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The retail strategies of luxury fashion firms in the metaverse: Enhancing brand experiences

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ABSTRACT

This study investigates how luxury fashion brands manage brand experience in retail strategies that involve the metaverse. To achieve this research objective, we adopted a qualitative methodology collecting 26 semi-structured interviews with luxury brand practitioners and industry experts. The results highlight key areas in luxury retail where Metaverse campaigns enhance brand experiences and reduce frictions. This study contributes to the literature on luxury retailing by providing theoretical insights into the emerging strategies of luxury fashion brands in the metaverse. Finally, managerial implications are discussed in terms of how luxury fashion brands can leverage the metaverse to integrate channels in an immersive manner.

1. Introduction

Metaverse platforms are virtual spaces that have emerged as a recent avenue for fashion brands to promote digital products and offer unique brand experiences (Ki et al., 2025; Park et al., 2023). The metaverse can improve consumer relationships by offering various social activities that encourage meaningful interactions with brands, satisfying the desire for community engagement (Kumari et al., 2024). In particular, the metaverse is revolutionizing the retail landscape and the customer experience (Mehrotra et al., 2024) by enabling consumers to explore immersive virtual spaces through digital representations of themselves (so-called avatars) and interact with other digital identities, including fellow consumers and retail staff (Yoo et al., 2023). Users engage in games (Cedrola and Giovannetti, 2024) or immersive environments for significantly longer periods compared to their interactions with retailers on traditional websites, where they are increasingly less likely to make purchases. In general, the use of augmented reality is profoundly influencing retail dynamics (Schultz and Kumar, 2024), offering benefits to both brands and consumers, such as a more engaging multisensory experience, time savings, and increased sales (Caboni et al., 2024). In this context, luxury fashion brands can capitalize on innovation (Bigliardi et al., 2022), making their business models more sustainable (Kniazeva et al., 2024), and establishing long-lasting relationships with consumers by promoting the co-creation of fashion products. For example, luxury fashion brands are increasingly incorporating non-fungible tokens (NFTs) - a type of non-interchangeable data written on a blockchain (Belk et al., 2022) - into their products (Joy et al., 2022). NFTs might affect perceived value, creating a new category of luxury defined by Bao et al. (2024) as "virtual luxury."

In the academic debate, the phenomenon of metaverse adoption by luxury fashion brands has attracted the attention of scholars, who have analyzed the business opportunities (Barrera and Shah, 2023), the motivations which push these brands to access the metaverse (Kniazeva et al., 2024), and the factors influencing virtual shopping on these platforms (Kim et al., 2023). Despite the growing opportunities that the metaverse offers to luxury fashion brands, as recently pointed out by Park and Lim (2023), academic research investigating its influence on their marketing strategies remains limited. In particular, according to recent studies (e.g., Mehrotra et al., 2024; Yoo et al., 2023), little research has been dedicated to the topic of the metaverse in the retail sector. The metaverse has the potential to expand both online and offline channels for fashion and luxury brands. However, there is a lack of a deeper vision of the opportunities of metaverse retailing in the context of an omnichannel strategy (Eggenschwiler et al., 2024). We address the recent call by Klaus and Manthiou (2024) for empirical research on the topic of metaverse retail, in particular focusing on metaverse marketing

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by analyzing the aspects related to metaverse retail and brand enhancement.

Thus, this article aims to answer the following research question:

RQ: How do luxury fashion firms develop brand experiences in retail strategies that involve the metaverse?

The remainder of this paper is structured as follows. Section 2 presents the theoretical background of this research, with a focus on the recent academic literature on retailing in the metaverse and its adoption by luxury fashion brands. Section 3 presents the methodology of this study, i.e. a qualitative approach based on semi-structured interviews with key informants operating in luxury fashion firms and other organizations. Subsequently, the research findings are explained in Section 4 and discussed in Section 5. Conclusions, limitations of the study, and future research directions are included in Section 6.

2. Literature review

2.1. The evolution of the metaverse

The metaverse is an interconnected, immersive ecosystem where the boundaries between virtual and real worlds are indistinguishable, enabling interaction and socialization through avatars and holograms within simulated shared experiences (Dwivedi et al., 2023). Despite the recent expansion of this ecosystem, the term "metaverse" was first used in the 1990s by Neal Stephenson (1992), who envisioned a virtual world where people could live secondary lives as avatars in a three-dimensional (3D) space mirroring the real world.

There is no single definition of the metaverse in academic literature, though interest in the topic is rapidly growing. Kim (2021, p. 142) attempted to define the metaverse as "an interoperated persistent network of shared virtual environments where people can interact synchronously through their avatars with other agents and objects." Hollensen et al. (2023) described the metaverse as a network of interconnected 3D virtual worlds where users navigate various spaces using virtual reality (VR) and augmented reality (AR). In the metaverse, users are represented by avatars that reflect their physical selves, enabling them to experience an alternative life in a virtual environment that simulates reality.

Other researchers like Moro-Visconti and Cesaretti (2023) interpreted the metaverse as a digital extension of the physical world rather than a parallel reality replicating it. They argued that defining the metaverse solely as a universe of interconnected virtual worlds is insufficient because it overlooks the crucial connection between virtual and real worlds. Under this perspective, the metaverse is seen as a technology-mediated network of scalable, potentially interoperable extended reality environments that blend physical and virtual realities to offer immersive and social experiences. In this context, people are continuously engaged with the internet rather than merely accessing it (Hollensen et al., 2023). Metaverse attributes include continuity of identities and objects, a shared environment, the use of avatars, synchronization, three-dimensionality, interoperability, and an interactive, engaging, and social user experience (Kim, 2021).

Barrera and Shah (2023) divided the metaverse's evolution into three phases. Initially, the metaverse expanded from a narrow focus on a single world to a broader perspective of interconnected worlds; subsequently, it transitioned from being purely virtual, incorporating VR and AR experiences, to integrating a range of other technologies; finally, its immersive and socially interactive aspects became prominent. Within this framework, scholars have identified three key elements of marketing strategy in the metaverse: immersiveness, sociability, and environmental fidelity (Dwivedi et al., 2023; Mogaji et al., 2024). Immersiveness in the metaverse emphasizes the integration of interactive technologies that blend virtual and real-world elements. The sociability aspect enhances consumer experiences through AR interventions that affect their attitudes and purchase intentions (Koohang et al., 2023). Environmental fidelity refers to the extent of similarity between the metaverse and the real-world environment in terms of physical and functional characteristics (Barrera and Shah, 2023).

However, according to Yoo et al. (2023), the evolution toward a fully decentralized metaverse has yet to be fully realized. Therefore, they defined the current stage of metaverse development as "transitory metaverse," which is designed to simulate real-world activities within a 3D virtual space. In the transitory metaverse, platforms seamlessly integrate gaming, social media, and retailing across multiple interconnected virtual environments, enhanced by digital avatars and objects (Ki et al., 2025).

2.2. Retailing in the metaverse

Metaverse retailing enables users to navigate metaverse platforms with their avatars, interact with others (customers or virtual assistants), and enhance their shopping experience, creating an ideal fusion of physical and digital realms (Chakraborty et al., 2023). Research in the domain of metaverse retail is still evolving and growing, following some main strands such as managerial strategies, stakeholder opportunities, virtual store atmosphere, consumer behavior, society and policy (Klaus and Manthiou, 2024), escapism, and gamification (Cedrola and Giovannetti, 2024). Mehrotra et al. (2024) identified areas for improvement in the metaverse retailing customer experience, including immersiveness, interactivity, dynamic control, realism, novelty, and visual augmentation.

