

# **Enhancing Customer Experiences: A Holistic Brand Strategy Framework in the Metaverse**

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#### Abstract

The metaverse, dubbed the "new version of the digital world," promises to fundamentally transform how customers interact with brands. This study regards the metaverse brand experience as a strategic resource initiated by organizations and analyzes how organizations manage brand experiences through metaverse technologies. Based on interviews with eight managers from different firms and 45 articles related to metaverse brand strategy from two industry platforms, a three-faceted, holistic metaverse brand strategy framework emerges: metaverse brand strategy drivers differentiate between internal and external factors, routes to enhance brand experiences refer to stimulating customer-system and customer-customer interactions, and metaverse brand experience value explains the transformation of brand relationships. This study contributes to the literature on digital marketing by providing theoretical insights into metaverse-mediated brand experiences.

Keywords: Brand experience; Brand strategy drivers; Experience value; Metaverse

# 1. Introduction

The year 2021 is regarded as the dawn of the metaverse era. As a global social media giant, Facebook rebranded itself as Meta and identified metaverse technology as crucial to the future of digital advertising. This transformation rapidly spread from the United States to China, where tech leaders launched their own metaverse platforms: Baidu introduced Xirang, while Alibaba unveiled Yuanjing—both offering brands immersive services such as 3D product displays and virtual launch events. Meanwhile, automotive brands partnered with Honnverse to create virtual experience centers; Snow Beer hosted virtual parties via WeChat mini-programs; and various brands widely adopted NFTs. The metaverse is considered Internet 3.0, wherein the media, information, customers, and the uniqueness of responses fundamentally alter brand promotion strategies and customer-advertisement interactions (Kim, 2021). While the metaverse's potential remains underexplored, it is expected to evolve into a fully functional virtual universe that bridges businesses and customers (Barrera & Shah, 2023).

Enhancing user experience is the core goal of metaverse applications. Metaverse platforms are virtual spaces that have emerged as a recent avenue for brands to promote digital products and offer unique brand experiences (Ki et al., 2025). Additionally, the metaverse has become a pivotal space for socialization and experimentation among young and emerging audiences (Sidorenko-Bautista et al., 2025).

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Immersive commerce in the metaverse enables brands to offer innovative virtual try-on features for their digital product assets, providing consumers with unique experiences that extend their digital visibility (Koohang et al., 2023). The metaverse transforms customer experiences by allowing them to navigate immersive virtual spaces and interact with various digital agents (e.g., peers, retail staff, and virtual influencers) via customized avatars (Joel-Edgar et al., 2025). Users demonstrate significantly higher engagement durations in gamified environments than on traditional e-commerce platforms. By harnessing the power of gamification, brands can foster deeper, more meaningful interactions that transcend the transactional nature of traditional e-commerce (Arya et al., 2024). Within brand metaverse communities, users can adopt various roles (e.g., business owner, designer, or architect) regardless of their formal qualifications. Metaverse-based product displays, virtual events, and digital storefronts enable customers to experience brands immersively, thereby enhancing brand image, increasing awareness, and deepening knowledge (Payal et al., 2024). It also supports individuals and organizations in co-creating and marketing new products and services (Barrera & Shah, 2023). Collectively, these developments demonstrate that augmented reality (AR), virtual reality (VR), and AI(Artificial Intelligence)-driven platforms can be leveraged to create personalized and impactful brand experiences (Bilgihan et al., 2024).

The widespread adoption of the metaverse by brands has emerged as a significant focus in academic discourse. Several studies have developed theoretical frameworks for metaverse brand marketing, integrating marketing (Kumar et al., 2025), advertising (Ahn et al., 2022), and consumer behavior perspectives (Dwivedi et al., 2023). Other research has conceptually discussed the potential and business opportunities in the metaverse, examining how firms can leverage it to enhance customer experiences across industries (Golf-Papez et al., 2022). Park and Lim (2023) identified marketing strategies employed by fashion companies in the metaverse through thematic analysis; they advocated for further research on metaverse brand strategy. Building on this, our study extends the theoretical framework of brand strategy by addressing (Kshetri, 2022) call for brand experience studies in the metaverse.

To advance understanding of experience-centric brand strategy in the metaverse, this study examines the following research question:

RQ: How do firms leverage metaverse brand strategies to enhance customer experiences?

