Shopping in the Metaverse: An Exploratory Study of Fashion Shops

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ABSTRACT

The metaverse has revolutionised the fashion industry by enabling fashion brands to engage with consumers through immersive virtual stores. These virtual environments offer innovative and interactive experiences, allowing textile companies to connect with their audiences in new ways. This study conducts an exploratory analysis to examine how storytelling is implemented in virtual fashion stores in the metaverse, focusing on the case study of Tommy Hilfiger in Roblox and Decentraland, two 3D decentralised virtual reality platforms. The findings emphasize the importance of personalization and interaction in shaping the brand experience.

1. Introduction

The evolution of the Internet and the widespread development of virtual reality and augmented reality have facilitated the rapid growth of the metaverse (Huang et al., 2023; Martín-Ramallal, 2024), creating new business opportunities through increasingly immersive experiences. Some sectors have been able to leverage the potential of this environment, and it has the potential to become an important business tool as companies discover and develop their interaction capabilities (Deloitte, 2023). The metaverse is currently a significant sector within the global digital economy, with a total value of $71.5 billion in 2022 and a projected growth rate of 38.1% until 2028 (IMARC, 2024).

Although the video games industry could be considered the most prominent industry in the metaverse (Navas, 2023), the fashion industry is beginning to exploit the potential of this environment (Grillo, 2022). It is estimated that the number of companies in the textile industry with a presence in the metaverse will increase by 35% over the next five years (KPMG, 2022). Furthermore, digital demand for fashion brands is expected to increase exponentially, potentially generating additional sales that could reach USD 50 billion by 2030 (González, 2023). Consequently, there is mounting evidence of a gradual incursion of fashion companies committed to offering a variety of virtual experiences across different virtual universes.

In the context of a traditionally conservative industry such as fashion, which seeks to build deep connections with its audience, online stores are emerging as enablers for users to interact with new products and services (Zalan and Barbesino, 2023) in ways that would have been impossible before (Qaffaf, 2023). In fact, some companies are already developing digital retail spaces that allow them to present their products in an organic and natural way, with a more engaging, visual and brand-centric approach (Wunderman, 2021). This implies a change in the way brands understand their relationship with audiences, as it is based on an increasingly complex design of communication at a textual and visual level (Díaz-Morilla et al., 2022).

This digital universe aims to have a greater impact on both the physical and virtual worlds in terms of economic innovation, productivity enhancement, consumption, entertainment and social interaction (Chen and Yao, 2021). Despite this, shopping spaces in virtual worlds have been a relatively understudied area within the social sciences. Issues such as product or service quality (Gadalla et al., 2013), user experience (Lee et al., 2011), user behaviour (Wongkitrungrueng and Suprawan, 2023) or user purchase intention (Jafar et al., 2023) have been analysed; however, studies on the atmosphere in shops (Krasonikolakis et al., 2011) and especially in Second Life (Hassouneh and Brengman, 2015) are scarce. The main findings relate to user satisfaction (Oh et al., 2023), but it is not known which elements determine satisfaction. This highlights the need for research to explore what defines narratives in these spaces, in order to understand the opportunities that the metaverse offers for fashion communication through virtual shops.

1.1. Research Question and Objectives

A research question (RQ) was formulated in order to delimit the problem and bring new insights to this under-researched area: How does Tommy Hilfiger construct its narrative in the metaverse to establish its brand experience through the atmospheric elements of online stores? In order to answer this question, several objectives were set:

- General Objective (GO) - To identify the atmospheric elements that define the shops.
- Specific Objective 1 (SO1) - Analyse the characteristics of the avatars in each of the worlds.
- Specific Objective 2 (SO2) - Describe the narrative strategies used in the different settings.

2. Theoretical framework

While Web 1.0 connected users online and Web 2.0 built a community around the Internet, Web 3.0 has favoured connection to a virtual world that belongs to everyone (Lee and Kim, 2022). Currently, digital ecosystems are at a moment of maturity (Merino-Cajaraville et al., 2022), as evidenced by the consolidation of e-commerce of fashion products (Mir et al., 2018).