In the framework proposed by Park and Lim (2023), metaverse strategies are based on three key technology facilitators: NFTs, games and virtual worlds, and immersive technologies. These assets create brand experiences that include sensory, affective, behavioral, and intellectual elements, ultimately affecting multiple dimensions of brand equity.

When examining the evolution of retail, Gauri et al. (2021) proposed a model with two fundamental directions along a continuum of elements that enhance the customer centricity: on one side, experience enhancement, and on the other, friction reduction. Metaverse retailing enables the integration of elements such as browsing, product selection and interaction, comprehensive information, and tailored recommendations to mimic and improve conventional in-store encounters. This differs from traditional online shopping, which often involves hours of scrolling, reading reviews, and lasting advertisements (Chakraborty et al., 2023).

Within the metaverse, customers can browse through virtual worlds that are designed to resemble traditional retail settings, but with more levels of immersion and interaction than traditional e-commerce websites or social media platforms (Yoo et al., 2023). Furthermore, customers have greater opportunities to personalize the buying experience, making it more engaging and unforgettable (Han et al., 2022), and to participate in brand communities (Yoon et al., 2024). This is also made possible by leveraging data on customer preferences and behaviors in the metaverse, which allows firms to record, personalize, and propose items, features, and experiences suited to and appreciated by the customer.

Aspects of developing shopping experiences in the metaverse range from gaming to immersive experiences. To create satisfying shopping experiences, the shop environment must be transformed into an immersive metaverse retail space by considering elements such as layout, lighting, time of day, crowdedness, and assortment, along with movement, sound, haptics, interactions, and interfaces, all of which can be customized to fit the preferences of customers or retailers (Frank et al., 2024). Therefore, metaverse purchasing experiences can greatly increase the value of retail items and strengthen the relationships between stores and customers (Shankar et al., 2021).

In the luxury industry, it is crucial to consider the role of retail

characteristics and customer experience in aligning with the dissemination of brand elements in the retail setting. This encompasses not only the tangible aspects of the product and the surrounding environment, which can be conceptualized as touchpoints, but also the intangible elements, such as the charisma, artistry, and allure that fashion houses and their creative directions bring to the forefront (Dion and Arnould, 2011).

Furthermore, metaverse stores can be convenient and accessible, representing a highly versatile customer touchpoint that enhances the omnichannel customer experience and further increases customer loyalty (Rahman et al., 2023). Finally, a fundamental element in the perception of the quality of the experience in the metaverse is provided by technological access devices, from smartphones to VR headsets, which push the boundaries of what is possible in terms of virtualizing metaverse worlds (Frank et al., 2024). Recent studies have highlighted the potential of integrating VR and artificial intelligence (AI) to create virtual showrooms, which could facilitate innovative and effective forms of luxury brand storytelling. These environments can showcase technological advancements and user engagement through immersive 3D experiences and dynamic narratives (Hajahmadi et al., 2024). The integration of heritage elements and storytelling is also reflected in brands' recent ventures into gaming, as seen with Gucci and Max Mara.

The advent of the metaverse has enhanced collaboration between customers and retailers. This includes the creation of user-generated content, the organization of joint shopping experiences, and the provision of virtual product demonstrations. In fact, businesses that are already active (or intend to become active) in the metaverse often demonstrate superior product or service offerings compared to their competitors (Abumalloh et al., 2023).

Several leading fashion retailers (e.g., Adidas, Gap, Nike, Ralph Lauren) have recognized the potential of the metaverse and are experimenting with digital fashion through 3D design and virtual sampling in their business models (Chan et al., 2024). From a strategic viewpoint, knowing how to acquire and manage technological and organizational resources (Elia et al., 2021) enables retail companies to gain a sustainable competitive advantage, pursuing a digital transformation from online retailing to metaverse retailing (Abumalloh et al., 2023), or a mix of the two. For instance, the most innovative brands have also experimented with mixed reality (MR) forms in retail to offer virtual tours to customers and show how certain products appear simultaneously in a simulated real-life environment. Nike, Sephora, L'Oréal, and Ulta Beauty are just a few examples of companies that have implemented virtual try-on thanks to AR (Gauri et al., 2021).

Eggenschwiler et al. (2024) proposed dividing retailers' strategic approach to the metaverse into short and long-term objectives, offering a framework that encompasses phases such as knowledge building, targeting, raising awareness among target audiences, customer experience design, and selling. This framework provides actionable guidance for companies that navigate this highly tumultuous and rapidly evolving field.

From a consumer perspective, users who create enhanced avatars and indulge in luxury, sometimes beyond their means in real life, may express a desire for social elevation. According to Jin (2024), retailers can create a virtual retail space in the metaverse by implementing immersive technologies that leverage the interconnectivity between VR and users' real-world shopping behaviors. Furthermore, consumers spend more time on retail platforms when they can use virtual try-ons, viewing it as a rewarding experience (Chan et al., 2024). In addition to immersion, entertainment, and the enjoyment of the experience, the convenience of purchasing in metaverse retail is also important for consumers, as it is linked to efficient and streamlined buying experiences (Shi et al., 2020).

Retailers working on digital fashion have started to propose virtual fashion skins and collections for the metaverse and digital influencers. Their efforts include innovations such as testing smart dressing rooms and simulating garments for design purposes (Chan et al., 2024).

Another relevant aspect of the retail experience in the metaverse is the need to stem counterfeiting, a particularly significant issue for luxury retailers (Sung et al., 2023). In this virtual space, firms can monitor and manage non-transferable tokens (NTTs) and other certification systems, similarly to self-sovereign identity (SSI) in store retailing, integrating them to further elevate the retail experience (Bruni et al., 2023).

Finally, in evaluating the advantages, opportunities, barriers, and resources needed to implement strategies in the luxury retail metaverse, elements such as data privacy, acceptance of technology, and its adoption by both brands and customers cannot be ignored (Chrimes and Boardman, 2023). Previous research has emphasized the need to pay attention to the collection and protection of consumer data, including biometric data, facial expressions, eye movement, geographical location, and other personal information (Dwivedi et al., 2022). Therefore, companies will need to equip themselves with the technological skills and resources required to address digital security concerns, as well as environmental and social sustainability (Chrimes and Boardman, 2023).

2.3. *Metaverse adoption by luxury fashion brands*

Metaverse presents a new business opportunity both for established brands seeking new markets and emerging companies across various sectors, including luxury fashion (Bao et al., 2024; Murtas et al., 2024). In fact, according to SanMiguel et al. (2024), a significant portion of the marketing literature in recent years has focused on the metaverse, particularly in the fashion industry. Studies exploring metaverse marketing have analyzed the use of NFTs by luxury brands (e.g., Sung et al., 2023) or the entry of fashion companies into this virtual space (e.g., Kniazeva et al., 2024). Park and Lim (2023) identified marketing strategies employed by fashion companies in the metaverse, but argued that the marketing literature on this phenomenon remains quite limited.

Generally, the metaverse offers several marketing opportunities for luxury fashion brands (Venturini and Columbano, 2024), enabling these firms to achieve greater economic success (Joy et al., 2022). In recent years, luxury brands have been experimenting with gamification to create an engaging experience, developing innovative and personalized journeys for customers (Milanesi et al., 2023; Cedrola and Giovannetti, 2024).