Based on in-depth interviews with eight marketing managers across diverse companies and 45 articles related to metaverse marketing cases, this study proposes a comprehensive metaverse brand strategy framework comprising three core facets (metaverse brand strategy drivers, routes to enhance brand experiences, and brand experience value). This study contributes to the emerging research on virtual experience (Trabelsi-Zoghlami & Touzani, 2019) and enriches the literature on metaverse brand strategy in marketing (Park & Lim, 2023). Moreover, the study builds on the premise that firm-customer interactions enhance brand experiences, consistent with metaverse engagement research (Payal et al., 2024).

## 2. Literature review and research framework development

# 2.1 The definition of the metaverse

There is no general consensus on the precise scope or definition of the metaverse. 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 virtual world. The commonly discussed metaverse is a virtual world resembling the real world, enabling users' interactions (Dwivedi et al., 2022). Similarly, it is conceptualized as a persistent network of real-time rendered 3D spaces that

maintain continuity of identity and objects. Three key advancements distinguish the current metaverse from earlier versions like Second Life: (1) the new metaverse is more natural and immersive than its predecessors; (2) the current metaverse uses mobile devices to increase accessibility and continuity; and (3) the modern metaverse emerges from the convergence of multiple technological building blocks, including networks, computing, 3D modeling, Internet of Things (IoT), Artificial Intelligence (AI), blockchains, XR (extended reality), and interface devices (Barrera & Shah, 2023).

Other scholars, such as Dwivedi et al. (2023), conceptualize the metaverse as an interconnected, immersive ecosystem where the boundaries between virtual and real worlds are indistinguishable, enabling interaction and socialization through avatars within simulated shared experiences. Hollensen et al. (2022) describe the metaverse as a 3D digital space where users can interact with other participants and virtual surroundings, allowing continuous engagement rather than temporary visits.

Barrera and Shah (2023) define the metaverse as a technology-mediated network of scalable, interoperable extended reality environments that merge physical and virtual realities, offering immersive, high-fidelity, and sociable experiences. Within this definition, scholars identify three key elements of brand experience strategy in the metaverse: the immersiveness, which emphasizes the degree to which virtual elements are integrated with real-world elements as perceived by users. Environmental fidelity refers to the extent of similarity between the metaverse and the real-world environment in terms of physical and functional characteristics (Hu et al., 2025). Sociability in the metaverse is defined as an environment that is perceived to be capable of facilitating social space, and it primarily emerges through humans' actions and activities (Sprott et al., 2025).

Additionally, Patil et al. (2025) focus on metaverse characteristics that drive immersive consumer engagement with products and services, including autonomy, authenticity, interactivity, informativeness, vividness, and virtuality. Similarly, affordance is a user's subjective interpretation of the function(s) of a given technology and perceptions about what the technology allows them to do. Building on this, Dincelli and Yayla (2022) identify five focal affordances of immersive VR, including embodiment, navigability, senseability, interactivity, and creativity.

In conclusion, this study supports the view that the evolution toward a highly decentralized metaverse has yet to be fully realized, and characterizes the current stage of metaverse development as a "transitory metaverse", which is designed to simulate real-world activities within a 3D virtual space (Yoo et al., 2023). Further, the metaverse is not simply a replica of real-world society; it coalesces the digital and real worlds, enabling users to engage, immerse, communicate, socialize, play, and create in a shared virtual environment through digital avatars and objects (Eggenschwiler et al., 2024).

# 2.2 Metaverse adoption to enhance brand experience

Holbrook and Hirschman (1982) theorize that consumption has experiential aspects that have led to the introduction of the experience economy. Experiential marketing treats customers as rational and emotional beings that sense, feel, think, act, and relate (Schmitt, 1999). Brakus et al. (2009) conceptualize brand experience as subjective, internal customer responses that are triggered by diverse brand-related stimuli, including the consumption of a brand's products, a brand's store, events, and its brand communications.

Customer experience, influenced by brand-related stimuli, is a critical strategic resource for firms and plays a vital role in shaping competitive advantage (Sharma & Dutta, 2023). For instance, brand experience has the potential to deepen brand connections, build strong brands, and transcend traditional transactional relationships, such as enhancing brand loyalty (Huang, 2017), two-way communications,

and emotional exchange (Kumar & Kaushik, 2020). In practice, companies can shape the customer experiences primarily through service design (Motta-Filho, 2021) and touchpoint management (Alexander et al., 2025).