Just as rapid technological development (Scheerder et al., 2017) and the democratisation of the internet have contributed to the consolidation of a digital culture that creates new opportunities for

interaction (Sidorenko, 2022), the metaverse could radically change the way consumers and businesses make purchases (Rathore, 2017) through an enhanced shopping experience (Hassouneh and Brengman, 2015). For their part, consumers are already willing to pay for products and services in this space (Williams, 2021) and experience a second life in the metaverse. In fact, Generation Z spends the most time in immersive social spaces and demands the most digital fashion, as wearing avatars allows them to express their individuality (47%) and feel good about themselves (43%), as well as increase their connection with their peers, both in the digital and physical world (Roblox, 2023).

In line with the above, a fundamental tool for reconfiguring the dynamics between fashion brands and their audiences in this new digital environment is the virtual shop, which corresponds to the evolution of the traditional web shop (Hassouneh and Brengman, 2015). Just as the advent of online commerce brought about a radical change in the textile sector's business model (Mir et al., 2017), virtual shops in the metaverse offer a number of significant advantages over traditional e-commerce, including the ability to provide an immersive and interactive shopping experience that overcomes the limitations of 2D e-commerce platforms (Sawiros et al., 2022). This innovation not only enables the development of new brands (Weiss, 2022), but also provides unprecedented flexibility in the design and customisation of virtual retail spaces (Hassouneh and Brengman, 2015), allowing them to quickly adapt to changing consumer needs. However, there are some challenges, such as the disconnect between the physical and online store (Mir et al., 2017) or human behaviour, which can create a sense of isolation among users. There are also some technical challenges related to accessibility, as the experience relies heavily on specialised hardware and a good internet connection (Sawiros et al., 2022). The complexity of developing and maintaining these virtual environments and concerns about data security and privacy are also significant challenges for businesses (Sawiros et al., 2022).

The media convergence of platforms and social networks in recent years has led to forms of digital creation and consumption in which storytelling or the act of narration is a means of transmitting both cultural elements and the personality and identity of the user (Rincón, 2006). This has been translated into messages or micro-narratives in the form of videos, GIFs, images or short texts (De Casas et al., 2018, p. 45). As a result, collaborative video platforms such as YouTube are littered with video game gameplays that are located in the metaverse. The defining characteristic of these micro-narratives is subjectivity, as in cyberspace the previous paradigm imposed by conventional media is broken and the way in which creators seek to interrogate users is more personal, individual and intimate. As a result, the language used in these communications is characterised by informality and spontaneity (García-Campos, 2018) and by visual close-ups, playing with Deleuze's concept of the mirror image (Acevedo, 2022; Sánchez, 2022).

In the metaverse, the development of these micro-narratives begins when the user customises their own character and from that moment on "constructs their own story and experience in the metaverse based on linguistic practices and the management of their avatar status" (Acevedo, 2022, p. 48). But these own experiences and narratives can in turn be deployed in countless transmedia narratives, thanks to the possibilities offered by live performances on platforms such as Twitch or YouTube, the discursive extensions in the form of comments on social networks, etc. The metaverse is therefore the space where all these micro-narratives (Rehm et al., 2015) and the virtual worlds of a community of users are connected (Dionisio et al., 2013). In the words of Jenkins (2006), the narrative in this parallel universe is created through the creation of characters and their exploration of virtual worlds.

One of the platforms in this study, Roblox, has the slogan "We don't make Roblox. You do" (Roblox Corporation, 2021). In other words, the freedom of creation in this world is absolute and the only limit is the mind of the creators and users (Iparraguirre-Bernaola, 2023). Therefore, the ideal of omniscient control is offered to this community (Purse, 2013), but this absolute freedom and control is only a reverie, since these virtual structures are created to satisfy the needs of a specific public in a specific social and cultural context (Iparraguirre-Bernaola, 2023). Consequently, the metaverse is a framework in which to observe how users experience freedom, although the narrative proposed at any given moment, such as an online video game and a virtual platform, will only be successful if it manages to attract the interest of that community (Pearce, 2004; Salen and Zimmerman, 2004).