Despite the great efforts and investments in providing functional and emotional benefits in luxury online experiences, there are still fundamental reasons for dissatisfaction and discontent on the part of consumers, especially in purchasing and after-sales. A possible solution could be to implement experiences and games in the metaverse, which address a renewed and growing interest of consumers, especially those belonging to the Young tech pioneers and Escapers clusters (BCG-Altagamma, 2023). More generally, luxury fashion brands are adopting new digital approaches to appeal to younger consumers who may not be able to afford physical products (Nanda, 2021).

While incorporating the metaverse into their marketing strategies, fashion companies must thoroughly review their business models and consumer engagement strategies (Profumo et al., 2024). Indeed, considering that the metaverse corresponds to an extension of the physical world in virtual format, companies need to manage the integration between the two realities (Moro-Visconti and Cesaretti, 2023). A recent survey by Statista (2023) highlighted that, although the metaverse represents a great market opportunity for fashion companies, its potential has not yet been fully recognized by either businesses or consumers. SanMiguel et al. (2024) argued that the metaverse remains connected to the phygital experiences, which have gained popularity among consumers since the Covid-19 pandemic, through tools such as smart mirrors and virtual trials. From this perspective, shopping in the metaverse is seen as an extension of consumer experiences, which can be transferred to spaces like meta-malls or meta-stores. However, this meta-shopping approach is considered shortsighted (Stephens, 2021). In this regard, Kim et al. (2023) argued that the success of virtual shopping for real use depends on the degree of immersion and the level of

interactivity between business and consumer. For this reason, one of the barriers to the spread of meta-shopping in the fashion sector is the lack of tactile sense and tactile technologies (Ornati and Kalbaska, 2022). Previous research has not reached a consensus on the role of touch in technology adoption. Some scholars have emphasized that sight and touch are the primary senses providing positive feedback in immersive experiences (Batat, 2024); however, devices and haptic technologies appear unable to fully replicate the sense of touch experienced in real life, particularly for luxury clothing and products (Ornati and Kalbaska, 2022). This situation may lead to a greater reliance on tactile technologies in both physical and immersive experiences, while also enhancing other sensory experiences in digital environments such as digital retail, AR or VR experiences, and games (Batat, 2024). At the same time, brands must be cautious when experimenting with immersive experiences and AR, VR, and MR technologies to avoid misrepresenting the quality, materiality, and design of their product and brand, as well as causing motion sickness or negative sensations for users (Chrimes and Boardman, 2023). Therefore, fashion companies are adopting virtual platforms that include games, e-commerce, and social media (Belk et al., 2022), incorporating MR with the metaverse (McDowell, 2022). In these strategies, digital avatars play a key role by simulating human models wearing fashion products such as clothes, making the virtual experience increasingly engaging (Kim and Chakraborty, 2024). By integrating the metaverse into marketing strategies, fashion companies will have greater opportunities to virtually reach a larger number of consumers (Luong et al., 2024; Yoo et al., 2023). Through the trial and sale of virtual items, consumers can develop the desire to purchase for and in the real world, thus serving as a driver for physical retail as well. An example of a luxury brand that has effectively integrated physical and digital retail environments is Louis Vuitton. By collaborating with the popular video game League of Legends established in 2019, the French brand launched a virtual showroom within the game, reaching its audience of over 115 million players. Customers and users can use their avatars to browse the latest products from the brand, make purchases, and have their avatars wear skins based on the brand's real world collections (Girord, 2023).

3. Method

The nature of the research question suggests the need for an exploratory, qualitative, and inductive methodological approach (Aslam, 2023). Our qualitative analysis aims to provide a comprehensive overview of the evolution of fashion and luxury retail in the metaverse.

Semi-structured interviews serve as our primary source of data, guided by a protocol (Table 1) aligned with the existing literature (Eggenschwiler et al., 2024). After reviewing the literature and identifying our RQ, we developed this interview protocol with questions designed to elicit information-rich data from key informants (Maxwell, 2013). In this phase, as suggested by Castillo-Montoya (2016), we tried to balance our research objectives with the conversation by carefully formulating and organizing the questions to be clear, brief, and understandable for the key informants. Understanding the context of the research was also a key element we considered when developing the interview protocol. Specifically, the main objective of the questions was to explore the views of managers and consultants on the management of retail in the metaverse, identifying challenges and opportunities in the luxury fashion segment.

All interviews were conducted remotely by experienced marketing researchers via videoconferencing from December 2022 to July 2024. At least two researchers participated in each interview. In addition to asking the questions outlined in the protocol, they took field notes, which were reviewed and discussed after data collection was completed.

The interviews involved 26 managers and consultants from different companies to ensure diverse perspectives. They lasted between 40 and 90 min and were recorded and transcribed. Purposeful sampling was employed to recruit key informants from the luxury fashion industry with the expertise to investigate the complex topic of our research (Suri, 2011). The purposeful criteria focused on professional experience in metaverse campaigns and retail management. The informants interviewed worked for various fashion brands or partner firms (e.g., consultancy firms and metaverse agencies), following Patton's (2015) maximum variation principle to ensure comprehensive data coverage and information saturation. Table 2 shows the descriptive data of the sample.

Table 1
Interview protocol.

Topics	Example interview questions
Key informant's background	• What is your role in the company? • How many years have you been working in this sector? • What are your main professional experiences?
Metaverse adoption (Dwivedi et al., 2023; Hollensen et al., 2023; Park and Lim, 2023; Profumo et al., 2024)	• Has your company implemented any metaverse campaigns? • What digital products do you develop in the metaverse (e.g., NFTs)? • What are the main obstacles for luxury fashion firms in implementing the metaverse? • What are the main opportunities for luxury fashion firms in implementing the metaverse?
Retail strategies in the metaverse (Eggenschwiler et al., 2024; Gauri et al., 2021; Jin, 2024; Ki et al., 2025; Klaus and Manthiou, 2024; Mehrotra et al., 2024)	• How does your company integrate the metaverse with traditional retail and other channels? • How do you develop your retail strategy in the metaverse? • Have you opened any meta-stores? What type of retail format have you developed? • How are your retail operations integrated into the metaverse?
Brand experiences in the metaverse (Batat, 2024; Bilgihan et al., 2024; Lee et al., 2023; Park and Lim, 2023)	• Which brand experiences does your company activate in the metaverse? • How do you generate brand awareness in the metaverse? • What are consumer expectations in the metaverse? How do you try to satisfy them? • How do you engage consumers in the metaverse?

The data collection phase of this study concluded upon reaching the saturation point, which is defined as the point in qualitative research where no new themes or relevant information emerge from the data (Constantinou et al., 2017; Glaser and Strauss, 1967). Once data saturation is achieved, researchers should cease data collection.

The transcripts of the interviews, along with the extensive field notes we collected, serve as the material for the data analysis phase. As suggested by Tessier (2012), field notes, transcripts, and tape recordings should be used together to improve the quality of data management in qualitative studies. Following these guidelines accepted among qualitative research experts, our data analysis included verbatim interview transcripts and field notes. In these field notes, following the chronological order of the interviews, the researchers described the key aspects emerging from the conversations (Flick, 2022). The analysis focused on different elements of the responses of the interviewees and was conducted using inductive methodology (Gioia et al., 2013). The open coding was carried out manually by the researchers considering both the verbal transcripts and the field notes collected during the interviews with key informants. To ensure the reliability of our data analysis, we performed open coding following Strauss and Corbin's (1998) guide step by step, assigning codes and categories, trying to adhere faithfully to informants' terms, with minimal attempt to distill categories. Therefore, the number of categories was broad and emerged from the description

Table 2
List of key informants.