Park and Lim (2023) provide a typology of current marketing strategies of fashion brands in the metaverse, including those involving NFTs, games, virtual worlds, and immersive technologies. In the NFT domain, brands are actively launching NFTs in various forms, such as digital products, brand experiences, and game characters. Lee et al. (2023) find that NFT attributes, including scarcity, financial value, prestige, uniqueness, originality, and communication consistency-promote favorable brand attitudes. In gaming and virtual worlds, gamification refers to applying game elements to non-game contexts to engage users (Zhao et al., 2022). Brands are increasingly adopting gamification strategies, such as digital rewards, avatars, and product customization, to boost customer engagement in virtual environments (Shi et al., 2022). Within immersive technologies, AR and VR have emerged as dominant modalities, enabling key functionalities such as virtual try-ons, virtual showrooms and phygital launch events.

As previously stated, interactivity is a foundational attribute of the metaverse (Kim et al., 2023). Morrison and Crane (2007) argue that any interaction creates an experience for the customer, whether the organization is in the business of experiential offerings or not. McMillan and Hwang (2002) categorize interactivity into three types: user-to-content, user-to-user, and user-to-system, each contributing uniquely to brand experiences in both physical and digital contexts. In the metaverse environment, these interactivity types have evolved with new features, particularly in user-to-user and user-to-system interactions, which fundamentally enrich brand experiences. User-to-user interactivity emphasizes so-ciability and virtual connectedness. Specifically, the social presence generated by avatars in the metaverse reflects aspects of both human social presence (i.e., the actions taken by its human user) and automated social presence (i.e., the avatar's embodiment or appearance, design, and the character that these emit) (Sprott et al., 2025). Based on this, the sociability of metaverse brand communications functionally resembles physical-world brand interactions. User-to-system interactivity leverages technical features (e.g., manipulating 3D assets or virtual try-ons) to enrich customer experiences. Collectively, these interactivity types enable metaverse brand communication and marketing—through social activities, games, concerts, or test drives—to create enriching, immersive experiences.

## 2.3 Development of research framework for metaverse brand strategy

The metaverse is regarded as an opportunity for organizations, as they can benefit from the affordances of immersive VR to provide richer and personalized user experiences (Dincelli & Yayla, 2022). Despite growing practitioner adoption, academic research on metaverse brand strategy remains nascent. Several recent studies have identified specific branding strategies that utilize metaverse technologies to cultivate favorable brand relationships. However, the extant metaverse brand strategy research presents fragmented findings, highlighting the need for further investigation. No research has explored the role of customer experience at each stage of metaverse brand strategy and which experiential dimensions are the most salient (Hadi et al., 2024). To systematically investigate the role of the metaverse brand strategy in enhancing customer experiences, this study employs a holistic perspective.

The brand strategy framework in this study comprises three key stages (pre-experience, experience generation and post-experience). At the pre-experience stage, complex factors influence enterprises' adoption of metaverse technology. The metaverse provides an ideal space to foster innovation, which is itself an outcome of innovation (Kahn, 2018). Shankar et al. (2025) reveal that organizational readiness,

facilitating conditions, performance expectancy, and normative and mimetic pressures are significantly associated with enterprise adoption. Hatane et al. (2023) find that the perception of external control and the perceived usefulness of metaverse significantly influence the adoption intention of the metaverse among internal auditors. The pre-experience stage involves a complex decision-making process, requiring organizations to identify needs, gather information, and assess risks. In the metaverse, at the experience generation stage, firms develop innovative brand virtual experience scenarios and integrate various touchpoints to create enriching, personalized, and engaging customer experiences. The post-experience stage—pertaining to the evaluation of metaverse brand strategy outcomes—is conceptualized in this study as a phase of customer value exploration and relationship development (Yoo et al., 2023).

Figure 1 depicts the metaverse brand strategy framework, which draws upon the fields included in our literature review and the dataset. This conceptual framework serves as the foundation for subsequent analytical phases.