A key issue in this entirely new narrative (Volponi, 2023), which aims to capture the public's attention, is the atmospheric aspects of the store, understood as the elements of the environment that influence users' purchasing behaviour (Grossbart et al., 1990). Over the years, various authors (Baker,

1986; Belizzi et al., 1983; Bitner, 1992; Donovan y Rossiter, 1982; Golden y Zimmerman, 1986; Hui et al., 1997) have identified and categorised different elements of the physical store. Early studies in environmental psychology by Mehrabian and Russell (1974) were adapted to the retail domain by Donovan and Rossiter (1982). Baker (1986) classified the elements of the store environment into social, design and environmental factors (Table 1). Bitner (1992) extended this model by identifying three slightly different categories. Similarly, in digital environments, Eroglu et al. (2001) distinguished between environments of high and low relevance to the shopping task.

Table 1. Atmospheric aspects.

Baker, 1986	Bitner, 1992	Eroglu et al., 2001
Environmental factors – Temperature – Music and sounds – Lighting – Smell	**Environmental factors** – Temperature – Music and sounds – Colour – Lighting – Smell	**High relevance for the purchasing task** – Product descriptions – Price – Terms of sale – Delivery and return policies – Product images – Availability of samples (film trailers, book excerpts) – Navigation aids (site map, guide bar) – Product reviews
Design factors – Layout and design of the furniture and the various elements – Colours – Order – Cleaning	**Spatial and functional distribution** – Form and arrangement of furniture and other elements Accessibility – Functionality – Size	**Low relevance to the purchasing task** – Non-purchase related verbal content (e.g., "look at this"). – Background colours, borders and patterns – Typefaces and fonts – Animations – Music and sounds – Blank space – Image maps and icons – Indicators of secure connections and transactions – Awards and website affiliations – User counter – Games or competitions
Social factors Employees and customers Interactions	**Signs, symbols and artefacts** – Logos – Posters – Signage	

Source: Own elaboration. Based on Baker (1986), Bitner (1992) and Eroglu et al. (2001).

Previous findings indicate that environmental stimuli influence consumers' affective and cognitive states, triggering approach or avoidance behaviour, although these findings are not limited to traditional e-retailers (Tang and Zhang, 2020). Atmosphere also influences user disposition in metaverse stores (McCormick and Ram, 2022). Therefore, as postulated by Alexandrova and Poddubnaya (2023), fashion brands need to understand which atmospheric elements influence the shopping experience in order to strengthen their presence and improve their relationship with consumers.

Despite the prominent role of these cues within the Stimulus-Organism-Response (S-O-R) paradigm (Donovan and Rossiter, 1982), research has predominantly focused on the effects and responses elicited in shoppers. However, there has been no attempt to identify the characteristics of these stimuli, which are understood to be all the visible and audible signals to the online shopper (Eroglu et al., 2001). It is established that certain gratifications impact user satisfaction in the metaverse (Oh et al., 2023) in relation to atmospheric sensitivity, defined as the inclination to base purchase decisions on the design

and physical conditions of stores (Grossbart et al., 1990). However, the specific elements and tools that elicit these feelings have yet to be identified, which presents a challenge in terms of gaining a strategic advantage (Bitner, 1992).

3. Methodology

In consideration of the distinctive characteristics of the metaverse, certain atmospheric attributes have been adapted to align with a contextual framework that differs from that of Web 2.0 establishments. It thus appears necessary to put forward an alternative taxonomy that will enable us to classify the atmospheric qualities and identify the elements that may prompt either an approach or a rejection based on the user's experience of fashion shops in the metaverse.

In order to understand how the elements of the atmospheric environment of virtual fashion shops are articulated within the metaverse, a case study of an exploratory nature is proposed, allowing for an in-depth and contextualised understanding of the phenomenon. The choice of this method is supported by the need to explore complex processes and unknown variables in emerging social contexts (Biancone et al., 2023), such as the visual and narrative elements that integrate e-commerce into the metaverse.

This paper focuses on the shops of two virtual universes, Roblox and Decentraland, both of which are immersive reality and freely accessible. The former, linked to online video games, is defined as a permanent and communal 3D virtual space where any user can create mainly online gaming experiences (Hernández-Ramos et al., 2024; Sidorenko and Cabezuelo-Lorenzo, 2022) and which currently has more than 150 million active users per month (Han et al., 2023). Decentraland represents a universe that has emerged as a consequence of the advent of cryptocurrencies and blockchain systems. It is founded upon a system of plots acquired by users, who are thereby empowered to engage in any type of activity (Martín-Ramallal, 2024).