#	Key informants' role	Gender	Organization	Country
1	Associate Design Director	F	Consulting firm A	United Kingdom
2	E-commerce Sales & Web Marketing Director	F	Fashion company A	Switzerland
3	Senior Manager Retail Operations	F	Fashion company A	Switzerland
4	Metaverse Strategy Lead Europe & Design Director	M	Consulting firm B	Italy
5	Managing Director	M	Consulting firm B	United Arab Emirates
6	Senior Manager	M	Consulting firm B	Italy
7	Product Press Office Assistant	F	Fashion company B	Italy
8	Head of Digital Communication	F	Fashion company B	Italy
9	Brand Insight and Performance Manager	M	Fashion company B	Italy
10	Junior Content Strategist	F	Metaverse agency A	Italy
11	CEO	F	Consulting firm C	Italy
12	Digital Innovation Project Manager	F	Fashion company C	Italy
13	Chief Technical Officer	M	Consulting firm D	Italy
14	Co-Founder	M	Digital fashion house	Italy
15	President	F	Association for sustainable fashion	Italy
16	CEO	M	Metaverse agency A	Italy
17	Blockchain Consultant	M	Consulting firm E	Italy
18	Founder	M	Digital fashion platform	Italy
19	CEO & Co-Founder	M	Metaverse agency B	Italy
20	President & Co-Founder	M	Metaverse association	Italy
21	Vice President	M	Metaverse association	Italy
22	Global PR and Communications Director	M	Fashion company D	Italy
23	CEO	M	Fashion company E	Turkey
24	Country Manager	M	Fashion company F	Italy
25	Global Marketing Director	F	Fashion company G	Italy
26	Head of Partnerships	M	Consulting firm F	Italy

and transcripts of the interviewees. This process allowed new themes and descriptions to emerge (Strauss and Corbin, 1998).

We also followed studies in which researchers used a larger number of codes to maintain data richness and information saturation (see, e.g., Pardo et al., 2020). After codification, we proceeded to the second step, which led to greater abstraction and thematic analysis to understand the nature of the ongoing phenomena (Gioia et al., 2013).

For the second-level analysis, the researchers employed sensitizing concepts, interpreting the data through their experience and prior research. Data interpretation led to the development of codes to describe the findings. After assigning categories and labels, the researchers investigated whether a deeper structure existed and ultimately connected the emerging themes and relationships with the existing literature (Gioia et al., 2013).

To improve the trustworthiness of the results, we followed Lincoln and Guba's (1986) criteria for generalizability and transferability of the results, considering the participation of managers and consultants from multiple organizations. The reliability and replicability of the results were established by providing clear definitions and a detailed analytical process. The credibility and internal validity of the findings were supported by involving multiple researchers in the coding process, ensuring a high level of agreement in the coding, and achieving data saturation during the analysis phase (Miles and Huberman, 1994). Fig. 1 presents the data structure that emerged from our data analysis.

4. Findings

The results of this research identify two aggregate dimensions that highlight how luxury fashion brands develop retail strategies in the metaverse (par. 4.1) and describe the innovative brand experiences they activate (par. 4.2).

4.1. Luxury fashion retail in the metaverse

4.1.1. Theme 1: channel integration

For luxury fashion brands, the integration of metaverse platforms into their retail strategies has become increasingly relevant following the recent growth of e-commerce as a main touchpoint for the purchase of luxury products, especially among young generations (Kim, 2019; Statista, 2024). Key informants reported that firms implemented AR in their e-commerce websites or APPs so that they could provide an augmented experience to their target. Moreover, metaverse platforms are more engaging than e-commerce as they reflect the experience in the physical store. In fact, consumers can try items, interact with sales assistants, and are more likely to complete the purchase. Key informant 7 pointed out:

> Everything virtual and digital helps enrich the experience the customer can have in the store and [is] a new way of communication to create the in-store experience also for those who do not physically enter it. Personally, I see [the metaverse] as a tool that helps both directions. Both to attract new customers to the store, perhaps enriching their experience, and enabling those who don't physically come to the store to still have a shopping experience as if they were there. And that's a bit of a difficulty with e-commerce, isn't it? To ensure a customer experience that is as close as possible to the real experience you would have in the store. Therefore, it offers a 360° added value.

The key informants agreed that the metaverse does not replace the physical experience but provides fashion firms with opportunities to offer innovative experiences, strengthen their omnichannel approach, and improve their brand reputation. For example, activities such as virtual fashion shows can increase the drive to physical stores, reinforcing the integration among channels (Venturini and Columbano, 2024). Key informant 26 reported:

> This retailer created a timed Christmas experience in collaboration with a campaign featuring Christmas sweaters for a fundraiser, planning to let users access the Christmas-themed game using redeem codes. At the end of the experience, the user accessed the e-commerce store. 11% of the users reached that point, which is a very high conversion rate. The top 10 players won a half-hour private meeting on Roblox with the brand's testimonial avatar.

The retail strategies that involve the metaverse are often aimed at reaching young targets, e.g., Generation Z and Generation Alpha, who may not be able to afford expensive tangible luxury goods. Those companies that have not launched comprehensive metaverse campaigns, nonetheless, recognize its potential. Key informant 24 stated:

> The metaverse, together with virtual reality, is a topic that needs to be developed, above all because it is the future and we need to anticipate it to bring the new generations closer. Right now, we are keeping it in-house, to ourselves, and running tests with our customers.