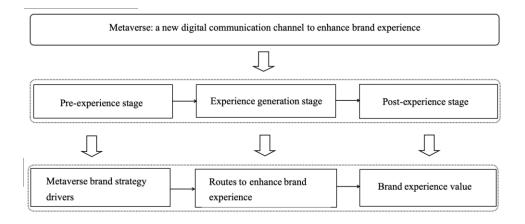


Figure 1. A Holistic Metaverse Brand Strategy Framework

# 3. Methodology

In the new research areas with insufficient empirical studies, a discovery-oriented approach is appropriate (Park & Lim, 2023). Braun and Clarke's (2006) thematic analysis was employed to identify, analyze, and report patterns (themes) within data. The approach is particularly suitable for preliminary exploratory research involving theme discovery and theoretical framework development. Moreover, thematic analysis demonstrates notable methodological inclusiveness, enabling systematic pattern identification across heterogeneous datasets (including interviews, focus groups, or texts) (Braun & Clarke, 2006).

# 3.1 Data collection

The data for this study are composed of two parts: semi-structured interview data and metaverse brand communication cases. Purposeful sampling was employed to recruit practitioners with professional expertise, enabling a thorough investigation of the research topic (Suri, 2011). We recruited informants based on dual criteria: (1) familiarity with metaverse technologies, and (2) engagement in the formulation or implementation of metaverse brand strategies. Table 1 provides the descriptive data of the sample.

#	Key informants' role	Organization	Gender	Coun-
				try
1	Independent Director	Metaverse marketing company	М	China
2	Chief Operating Officer	Digital marketing company	М	China
3	Metaverse Busines Executive	Digital marketing company	М	China
4	Chief Executive Officer	Digital collectible launching company	F	China
5	Chief Executive Officer	Metaverse marketing company	М	China
6	Chief Executive Officer	Digital brand consulting company	М	China
7	Chief Operating Officer	Digital marketing company	М	China
8	Chief Executive Officer	Digital brand consulting company	М	China

### Table 1. List of Key Informants

Managers from eight firms in China articulated their perspectives of metaverse brand strategy through semi-structured interviews. All interviews were conducted remotely by experienced advertising researchers through video conferencing from March to August 2022, with each session lasting between 40 and 80 minutes. Two researchers participated in each interview, took field notes, recorded the sessions, and probed responses based on the predefined interview protocol. Aligned with the research objectives, we formulated two core open-ended questions:

1. What metaverse technologies have your company or others employed to engage customers?

2. How are these technologies implemented in metaverse brand communication activities? Please provide detailed examples.

Rather than focusing on an effective description of a single phenomenon (Varpio et al., 2017), this study collected industry-sourced secondary data on metaverse brand cases to capture diverse perspectives. We retrieved secondary data from Chinese industry platforms—DIGITALING and Guanggaomen. We selected the two platforms as primary sources of data for three reasons. First, their articles focus on leading companies in China's metaverse marketing field. Second, they investigate novel brand strategy implementations in metaverse contexts. Third, articles cover practitioners' first-hand observations and reflective analyses of brand practices. After implementing a systematic screening process to exclude publications irrelevant to metaverse brand strategies, this study retained 45 articles as the primary dataset for this study.

#### 3.2 Data analysis

Thematic analysis was employed in the analysis phase. The process included six steps: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report (Kiger & Varpio, 2020). This study adopted an inductive approach to theme identification; it derived themes from the researcher's data (Braun & Clarke, 2006). Since these themes are data driven, they might not mirror the exact questions asked of participants (e.g. if participants veered off topic) (Kiger & Varpio, 2020). The data structure (Figure 2) illustrates a progression

from first-order concepts to final themes. To gain an interpretation, we added key quotes to exemplify themes and enhance understanding (Crick, 2021).

The credibility and internal validity of the findings were enhanced through three key measures: (1) involving multiple researchers in the coding process to ensure intercoder reliability, (2) establishing a high level of coding agreement through iterative discussions, and (3) reaching data saturation during the analysis phase (Miles & Huberman, 1994).