Based on the above, the research resorts to convenience sampling to select the specific case. Tommy Hilfiger was selected (see Figure 1) based on three criteria:

- The company has its own brand in the virtual worlds, ensuring a consistent representation of the brand in the different worlds of the metaverse.
- The online store is permanent, allowing for longitudinal observation of the interaction and providing interesting data on the sustainability of fashion stores in the metaverse.
- The presence of the brand in both Roblox (https://bit.ly/3Wdhs7n) and Decentraland (https://bit.ly/4cTuBIk), in order to facilitate a comparative analysis between two of the most important worlds of the metaverse and to offer a broader perspective on the visual and narrative elements in different contexts.

Image 1. Tommy Hilfiger marketplaces on Roblox and Decentraland.
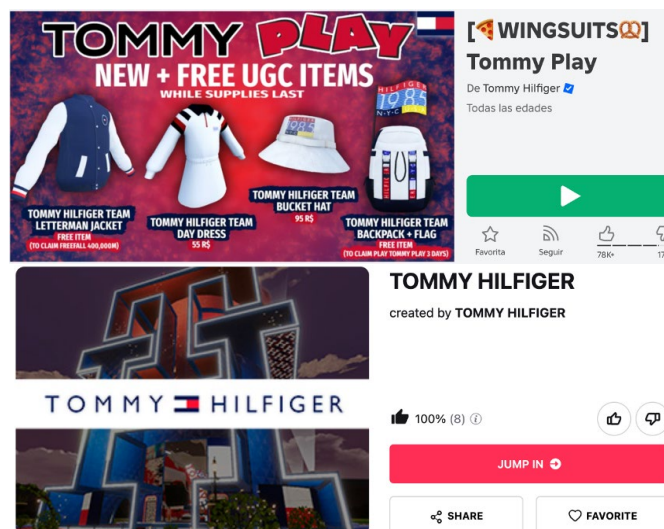
Source: Roblox and Decentraland, 2024.

In order to achieve the objectives described above, the research applies an analysis that allows us to study the atmospheric elements and resources used, and thus better understand the participants' perspective (Menard-Warwick, 2010). The study items deal with characters, spaces and action (see Table 2) through nominative, structural, textual, plastic, iconic and identifying variables.

The development of this template takes into account what has been postulated by different authors on the shop environment (Baker, 1986; Bitner, 1992; Lohse and Spiller, 1999; Usoh et al., 2000; Mummalaneni, 2005; 2024ez-Navarro et al., 2019). Previous methodological contributions on the analysis of images and videos (Salvador-Rivero and Montes-Vozmediano, 2016) are also considered, following the approach of Pizzinato et al. (2012) on the inclusion of digital narratives. In addition, units of analysis specific to virtual spaces have been included, which have also been successfully used in previous studies (Baia Reis y Ashmore, 2022; Brookwell, 2021; Green, 2023).

Table 2. Analysis template

Typology		World/ Name/ URL/ Location	
	Access	From universe/ metaverse/ other	
	Exterior/Interior	Customised/ no	
Characters (Social factors)	Seller Buyer Other characters	Sex / number	
		Physical characteristics / clothing	
		Interaction (with buyer/other)	
		Action taken	
	User avatar	Customisable (Skins) / Not customisable	Paid/ free of charge
			Sex/ Hair/ Clothing/ Accessories/ Others
	Other avatars	Presence/absence	
		Physical characteristics/sex/costume	
		Interaction (interacts with buyer/others)	
Design of the space		Shop signage	
	Interface format	Vertical/ horizontal	
	Shop atmosphere	Organisation of the shop	
		Spaces for other brands (*cobranding*)	
		Degree of plausibility	
		Quality and typology of graphics	
		Presence of brand symbols	
	Shop design	Furniture and objects	
		Signage	
		Products	Product sheet (presence/absence)
		Predominant colours	
		Distribution	Tickets
			Points of sale/ cash registers
			Testers
		Levels / Paths / corridors / floors	
		Connection with other spaces	
	Lighting	Realistic / hard/ neutral/	
	Sound	Dialogues	
		Music	Gender	Associated with the brand
			Changing/ Static

Action	Buy		Narrative value	
			Environment	
		Articles	Physical garments /skins/ NFT/ others	
		Method of payment	NFT/ crypto-currencies/ own currency/ real cash	
			Promotions	Typology
			Go for a walk	
			Other (picture taking / games / events / other)	
			Access to other brand spaces: same world/other worlds	
			Transmedia actions	

Source: Own elaboration, 2024

4. Results

The findings are organised as follows: firstly, information about the external environment; secondly, information about the avatar and its characteristics; and finally, a description of each of the shops.