4.1.2. Theme 2: exclusivity enhancement

The metaverse can be adopted by luxury fashion brands to launch

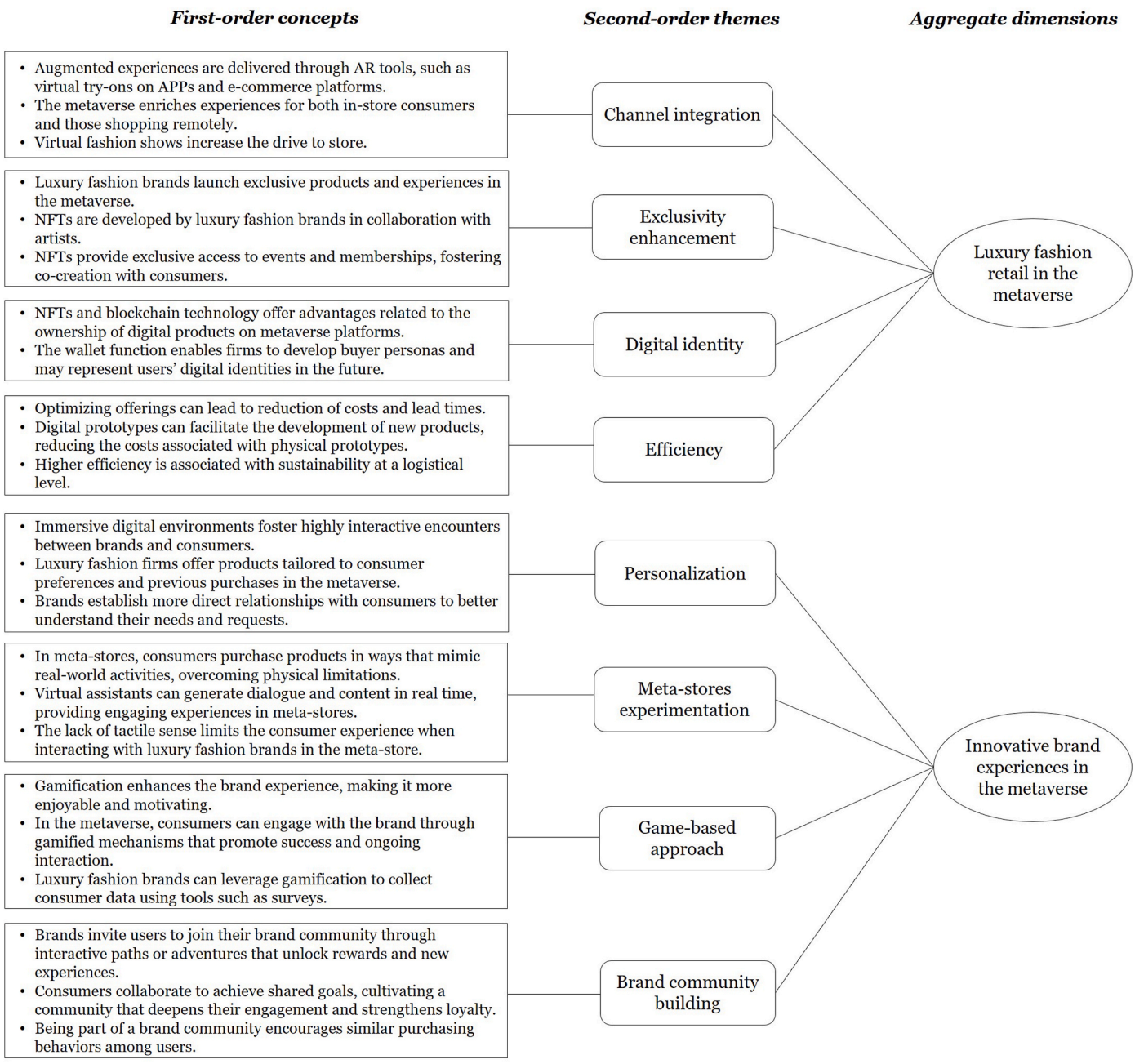

Fig. 1. Data structure.

exclusive products and experiences (Sung et al., 2023). With regard to digital products, NFTs are developed through collaborations with artists.

> The items play a fundamental role in the gaming experience, enabling creators to offer challenges and rewards that create engagement. There are even item hunters who hunt for branded goods… true collectors. This typical video game dynamic perfectly aligns with the collection of luxury fashion, online and in real life. And let's face it, having certain items in these worlds is really cool. (Key informant 26)

> NFTs in the fashion industry can be used for collecting, authenticating exclusive and limited fashion collections, providing exclusive access to private fashion events or creating exclusive digital collaborations between designers, artists, and brands in the fashion sector. (Key informant 15)

Furthermore, NFTs can increase loyalty, positively affecting the long-term performance of brands (Cho et al., 2024). Key informant 4 reported:

> An NFT can be associated with an exclusive club membership, so owning an NFT might enable you to have a personal shopper or allow you to keep the store open for an hour after closing for a private event. As I see it, in the fashion sector, an NFT unlocks new loyalty logics.

As far as experiences are concerned, metaverse fashion weeks are an interesting opportunity to enhance exclusivity in fashion luxury. For example, key informant 4 reported that the first Vogue Metaverse Fashion Week in 2022 achieved very positive results, thanks to being an exclusive event open only to Vogue Business users, making it a niche experience. The technology used enabled high photorealism, while also creating a sense of extreme exclusivity. Moreover, it activated co-creation effects through content generated by participants on their

social media.

4.1.3. Theme 3: digital identity

NFTs and blockchain technology, in general, offer several advantages related to the ownership of digital products on metaverse platforms (Barrera and Shah, 2023). Key informant 17 asserted:

> NFTs can guarantee that a specific user owns a specific asset in his wallet. So, if a 3D developer creates a unique asset or a work of art in the metaverse and wants to resell it, they can do so. Blockchain is really about the whole issue of ownership and identity in the metaverse.

Metaverse wallets, which are characterized by safety and ease of use (Kaur et al., 2024), are key to understanding user characteristics. In the future, they could represent the user's identity, as suggested by several key informants:

> [Wallets] will be our image in some way. If I can look into your wallet and find many fashion-themed NFTs, it becomes much clearer to me who you are, what activities you've engaged in, and what types of wearables you prefer. It truly becomes your image.
>
> (Key informant 19)

> Your digital identity, along with an NFT given as a gift, helps complete the development of a buyer persona, from which there is an ongoing struggle to recover the customer's digital identity to date. It's still early days, but that will be the way.
>
> (Key informant 4)

User purchasing data allows brands to better understand their needs and provides a foundation of potential customers for future products. Thanks to AI, retailers can anticipate the next purchases, optimize offerings, and enhance personalization. Key informant 1 explained:

> Machine learning models, which are one of the many AI techniques, can be used to predict all these factors and ultimately to optimize sales, costs, and revenues, thereby improving the customer experience. In this way, we reach customers with the product they need, when they need it, through the channel they use most and find most suitable … AI models also enable retail giants to create a competitive advantage.

4.1.4. Theme 4: efficiency

From a retail perspective, personalization and optimization help to lower costs (Dwivedi et al., 2023). Consequently, key informant 10 identified positive effects in terms of efficiency.

> With the metaverse, [retail] efforts can be simplified because a brand that creates a virtual store can run a simulation to see how much traffic there can be, study the target, the geographical position, and therefore assess whether it is worth opening a store in a specific location or area over another.

The reduction in cost and lead time is also achieved through the adoption of digital prototypes for fashion items (Mogaji et al., 2024). Moreover, this generates positive effects from a sustainability point of view.

> Even the prototyping part, by creating a certain product, making it virtual, and observing how much interest there is in the metaverse … It can certainly be interesting to calculate the low costs of creating a digital twin and then evaluate whether or not to replicate it in reality. This reduces many costs. If we then consider timing, from a consumer point of view, rather than visiting an e-commerce [website], I could think of entering the metaverse, looking at 3D products, seeing their wearability, the fabrics, and anything that I wouldn't understand with a 2D image, then at that point I will purchase online or offline, reducing time. Finally, this reduction in costs and time is also linked to sustainability at the logistical level.
>
> (Key informant 10)

> The metaverse could be used for the design and development of new products: fashion firms could create 3D product models and test them virtually, avoiding all the costs of physical prototypes and reducing development times.
>
> (Key informant 15)

4.2. Innovative brand experiences in the metaverse

4.2.1. Theme 5: personalization

The metaverse has revolutionized brand experiences, particularly because the immersive digital environments of these platforms foster highly interactive encounters between luxury brands and digital customers (Profumo et al., 2024). On these virtual spaces, luxury fashion firms can generate engagement by implementing innovative approaches and offering unique, immersive, and personalized experiences (Lee et al., 2023). Key informant 18 reported:

> Through the immersive experience of the metaverse, companies can create user engagement. Through virtual showrooms and immersive live events, the metaverse can significantly increase brand visibility and engagement, enhancing brand value.

Furthermore, to increase the personalization of the brand experience, luxury fashion firms launch products in the metaverse that may not be available in physical stores or other digital channels. Metaverse platforms design products specifically tailored to consumer preferences and past purchase behavior, thereby meeting the growing demand for customization. In this context, consumer participation becomes fundamental to improve brand experiences over time (Rahman et al., 2023; Yoon et al., 2024). Consumers in the metaverse are therefore placed at the center of interactions with brands, with which they build more direct relationships; this allows companies to better understand their needs and requests, and to satisfy them with a personalized brand experience.