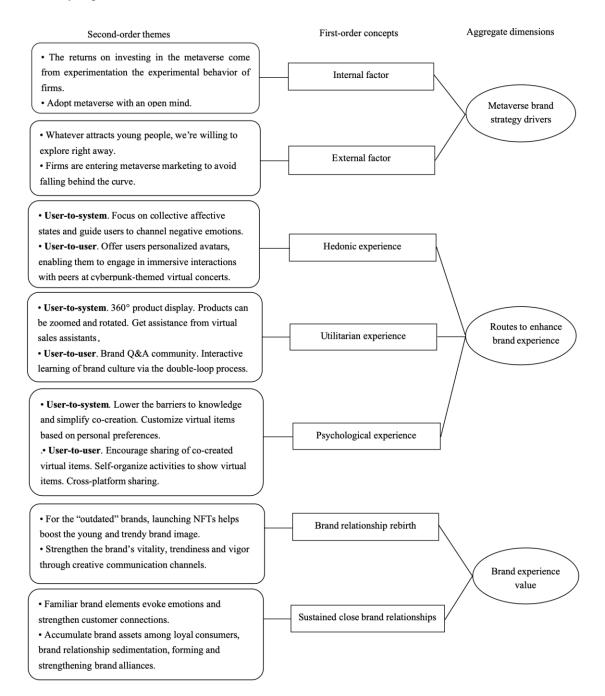


Figure 2. Data Structure

# 4. Findings

This study identifies three aggregate dimensions that highlight how firms enhance customer experiences with brand strategies involving the metaverse.

# 4.1 Metaverse brand strategy drivers

The internal driving factor is open organizational culture. Organizational culture is a relatively stable determinant that influences an organization's performance (Zheng et al., 2010). Scholars advocating modernist perspectives emphasize that cultures exhibiting openness, transparency, authenticity, and risk tolerance constitute critical enablers for organizational technology adoption (Felix et al., 2017). Metaverse technology demonstrates significant potential to enhance both user experience and brand equity. Within competitive technology markets, organizations that successfully leverage metaverse platforms to create novel customer experiences consistently exhibit a defining characteristic: an innovation-supportive culture (conceptualized in this study as open organizational culture). Adopting metaverse brand strategies entails significant risks due to market information asymmetry and potential loss of control in customer-brand interactions. However, key informants highlighted how an open organizational culture confers multidimensional advantages—particularly in cultivating lateral thinking and cognitive flexibility. Under conditions of uncertainty, culture-supported firms demonstrate higher error tolerance coupled with proactive customer insight generation, frequently yielding serendipitous innovation outcomes.

The current returns on investments in metaverse mainly stem from the experiences gained through testing. After all, true knowledge comes from practice. Making necessary strategic investments now will enable firms to reap the rewards when the metaverse reaches maturity.

(Article 26)

Normative pressure represents exogenous forces accelerating metaverse adoption. Key informants consistently identified evolving customer expectations for immersive, interactive brand communications as the primary driver of corporate metaverse investments. This trend proves particularly salient for Generation Z, a digital-native cohort demonstrating innate proficiency in navigating a hybrid digital-physical ecosystem. Adopting metaverse technologies to transform low-interactivity marketing models can effectively enhance brand awareness and facilitate brand identity construction among this demographic.

Brands entering the metaverse are making a statement...We are willing to be among the first to explore and experiment with any communication approach that resonates with young consumers.

(Article 2)

In the metaverse, firms must engage with emerging audience segments through innovative interaction paradigms and cultivate novel social engagement formats to establish or reinforce brand identity.

(Article 5)

While most firms recognized that the metaverse's current market traction primarily stems from social media amplification, its rapid evolution into a foundational customer engagement paradigm has generated mounting institutional pressures. This normative shift has compelled market participants to initiate strategic adaptations.

Brands use metaverse as a way to get ahead of future trends to better step into the zeitgeist.

(Article 24)

4.2 Routes to enhance brand experiences

4.2.1 Hedonic brand experience

Users predominantly engage with virtual worlds for entertainment, excitement, and relaxation, motivated by reality-escapism desires. This study classifies hedonic experiential design into two distinct pathways: channeling negative affect and eliciting positive emotion.

User-to-system The first approach focuses on facilitating negative affect regulation. Such affect is often concealed—whether intentionally or unintentionally—due to cultural norms, individual traits, and external feedback. Key informants highlighted their systematic design for monitoring and channeling collective negative affect. In branded virtual environments, avatar-mediated interactions enable customer anonymity, serving as outlets for temporary escapism. Users may select interaction modalities that minimize environmental intrusiveness. When experiencing comfort and relaxation, customers demonstrate greater willingness to disclose and alleviate negative emotions.

Our firm has noticed the emotional anxiety and pressure behind the seemingly "giving up" attitude of the young generation in the current social environment. Accordingly, in the store, we designed a photo area for introverts (I-types) and a dance machine for extroverts (E-types).

