile Website
 - Mobile App
 - Other
9. What is the one thing you like the least when shopping for clothes? Please provide a short answer.
10. Have you used any of the following methods offered by fashion retailers? Please select all that apply.
 - Order online, pick up in-store (Click-and-collect)
 - At home delivery, return in-store
 - Look at products in-store, purchase online
 - Look at products online, purchase in-store
 - I have not tried any of the methods above

Omnichannel and Metaverse

11. Which kind of payment method would you most expect in the metaverse?
 - Debit Card / Maestro
 - Credit Card (e.g., VISA, Mastercard, AMEX)
 - Online Payment (e.g., PayPal, Bizum)
 - Cryptocurrencies (e.g., Bitcoin, Ether)
 - Other

12. How do you expect to be able to interact in the metaverse of a fashion retailer?
- Standardized Avatars that you can customize
 - Customized Avatars based on a 3D body scan made with your phone
 - Other
13. What products and services would you expect from a fashion retailer in the metaverse?
Please provide a short answer.
14. How much do you agree with the following statements? Please indicate your answer on a scale from 1 to 5.
- The current metaverse initiatives of companies are convincing.
 - I could imagine myself using the metaverse as an additional shopping channel.
 - I would purchase glasses (e.g., Oculus) to experience virtual reality and the metaverse.
 - I worry about the environmental impact of the metaverse.
 - I worry about data security in the metaverse.
 - I worry about diversity, equity, and inclusion in the metaverse.

Demographics

15. With which gender do you identify?
- Female
 - Male
 - Non-binary
 - Prefer not to say
16. What's the highest degree that you have completed? Please indicate your answer.
- Without degree
 - Primary education
 - Secondary education
 - University degree
17. In which year were you born?
18. What's your nationality?