4.2.2. Theme 6: meta-stores experimentation

The results of this study highlight that, in the metaverse, luxury fashion brands can craft virtual spaces that go beyond the traditional dynamics of interactions with customers, offering increasingly personalized and engaging experiences. Consumers can explore meta-stores, participate in branded events, and purchase luxury fashion products in ways that mimic real-world activities, overcoming physical limitations, and enhancing experiential immersion and participation. In this regard, key informant 15 stated:

> Brands could create virtual stores where consumers can browse and purchase products in a immersive way. This virtual shopping experience could be tailored to the tastes and preferences of customers using artificial intelligence and machine learning technologies.

In these meta-stores, luxury fashion brands can enhance the brand experience by using generative AI to include virtual assistants capable of creating dialogue and content in real time, adapting to the context and consumer needs, and offering natural, personalized, and engaging interactions that improve customer experience.

Although meta-stores offer a valuable business opportunity for luxury fashion brands, our key informants identified several challenges, including limitations in sensory experience and the perception of design quality and material composition. These aspects must be reflected in the creation of digital twins for physical products. With respect to sensory experience, it was reported that the experiential nature of the luxury retail strategy in meta-stores relies on a combination of factors, rather than being solely dependent on tactile or sensory elements. The aspect related to product quality refers to the ability to translate the inherent

attributes of quality and excellence in such settings. This involves ensuring consistency in quality, without compromise, simplification, or technical distortions. Consequently, the strategy for creating and implementing a meta-store must reflect a coherent committment to the brand's excellence in design, materials, and distinctive features.

> It's clear that in the fashion sector, you want to feel the textile by touch. It is not something that replaces reality, but it complements it, adding value.
>
> (Key informant 16)

> One of the aspects that limits the access of luxury brands to gaming platforms is the risk that the product will not be adequately represented. Imagine a pair of designer glasses that would be ruined by poor graphic quality … Fortnite, for example, features a powerful graphics engine that ensures quality is not compromised, and this is fundamental.
>
> (Key informant 26)

4.2.3. Theme 7: game-based approach

According to the key informants involved in this study, more luxury fashion brands are including a game-based approach to interact with their consumers in the metaverse (Milanesi et al., 2023). For example, key informant 19 stated:

> In the metaverse, where the gamification part is very easy to implement, you can quickly succeed in engaging people in any activity. If you can reduce customer acquisition time to a tenth, the level of engagement increases, and you can achieve extraordinary results.

In this regard, our results highlight that gamification represents a key element of the brand experience in the metaverse, providing an appealing way to motivate consumers to engage more with luxury fashion brands. Gamification makes the brand experience more fun and motivating, enhancing customer satisfaction and engagement on virtual platforms (Arya et al., 2024). In this way, consumers feel empowered to participate and succeed in the metaverse through gamified mechanisms, while remaining engaged with a brand. Moreover, luxury fashion brands can use gamification to collect consumer data through tools such as surveys and other interactions. By offering participation rewards, these brands can gain useful insights that help them develop better products and design more personalized experiences. Key informant 18 reported:

> Gamification offers a new type of experience that brands can leverage to connect with their target users. This approach was used for Metaverse Fashion Week and Metaverse Beauty Week. Through gaming and immersive experiences in the metaverse, companies manage to create user engagement in unique ways.

4.2.4. Theme 8: brand community building

Furthermore, our findings demonstrate that gamification can help to create an active and engaged community around a brand or product in the metaverse (Bilgihan et al., 2024). Through gamification, users set specific goals to achieve, compete with others, and share their successes within the community, which can then be converted into rewards. In this way, luxury fashion brands foster customer loyalty by using mechanisms that encourage consumers to return and complete new challenges. Specifically, brands engage users by inviting them into the brand community through interactive paths or adventures that unlock rewards, opportunities, and new experiences. As a result, users are motivated to challenge each other, collaborate to achieve common goals, and socialize, all while interacting with the brand. This cultivates a community that deepens their engagement and strengthens loyalty. Moreover, belonging to a community fosters the development of a social identity among consumers, which leads to similar purchasing behaviors. In this regard, key informant 12 stated that:

> We created a community of almost five thousand potential customers. The result was that many consumers began to fall in love with the brand and bought our clothes.

5. Discussion

5.1. Theoretical implications

The aim of this study is to advance the marketing research about the metaverse by adopting the perspective of luxury fashion companies with regard to metaverse retail and branding strategies. The findings of this study reveal how the metaverse is affecting luxury fashion companies in their transformation towards an omnichannel retail approach and a customer-centric model.

In discussing the study results, we respond to the RQ (*How do luxury fashion firms develop brand experiences in retail strategies that involve the metaverse?*) by proposing a customer-centric framework for luxury fashion retail in the metaverse (Fig. 2). This framework builds on the model of Park and Lim (2023), which identifies the key technological facilitators of the metaverse, and integrates it with the model of Gauri et al. (2021), which illustrates the evolution of omnichannel retail.

The two fundamental pathways to implementing consumer-centric retail formats are experience enhancement and friction reduction (Gauri et al., 2021). In the metaverse, this is made possible thanks to three technological facilitators: NFTs/NTTs, games and virtual worlds, and immersive technologies such as AR and VR (Park and Lim, 2023). This study aims to provide a comprehensive overview of luxury retail, highlighting innovative dimensions within the metaverse. It offers an original perspective on luxury fashion retailing by integrating empirical findings with theoretical insights to enrich the existing literature.

The themes emerged in our findings are discussed through the theoretical approach of omnichannel retailing, an evolution of retail that puts the customer at the center through experience enhancement and friction reduction. In a customer-centric retail framework, these two pathways facilitate the integration of channels, providing luxury fashion retailers and brands with a competitive advantage.

The first pathway—experience enhancement—is achieved in the metaverse through exclusivity enhancement, personalization, brand community building, gamification, and immersiveness.

The first aspect that emerged from our results is exclusivity enhancement, aligned with the omnichannel retail approach and the focus on enhancing customer experience (Gauri et al., 2021). In the metaverse, luxury brand retail can incorporate elements of rarity, scarcity, personalization, and pleasure to maximize the customer experience and significantly improve brand association, perceived quality, and brand awareness through frequent customer interactions and social sharing (Park and Lim, 2023). In terms of enabling technologies, NFTs represent purely digital items or digital certificates linked to physical pieces, which can have highly personalized and artistic characteristics, emphasizing their collectible nature. In the context of games and virtual worlds, this refers to the opportunity to engage in games and experiences within the metaverse that are accessible only to these users. Finally, for immersive technologies, the sense of exclusivity can be conveyed through participation in immersive VR, AR or MR experiences, such as events and fashion shows. The dimension of exclusivity enhancement is also reflected in the emphasis on immersion, interaction, and personalization of the buyer's experience (Yoo et al., 2023) toward increasingly immersive and unforgettable experiences (Han et al., 2022). Therefore, luxury retail in the metaverse also enables the creation of experiences that blend art, magic, and theatrics (Dion and Arnould, 2011; Pine and Gilmore, 2011), making them even more unique and customizable based on the user's characteristics. This goal can be achieved by creating limited-edition prizes in games and activities such as events and fashion shows, which not only gratify the user but also have additional media relevance on online and offline media.