## (Article 2)

User-to-user Hedonic factors (e.g., escapism, pleasure) positively influence users' behavioral intentions by fulfilling core psychological needs (Sung, 2021). Within virtual environments, users are primarily motivated by the pursuit of entertainment, excitement, and relaxation (Bleize & Antheunis, 2019). These digital spaces enable anonymous interactions and imaginative social engagement, often facilitating greater behavioral freedom than physical-world counterparts (Mogaji et al., 2023). Most key informants acknowledged that current metaverse applications predominantly deliver awe-inspiring, immersive, and entertainment-centric experiences.

For brands, the near-term opportunity in the metaverse space lies in surprising and delighting customers in the process of consumption.

#### (Article 24)

In virtual brand activities, user avatars (designed with emotional expressiveness) become visible to all participants, enabling real-time observation of peer avatars' facial expressions, body language, and interactive behaviors. This perceptual stimulation triggers both conscious imitation and subconscious mimicry among users. Through such avatar-mediated interactions, pleasant emotions propagate through the group, ultimately establishing collective emotional synchrony.

Players can seamlessly toggle between "Pure Enjoyment Mode" and "Interaction Mode" through their digital avatars. In Pure Enjoyment Mode, optimal viewing angles enable complete immersion in the audiovisual spectacle. Interaction Mode permits unrestricted virtual space exploration, element visibility control, and real-time socialization/dancing with other attendees.

# (Article 11)

Compared with asynchronous attention, synchronous shared attention (that is, multiple individuals focusing on the same event simultaneously) will give rise to stronger emotional reactions, stronger memories of the event, and greater behavioral changes (Shteynberg, 2015).

#### 4.2.2 Utilitarian brand experience

In the metaverse environment, utility value is operationalized as users' comprehensive satisfaction and derived experiential benefits (Koronaki et al., 2023). Enhancing utilitarian experience serves as an effective mechanism to motivate customer exploration of virtual brand ecosystems, thereby improving brand information assimilation. User-to-system Organizations strategically guide users in acquiring product knowledge and brand information—including physical attributes and application techniques—to satisfy informational needs for optimal product utilization. Many corporations have established virtual brand experience centers enabling customer interaction with 3D product models through zooming, rotation, and scenario-based simulations. This immersive interface facilitates detailed examination of product aesthetics, material properties, functional characteristics, and other critical attributes. Furthermore, these virtual stores incorporate augmented reality try-on functionalities. Key informants consistently reported that such embodied experiences substantially decrease product uncertainty while strengthening brand trust. Compared to traditional physical stores, virtual environments support more deliberate and systematic consumer learning processes.

We provide seamless 360° product visualization, enabling customers to inspect its appearance from all angles. Users can virtually disassemble the product to explore its components and functionalities in detail. This resolves common customer queries about appearance and use cases—intuitively and efficiently eliminating doubts.

# (Article 27)

Organizations elevate brand experiences by deploying AI-powered virtual assistants capable of delivering immersive brand tours and providing real-time customer support. These virtual agents incorporate affective expression capabilities that foster emotional connections while stimulating creative, divergent consumer interactions.

The AI partner of automobile brand Changan, "Xiaoan", serves as the intelligent steward in the virtual experience hall. Xiaoan uses its AI-powered voice to deliver announcements, explain rules, and engage guests in live interactions. It seamlessly handles announcements and rule explanations, while actively joining interactive sessions and engaging on-site guests.

(Article 19)

User-to-user To develop customer discernment and enhance brand culture comprehension, organizations present brand heritage through interactive virtual scenarios. Key informants emphasized the strategic value of branded Q&A communities, as these platforms not only provide users with a space for real-time exchange of experiential brand narratives but also facilitate collaborative brand knowledge co-creation. This organizational initiative systematically cultivates an immersive, self-directed environment for brand culture discovery.

The "Brand-Verse" (a brand-centric virtual world) is built on its unique brand DNA and identity, featuring a complete and highly experiential brand narrative. The Xunfeng metaverse provides a communal square for users to connect and discuss.

(Article 32)

As key informants emphasized, metaverse-mediated brand historical immersion (vs. passive advertisement-driven exposure) facilitates: (1) embodied cultural meaning-making, and (2) self-directed competency acquisition—a dual outcome unattainable through conventional media.

User exploration activities include harvesting wheat and sorghum, learning the liquor-making process, and engaging with guides, villagers, master distillers, apprentices, and fulfilling their unique roles.