The exterior of the Tommy Hilfiger shop in the Decentraland universe is sparse in detail, as it is located on a plot of land surrounded only by spaces rented by other brands - cars, fashion and fast food, to be precise (Figure 2). In contrast, the one in Roblox is immersed in an environment that is recognisable to users - New York - and is full of sports and leisure spaces where the player can compete with others or against him/herself to earn as many rewards as possible, which can be used, for example, to make purchases in the shop itself (image 3). These spaces range from an athletics track to a BMX cycling track, including a large Ferris wheel and a spot for practising free-fall. All of this is overseen by the omnipresent brand initials — TH — and is watched over by a blimp.

Image 2. Location of the Tommy Hilfiger plot and exterior of the shop in Decentraland.
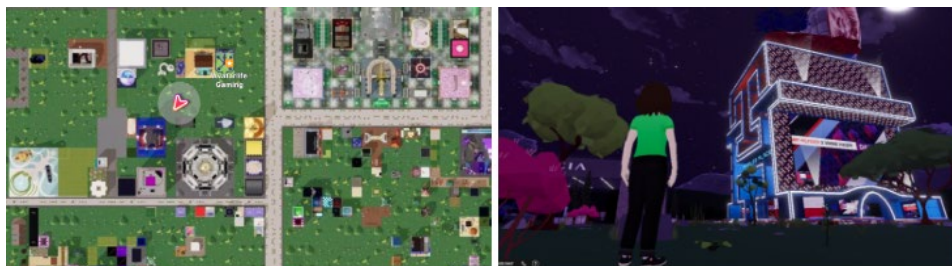
Source: Decentraland, 2024.

In Roblox, the avatar has three tools at its disposal that facilitate movement through space in different ways: a bicycle, an airbrush (for the creation of graffiti), and a jetpack, which enables the avatar to propel itself through the air. At the centre of the athletic track is a podium with four mannequins wearing Tommy Hilfiger clothes. These can be used to customise the user's character, or avatar, by purchasing them with Robux, the currency of the Roblox universe. Furthermore, the passage of time is discernible during gameplay, as the natural light shifts with the progression of hours. In terms of lighting, it is also noteworthy that the area surrounding the Tommy Hilfiger store in Roblox is consistently illuminated by red, white, and blue lights, which correspond to the brand's corporate colours.

Image 3. Exterior Tommy Hilfiger shop on Roblox.

Source: Roblox, 2024.

Regarding the shops in the two universes, it can be observed that they share a common feature in that the façade is comprised of large initials, displaying the distinctive insignia of the aforementioned multinational entity (see images 2 and 3). However, the interior spaces are markedly disparate. In the case of Decentraland, the interior comprises two polygonal main rooms, which are surrounded by a corridor. In the initial space (image 4), users can view the collection inspired by the designs of artist Vinnie Hager, which the brand is launching during the Autumn-Winter 2023 campaign. This space at Decentraland was created on 31 March of that year.

Image 4. Interior Tommy Hilfiger x Vinnie Hager room in Decentraland.
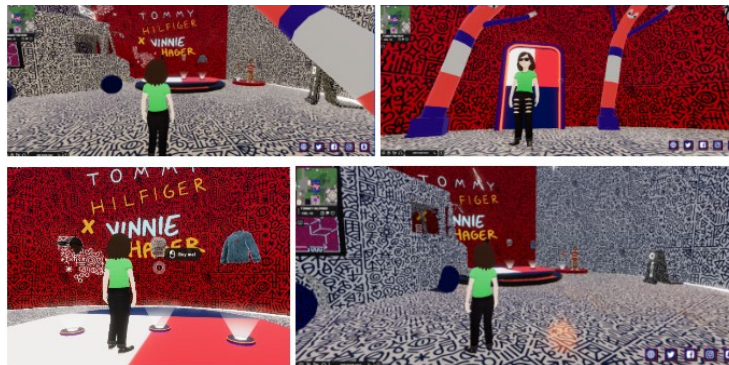
Source: Decentraland, 2024.