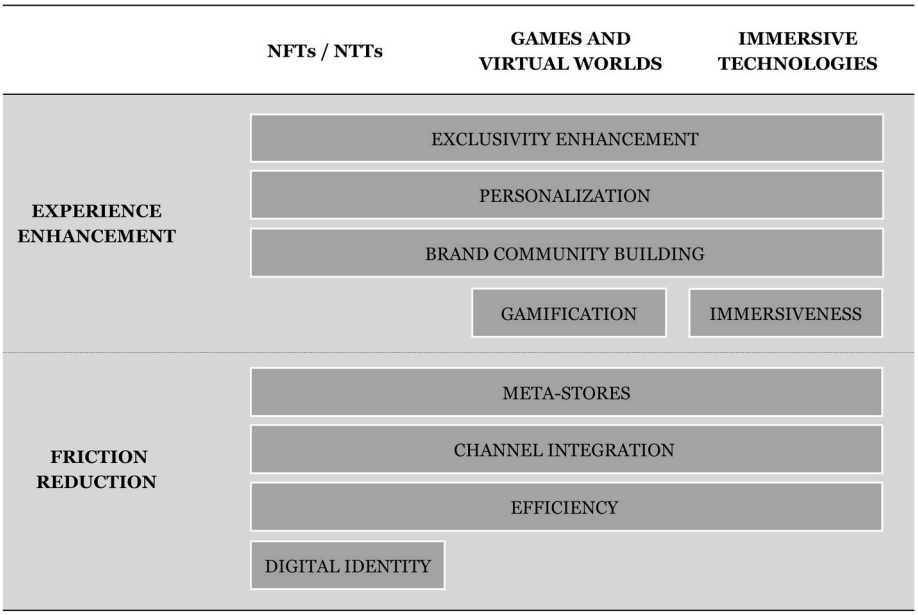

Fig. 2. Customer-centric framework for luxury fashion retail in the metaverse.

Another key aspect of experience enhancement is the personalization enabled by data generated through user interactions. AI and ML can enhance the personalization of products and solutions offered to the customer, but also the experience, which thus maximizes immersion, engagement, and enjoyment (BCG-Altagamma, 2023; Kumari et al., 2024). This contributes to brand awareness and brand association (Park and Lim, 2023), ultimately leading to smoother conversion into satisfying purchases (Caboni et al., 2024). Furthermore, the use of customer-enhanced data makes it possible to adapt the offer, the environment, and the experience, thereby reducing lead times, optimizing costs, and enhancing efficiency, value creation, brand loyalty (Park and Lim, 2023), and customer relationship management. This is evident in the browsing, try-on, sales, and post-sales phases (Bruni et al., 2023).

Brand community building represents a key component of the experience enhancement. The nature of the metaverse resembles that of the gaming context in fostering a dynamic and interactive community (Yoon et al., 2024). The interaction with other users with the metaverse enables consumers to engage with brands in meaningful ways. This can lead to enhance brand community building (Kumari et al., 2024), affecting attitudes and purchase intentions (Koohang et al., 2023), as well as customer loyalty (Abumalloh et al., 2023). The metaverse thus offers the possibility to dress avatars in fashion items, collect or design them in games, or simulate trying on clothes or prototypes with AR and generative AI (Chan et al., 2024). These experiences can be shared on social media (Belk et al., 2022) by contributing user-generated content in the mixed reality of metaverse and social media (McDowell, 2022), which seems particularly successful for luxury retailers (Sung et al., 2023).

Experience enhancement is driven by gamification and immersiveness. The results of this study highlight the importance of games and virtual worlds in creating interesting, fun, and stimulating experiences, offering digital items and avatar skins to be launched as previews or alongside real-life collections, and organizing events, showrooms, or fashion shows. Accordingly, a recent study by Söderström et al. (2024) has shown that enjoyment is a key precursor in purchasing decisions. Such fun-based initiatives not only strengthen brand equity with existing customers but can also attract new ones. Virtual worlds and games facilitate immersion, achievement, and interaction (Milanesi et al., 2023), allowing fans and brand enthusiasts to share their interests, socialize, trade digital items, and interact with the brand, contributing to customer loyalty (Abumalloh et al., 2023; Shukla et al., 2024) and brand community participation (Yoon et al., 2024).

This study suggests that the use of immersive technologies within metaverse retail environments enables users to engage in vivid, interactive sensory experiences (Kim et al., 2023), thus introducing novel challenges and tools of experiential marketing (Pine and Gilmore, 2011). These experiences can be distinctive and highly impactful, depending on the adequacy of supporting technologies, such as visors, devices, or smartphones (Frank et al., 2024). Therefore, as long as devices, navigation architecture, and the purchase experience ensure high levels of product engagement, smooth interaction, and seamless transactions, positive results can be achieved in consumers' perceived quality, purchase intention, and brand loyalty (Park and Lim, 2023), due to reduced friction. This supports the idea that retail in the metaverse does not replace the tactile and visual sensory of the physical store; rather, it builds value in synergy through other dimensions and touchpoints that overall contribute to brand equity across all channels (Batat, 2024). This, in turn, allows luxury brands to increase brand equity through the reach of new audiences and potential customers, particularly younger users (Nanda, 2021).

Regarding the second pathway toward customer-centric retail formats that incorporate the metaverse—friction reduction—key components include meta-stores, channel integration, efficiency, and digital identity.

With an omnichannel approach, luxury fashion retailers can enhance and expand touchpoints to improve customer experience, drive higher sales across various market segments, and foster greater satisfaction and loyalty (Abumalloh et al., 2023). In particular, meta-stores can complement offline retail in terms of exclusivity enhancement and friction reduction. In fact, on the one hand, they improve the brand experience through their characteristics of experientiality, uniqueness, and personalization (BCG-Altagamma, 2023). On the other hand, meta-stores can be convenient and accessible, serving as a highly versatile interface that enhances reactivity, seamless interaction, and immediate feedback, thanks to AI assistants. However, this can be achieved if the company has allocated the technological and managerial resources (Elia et al., 2021), clarifying the role of each marketing and sales channel in the overall strategy of the luxury retailer. Moreover, firms should recognize the centrality of the customers, their level of involvement, and their willingness to share personal data and information about themselves and their browsing experiences. It is essential to ensure that this data is collected, stored, and processed responsibly and

securely (Yoo et al., 2023). In some cases, meta-store experimentation is not limited to the creation of events or temporary spaces; rather, it serves as a platform for collaboration in co-branding initiatives. This tactic extends existing collaboration agreements between brands and retailers, making it possible for luxury brands to land on the metaverse, where they can learn, experiment, and take fewer risk than if they were launching activations or games independently. For firms, it is a good opportunity to further collaborate not only with artists and users but also with their own commercial partners and retailers, strengthening their competitive strategy and optimizing resources and relationships (Elia et al., 2021). The implementation of meta-stores in luxury fashion retail can lead to greater opportunities to reach a larger number of consumers (Luong et al., 2024) and improve the omnichannel customer experience, further increasing customer loyalty (Rahman et al., 2023) and mimicking and enhancing conventional in-store encounters (Chakraborty et al., 2023).

Meta-stores should be managed adopting a channel integration perspective. The omnichannel approach can be rewarding when the structuring and navigation of phygital retail allows the customer to obtain greater value in terms of experience (Han et al., 2022), personalization, reward, fun, and self-enhancement (Jin, 2024). Hence, although meta-stores can be seen as short-term tools to ride the hype of the metaverse (Stephens, 2021), their integration within an omnichannel retail strategy, where traditional points of sales, e-commerce platforms, and meta-stores work in synergy rather than conflict, is promising (Eggenschwiler et al., 2024). With an omnichannel approach, meta-stores do not replace the traditional retail experience; instead, they provide a practical, innovative, and stimulating alternative, adding value to the purchasing experience at different touchpoints. For example, consumers can access exclusive previews of digital items and use virtual try-ons and generative AI to gain a heightened sense of realism, adding value to interactions and potentially driving store visits.