(Article 32)

4.2.3 Psychological brand experience

Psychological experience is conceptualized as a co-creation design approach that encourages customers to actively explore personalized self-expression and ideal self-definition, ultimately enhancing their identity, self-concept, social status, and interpersonal relationships (Smith & Colgate, 2007). Typical implementations encompass avatar customization, brand ambassador initiatives, and participatory co-design activities—including product development and content sharing.

User-to-system AR and AI technologies generate processable digital content to facilitate brand-customer co-creation processes. Effective guidance of customer self-expression in co-creative design requires an optimal balance of system simplicity, as users tend to disengage when perceived operational complexity exceeds their cognitive thresholds. However, excessive simplification may compromise user engagement and inhibit creative participation.

Many brands have adopted a "one-click generation" approach, leaving customers with only passive participation in co-creation activities.

## (Interviewee 3)

To prevent diminished consumer creativity and engagement, key informants stressed that firms must simultaneously uphold both ease-of-use and utility principles in co-creation system design. The ease principle operates through two ways: (1) appropriately reducing creative process complexity, and (2) implementing intuitive navigation features that mitigate technical barriers in user-generated content production.

In the past, there was a knowledge barrier in co-creation. In the metaverse era, this barrier is disappearing. For example, when users specify their ideal car design, developers supply modular "bricks", which AI then facilitates step-by-step assembly of vehicles.

(Interviewee 3)

The utility principle in co-creation systems empowers users to create virtual goods that embody their personal preferences and identity expression.

Throughout the vehicle customization process, we implemented a series of keyword-selection options aligned with contemporary new energy innovation trends... allowing users to personalize body styles, door configurations, chassis types, and color schemes according to their preferences.

## (Article 26)

User-to-user In the metaverse, organizations stimulate user-generated content sharing to enhance community engagement. Key informants noted that brand community members can access and evaluate peer-designed virtual products, thereby fostering collective responsibility. Further, by enabling user-initiated social interactions (e.g., digital asset exhibitions) within the brand metaverse, firms can reinforce communal bonds while promoting member identity recognition.

In the "Hong Metaverse," users can create personalized digital art spaces. They can utilize wearable digital collectibles to customize their avatars and decorate their virtual homes. Additionally, users can visit others' brand spaces, host social gatherings, and showcase their unique fashion tastes.

(Article 3)

Key informants reported that their organizations incentivize customers to disseminate co-created content across multiple platforms (e.g., social media). Cross-platform sharing behavior that attracts more participants to the brand can boost the sharers' self-efficacy.

#### 4.3 Metaverse brand experience value

In this study, brand experience value is conceptualized as the outcome of meaningful brand-to-customer and customer-to-customer interactions across metaverse branding scenarios. As a

paradigm-shifting digital ecosystem, the metaverse's technological affordances allow firms to innovate and integrate brand touchpoints, thereby fostering immersive and enriching user experiences. Key informants stressed the importance of a dynamic perspective in assessing brand experience value, which manifests in two distinct outcomes: (1) brand relationship rebirth, and (2) sustained close brand relationships.

Brand relationship rebirth refers to the value of metaverse brand strategies in renewing brand image. For brands with outdated images, metaverse technologies serve as an effective conduit to quickly engage Millennials and Generation Z, demographics known for their openness to new technologies and digital platforms. Some key informants highlighted behavioral engagement as the pivotal metric for evaluating experiential value.

For the national time-honored brand to achieve multidimensional engagement with young customers, NFTs serve as one of the most effective digital touchpoints. The brand launched the first NFT digital collectible in the domestic home furnishing industry .....The limited-edition collection of 999 pieces was fully claimed in under two hours. Undoubtedly, the issuance of NFT has enhanced the brand's trendy image and gained more attention and support from young people.

# (Article 14)

Other key informants assessed the value of metaverse brand strategies based on their ability to sustain close brand relationships. Close brand relationships are defined as people's perceptions of connectedness and closeness within a relationship (Sternberg, 1986). Cordova and Scott (2001) argue that intimacy is not based on a single event, but it is based on the accumulation of interactions over time. Key informants identified emotional resonance as a relational governance mechanism. A representative example is Pepsi, which reinforces its "trendsetting" identity through virtual idols (e.g., the Pepsi Family) and metaverse concerts. By strategically deploying familiar brand symbols, companies can maintain brand identity consistency while strengthening brand bonds.