In this room is Morgan, a young virtual shop assistant dressed in identifiable corporate clothing who communicates with the user through dialogue boxes that follow each click. He invites the player to take part in a competition to share images of their avatar on social networks - Facebook, X, Instagram and Snapchat (image 5). At the same time, he offers discounts for purchases in this virtual store, which can be paid for using cryptocurrencies or credit cards. Purchases are made through a link that takes the user to Emperia, the brand's external virtual shopping platform. As well as being able to try on and purchase garments from the aforementioned collection - the last registered purchase was made in July 2023 - users can also purchase Vinnie Hager's own artwork or designs by approaching two objects in the space: a van and a letterbox.

Image 5. Snapshot taken at Timmy Hilfiger in Decentraland to enter the competition.
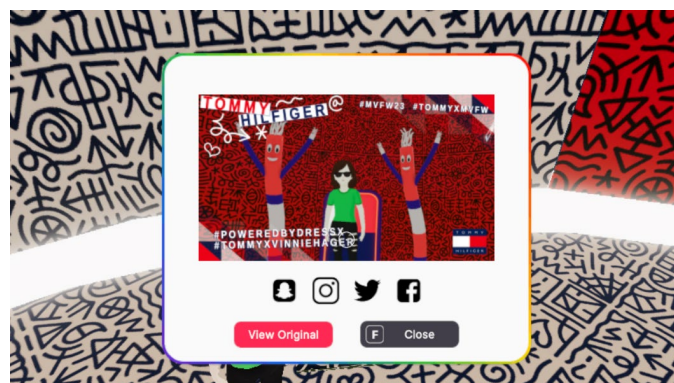
Source: Decentraland, 2024.

In the second room of the Tommy Hilfiger store (image 6) in Decentraland, the same sales assistant as in the previous room, Morgan, can be interacted with in a similar way. Here, however, the garments on display are suspended in mid-air, rotate on their own axis, and are illuminated by nadir spotlights that highlight their position in the room. It should be noted that there are four garments on display, two representative of the brand - Polo and Hunter - and two from the Autumn-Winter 2023/2024 collection, created with artificial intelligence specifically for the Metaverse.

In an environment where the corporate colours of red, white and blue once again dominate, the walls of this room - called Tommy Hilfiger Dress X - are decorated with both conventional and electronic signage, displaying garments from a collection created in a competition using artificial intelligence and augmented reality technologies, as well as a promotional video that users can play and pause at will. The peculiarity of this room is that the models on display are not physically available for purchase but must be bought in order to customise the avatar. Unlike the purchase of real clothes, the purchase of these clothes, which act as a skin, seems to have been more widespread, as the last purchase of these features dates back to May 2024.

Image 6. Tommy Hilfiger *Dress X* Zone.

Source: Decentraland, 2024.

A lift in the corridor provides access to the roof, a space designated as the People's Place (Image 7), where Morgan, the salesman, is once again present. Additionally, four items from the brand are available for use in Decentraland, which are sold on the brand's marketplace. There is also a stage that resembles the starting line of a car race, with a poster displaying the brand's advertisements for Decentraland's Fashion Week in March 2023. As in the preceding room, the garments are illuminated by four nadir spotlights, and there is no additional interaction with other elements.

**Image 7.** *People's Place* terrace by Tommy Hilfiger.

Source: Decentraland, 2024.

It can be seen that the corridor which surrounds and connects the two rooms plays an important role in this virtual shop. A panel featuring the Tommy Hilfiger hub is visible in a multitude of universes within the metaverse. In addition to Decentraland and Roblox, the brand has selected Ready Player Me, The Sandbox and Spatial as its platforms. This indicates that the brand provides users with the option of accessing the remainder of its virtual shops by merely approaching this point. Additionally, another panel situated within the aisle displays a discount code for shoppers. However, at the time of analysis

(22/07/2024), this discount could not be applied, as the promotion had already expired. In the three rooms described in this Tommy Hilfiger store in Decentraland, the only auditory element present is ambient and instrumental music that accompanies the user's walk, without any narrative pretension.