Efficiency emerged as a relevant aspect in the friction reduction within the retail strategies of luxury fashion firms. Operating in the metaverse allows luxury retailers to collect information and launch demos or prototypes, substantially reducing costs and lead time. The competitive, economic, logistical, and sustainability implications are significant (Abumalloh et al., 2023) not only in relation to the company's innovation capabilities but also in its ability to manage an integrated, digital, enhanced, and seamless customer experience (Gauri et al., 2021).

Finally, NFTs/NTTs enable firms to promote digital identities for both physical and digital products, as well as to certify phygital products and their transfer. The main advantages of using NFTs/NTTs include enhanced brand visibility, engagement, association with innovation (Park and Lim, 2023), perceived exclusivity, security, and ownership certification, guaranteeing greater transparency and assurance for the buyer (Belk et al., 2022). By adopting certification systems, the experience of interaction with physical and online retail would become even more seamless, safe, and integrated, fostering brand loyalty (Bruni et al., 2023; Park and Lim, 2023), which is also reflected in retail loyalty (Shankar et al., 2021).

In response to the main RQ, our findings contribute to the existing literature by providing empirical evidence on the retail strategies of luxury fashion firms and their implications for brand experiences in the metaverse. An omnichannel retail strategy that integrates the metaverse can be implemented through effective pricing and communication, leveraging opportunities in sustainability and data utilization. The goal is to maximize customer value (Shankar et al., 2021) and enhance brand equity (Park et al., 2023) by leveraging physical and virtual browsing experiences (Abumalloh et al., 2023).

Luxury retail in the metaverse can reinforce the experience enhancement (Gauri et al., 2021) and contribute to the brand equity through exclusive, innovative, and enjoyable activities (Yoo et al., 2023), as well as gaming and immersive experiences. In this way, the customer can interact with brands and other users through the participation in brand communities (Yoon et al., 2024). These experiences are integrated by expanding their resonance in social media, in a seamless, mixed reality (McDowell, 2022).

In the metaverse, the reduction of friction (Gauri et al., 2021) leads to greater overall benefits, including improved accessibility, enhanced nonsensory information, and the elimination of spatial barriers. Furthermore, there is also the opportunity to integrate physical and digital experiences and items, making them customizable, unique, exclusive, and more secure with NFTs and digital certificates (Park and Lim, 2023), enabling the verification and sale on the secondary market.

However, despite the potential of luxury retail in the metaverse, we note that several challenges and barriers remain, particularly in areas such as data privacy, technological reliability, and adoption (Chrimes and Boardman, 2023).

5.2. Managerial implications

Luxury fashion brands should view their presence in the metaverse not merely as a short-term tactic but as a key component of their channel management strategy, prioritizing customer experience and reducing friction between traditional and digital channels. In recent years, many luxury brands and retailers have turned to providers specializing in the luxury segment that have launched dedicated e-commerce channels. As seen in other sectors such as banking, luxury fashion firms have started to adopt an omni-digital approach to build their brands and interact more effectively with those customers who expect a smooth experience across touchpoints, characterized by a high level of connectivity (Olivieri and Hu, 2024; PwC, 2018).

Incorporating the metaverse into retailers' strategies is particularly effective in reaching and developing younger segments. Their behaviors exhibit a simultaneity of physical and digital actions, creating interferences in both realms. The presence in the metaverse can bridge these two types of experience through avatars, which place people in a spatial context and simultaneously transform them into a receptor of information and images. By amplifying communication through imagery, avatars enhance content transmission, overcoming language and expression barriers as images do not require translation.

From the brand's perspective, as highlighted by the key informants, it is possible to resonate even with those who currently lack purchasing power in the real world, laying the groundwork for future brand affection and loyalty. This is an element that should not be underestimated and represents a true long-term investment for companies. What one experiences in youth, from friendships to activities to places, remains memorable and desirable over time. This memory can be leveraged by brands as a form of future-oriented loyalty, which can also be translated into purchasing actions when young consumers reach a higher purchasing power.

Luxury brands have a notable ability to offer exclusive experiences, which would otherwise prove impractical in the physical world due to excessive costs or time constraints; they are also able to conduct behavior observation processes timely and at low cost. If an avatar represents the real self in terms of relationships, movements, and attention given to various objects, much can be understood. Certainly, from this perspective, behavioral analytics tools will need to be adapted to this new context.

Therefore, the metaverse retail strategy must consider not only the convenience of digital interaction but also the security of the purchase process. Integration can be improved through immersive experiences, brand communities, and enhanced interactions that parallel and connect wisely with the physical retail experience. Meta-stores can strengthen the equity of luxury brands by increasing brand awareness and engagement, leading to direct product experiences in physical stores or other digital contexts like e-commerce and social media.

Moreover, metaverse offers the opportunity to review and strengthen strategic brand development (Bilgihan et al., 2024) through collaboration between luxury fashion brands and retailers. They can run joint

campaigns, launch collections or promotions, optimizing resources, strengthening relationships, and targeting specific territorial and demographic groups, already calibrated by the distributor and the platforms they operate on, thus maximizing results.

6. Conclusion and further research

This study contributes to the growing metaverse research by addressing the crucial aspect of retail in relation to brand experiences in metaverse platforms in the context of luxury fashion. Since the topic is still new and evolving, future research could also explore other retail characteristics, such as assortment, pricing, or aesthetics. Some recent aspects that could be further analyzed include the connection between games and immersive experiences and their link to real benefits, or the artistic features of the metaverse.

As this study adopted a qualitative methodology, it suffers from limitations due to its generalizability. Therefore, the findings of this exploratory research should be verified within the context of more companies, also considering other industries outside of luxury fashion. For example, metaverse could revolutionize the travel and tourism industry by affecting consumer behavior, as well as tourism management and marketing, while creating immersive experiences (Buhalis et al., 2023). Moreover, quantitative approaches that analyze aspects related to sales (e.g., conversion, loyalty) and branding effects (e.g., brand engagement) of metaverse campaigns should be implemented in future research.

From an international perspective, there is still insufficient research on relevant aspects such as international approaches of firms to users from different countries. Consumers may differ in the antecedents and consequences of online shopping (Hu et al., 2023); therefore, future studies should investigate how luxury fashion firms operating in international markets implement their retail strategies, taking into account the specific scenario and cultural characteristics of each market, and how consumers react to these strategies. Segmentation variables allow for an adaptation of contents in digital communication and sales channels, while in the metaverse, it is likely that such categories and segmentation variables will be managed based on the georeferencing of the platform (for example, Roblox for the USA and Zepeto for Asia). It is also possible that, on virtual platforms, international users will be identified more by variables other than geographical ones, such as by behavioral characteristics.

Finally, further studies could address diversity, equity, and inclusion, as these have become central elements of sustainable strategies for luxury brands, also in the context of the metaverse. Indeed, users tend to project their identities with an additional level of expression in the metaverse, often surpassing traditional boundaries. This raises issues related to gender discrimination, cultural appropriation, and identity, especially in virtual domains (Chrimes and Boardman, 2023).

CRediT authorship contribution statement

Lala Hu: Writing – review & editing, Writing – original draft, Visualization, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Validation, Conceptualization. **Mirko Olivieri:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Marta Giovannetti:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Elena Cedrola:** Writing – review & editing, Writing – original draft, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors have no relevant interest(s) to disclose.

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Data availability

The data that has been used is confidential.

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