Image 8. *Marketplace* for purchasing Tommy Hilfiger *skins* on Decentraland.
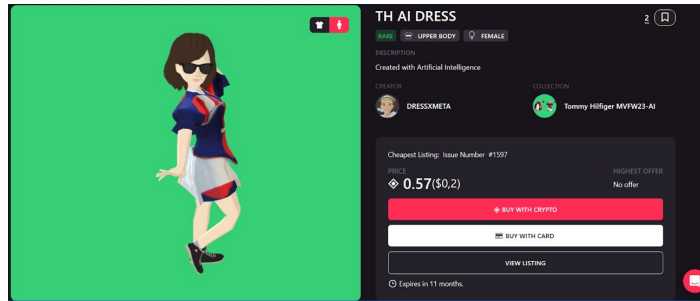
Source: Decentraland, 2024

The actions that can be performed in this store are photographic documentation, ambulation, and the acquisition of items for the avatars. Furthermore, the images can be disseminated on various social media platforms. However, there are no additional activities that can be undertaken within this store. With regard to the purchase of items, only branded clothing or accessories, such as skins for the avatar, can be purchased. However, this is done through an external marketplace. On this website, the player can try on the chosen garment and purchase it in dollars (Figure 8).

On the other hand, in Roblox, the North American company has a store (see Figure 9) that comprises three levels or heights. However, in contrast to the previous universe, there are no salespeople present. It should be noted that other characters are present in the space, corresponding to other users of the platform. Furthermore, the avatars are capable of not only interacting with one another, but also displaying a more expansive range of expressions and bodily gestures than those observed in Decentraland. Upon approaching either of the two entrances to the store, the player is greeted by a musical composition bearing resemblance to that which was previously encountered in the preceding universe. However, the music is not the sole auditory element present; the characters' movements are accompanied by other diegetic sounds that contribute to the narrative.

Image 9. First floor of the Tommy Hilfiger space at Roblox.

Source: Roblox, 2024.

In a manner analogous to Decentraland, the platform does not facilitate the purchase of tangible garments. Instead, it is only possible to procure items of clothing with the intention of customising avatars or characters and other skins. The purchase is not made at a physical point of sale; rather, it is simply made by navigating to the relevant item through a pop-up window on the platform (see Figure 10). Payment can be made using cryptocurrencies, such as tokens, or Robux, which can be accumulated by players who complete certain tasks or participate in competitions held outside the store.

Image 10. Tommy Hilfiger *skins* acquisition screen in Roblox.
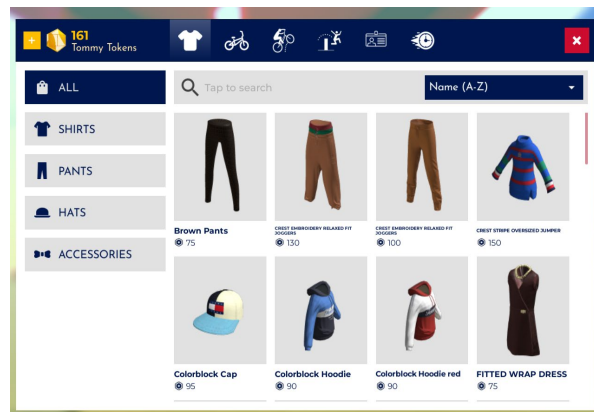
Source: Roblox, 2024.

As in the previous space, players in Roblox can walk around, unlock/acquire skins, play games and take photos (image 11). In this regard, they are presented with four customisable backgrounds, created by a US-based company.

Image 11. Photographs of the avatar in the TH space in Roblox.

Source: Roblox, 2024.

The three levels of the Roblox store (Figure 12) are equipped with mannequins on a plinth, which display the available skins for purchase or unlocking. Furthermore, the lighting is neutral with minimal variation, and the corporate colours are the dominant feature of these spaces. No physical equivalents to fitting rooms are provided, and users are able to assess the appearance of their avatars on the retail screen itself.

Image 12. TH interior space in Roblox.

Source: Roblox, 2024.

5. Discussion and Conclusions

In order to optimise the advantages and mitigate the disadvantages of establishing online shops in the metaverse, as well as to create a consistent brand experience, it would be appropriate to reconsider the online shop communication model used to date. This novel approach would facilitate the

implementation of global and intricate strategies (Weiss, 2022), centred on the avatar through an experiential narrative (Volponi, 2023) and shaped by the influence of video games (Merino-Cajaraville et al., 2022).

In light of the aforementioned considerations, the study was designed to achieve three specific objectives. The general objective (OG) was to identify the atmospheric elements that define the shops. In Decentraland, the Tommy Hilfiger store is characterised by a minimalist and exclusive approach, where the sobriety of the environment reflects a clear intention to highlight the brand in a space surrounded by other well-known brands. The lighting has been strategically designed to emphasise the exclusivity of the products on display, while ambient music contributes to a calm and contemplative shopping experience. In contrast, the Roblox environment is designed to be dynamic and participatory, incorporating recreational elements that encourage more active user interaction with the environment. Although this interaction does not result in the same level of purchases, it does have a beneficial effect on the brand experience. The distinction between the two platforms exemplifies a duality in brand strategy, with an ability to adapt to different audiences.

Secondly, an analysis was conducted to examine the characteristics of the avatars in each of the worlds (SO1). In Decentraland, the avatars are highly personalised and exclusive, with interactions that, although limited, emphasise the prestige of the brand and its relationship with fashion and art. The role of the virtual sales assistant serves to underscore the focus on a controlled, user-centric experience. In Roblox, the more dynamic and social nature of the avatars allows users to become immersed in a playful environment where personalisation and interaction serve not only to reflect the user's identity, but also to strengthen their emotional connection to the brand. This illustrates the manner in which Tommy Hilfiger adapts its presence to align with the distinctive characteristics of users on each platform.

Thirdly, the research aimed to gain insight into the narrative strategies employed in the different environments (SO2). In Decentraland, the Tommy Hilfiger narrative is constructed upon the foundations of exclusivity and art. The presentation of specific collections and the incorporation of advanced technologies, such as artificial intelligence, create a discourse that positions the brand at the vanguard of fashion and innovation. However, the space is entirely outdated, which suggests a lack of attention from the brand. In Roblox, the narrative is considerably more focused on interaction and play, enabling the brand to connect more directly with a younger audience that values experience and personalisation as much as fashion itself. This dual strategy allows Tommy Hilfiger not only to maintain its relevance across different audience segments, but also to expand its reach within the metaverse.

Once these three objectives have been achieved, the question posed (QI) can be answered. how does Tommy Hilfiger construct its narrative in the metaverse to establish its brand experience through the atmospheric elements of the online shops? The brand demonstrates a commitment to a narrative that strikes a balance between exclusivity and interactivity, adapting its approach to align with the distinctive attributes of each platform. On Decentraland, the brand presents itself as an icon of fashion and technology, aiming to attract an audience that values exclusivity and innovation. On Roblox, the brand is positioned in a more accessible and participatory way, focusing on the user experience through gamification and personalisation. This strategy allows the brand Tommy Hilfiger to maintain a consistent image across different virtual spaces and connect with a diverse audience, expanding its presence and relevance in the metaverse.

The limitations of this research derive from its nature and its exploratory nature, developed through a case study. However, the distinctive characteristics of the object of study, namely the company's proprietary brand presence within Roblox and Decentraland, facilitate a comparative analysis across disparate metaverse domains through the study of its permanent virtual stores. This may prove beneficial for communication and marketing professionals seeking to apply this knowledge in a practical manner to the development and implementation of their brands in the metaverse.

However, this work does not only contribute to the understanding of how fashion brands' points of sale are articulated in this new context. The most significant contribution of this study is at the methodological level, where it proposes and tests an analysis framework applicable to virtual shops with a presence in the metaverse. To this end, the study combines numerous previous research studies with the authors' own contributions to create a set of variables that encompass a range of aspects, including the technical characteristics of the space, its visual design, the atmosphere that the shops create, the characters that inhabit them, and the actions that can be carried out in them. In this way,

elements that have traditionally been part of retail marketing studies are incorporated into the analysis of virtual spaces, combined with the usual components of audiovisual narrative analysis.

Based on this study, future lines of research can be established that delve deeper into different aspects, such as understanding the influence of affective states on the purchase process. That is, how environmental stimuli and brand narratives affect consumers' emotional states and their use of virtual fashion stores. Finally, comparisons of the universes in which brands can be established, the differentiation of virtual shops from a sectoral point of view or the segmentation of consumers, among others, are of interest.

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