To help young generations find a sense of belonging in new environments, emotional connections through both "human elements" and "tangible symbols" are essential. This approach fosters profound bonds between brands and users... As an integrated space combining community engagement and user interaction, this domain strengthens youth's brand identification and sense of belonging.

#### (Article 11)

Moreover, sustained close brand relationships were described as "perpetuating brand love," "brand relationship sedimentation," "accumulating brand equity," and "forming brand alliances".

# 5. Discussion

This study aims to advance research on brand strategy and customer experiences in the metaverse from an organizational perspective. The findings highlight how the metaverse influences firms' brand strategy, enabling the creation of new communication channels and enhancing customer experiences through interactivity.

In discussing the study results, we respond to the RQ (How do firms enhance customer experiences in brand strategies involving the metaverse ?) by proposing a holistic experience-centric brand strategy framework in the metaverse (Figure 3). Building on Alvarez-Milón et al.'s (2018) model, this study categorizes metaverse brand strategy decision-making into three stages: the pre-experience stage (metaverse brand strategy drivers), the experience generation stage (routes to enhance brand experiences), and the post-experience stage (brand experience value).

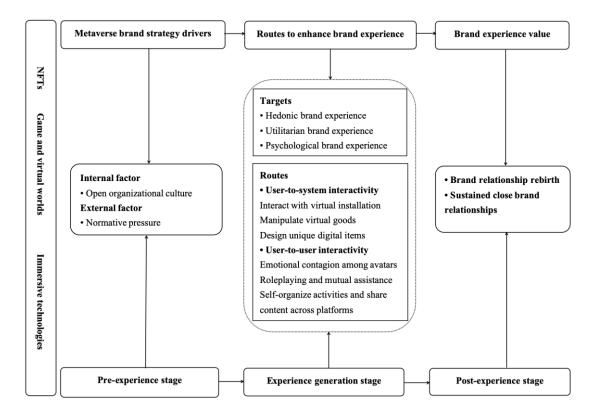


Figure 3. A Holistic Experience-centric Brand Strategy Framework in the Metaverse

## 5.1 Theoretical implications

Significant attention has been directed toward how new technologies are applied to create and integrate brand communication channels and touchpoints. Theoretically, the metaverse represents a paradigm shift from passive consumption to active participation, fostering a profound sense of immersion, interactivity, and personalization, which redefines the consumer experience (Bilgihan et al., 2024). This study employs a qualitative methodology to analyze how metaverse technologies are systematically organized and applied to enhance brand experiences. Our findings contribute to the literature related to the drivers of metaverse brand strategy, the role of interactivity in enhancing brand experience and the value of brand experience.

This study examines metaverse technology adoption from an organizational perspective, focusing on its role in customer experience enhancement. Within the metaverse environment, brands can incorporate elements of rarity, scarcity, personalization, and pleasure to maximize customer experiences and significantly improve brand association, perceived quality, and brand awareness through frequent customer interactions and social sharing (Park & Lim, 2023). Theoretically, this study diverges from prior research by analyzing how metaverse-specific brand strategies enhance three distinct experiential dimensions:

While existing research predominantly focuses on individuals' positive emotions, our findings reveal that the effective channeling and regulation of negative affect can also enhance customer well-being, thereby expanding the theoretical boundaries of hedonic experience research.

In terms of utilitarian experience, customers' virtual goods interactions trigger prior knowledge to process encountered content. This cognitive process leads to a constant reorganization, updating, and refinement of product knowledge. This iterative assimilation process promotes creative product use and helps customers smoothly integrate products into specific usage scenarios. Additionally, when the brand culture experience mode shifts from "storytelling" to "story-experiencing," different interactive contents (text interaction, virtual scene interaction) and methods (one-way communication, two-way interaction) may generate new modes of brand culture absorption. For instance, the information absorption pattern in metaverse brand storytelling is progressive, structured through three interconnected components: concrete learning, in-depth observation, and hands-on practice. This feedback-driven process fosters tangible understanding of brand culture and history.

Regarding psychological experience, reduced technical barriers constitute a necessary but insufficient condition for co-creation satisfaction. Our findings demonstrate that when firms develop deeper insights into customers' knowledge structures and preference patterns, they can design co-creation systems that better harness customer creativity. This study also reveals that sharing co-created works in virtual brand communities facilitates self-identity exploration, expression, and formation in metaverse environments. However, since the visibility of user-designed virtual items may significantly influence brand-related self-identity, future research should further examine how customers' individual characteristics and peer feedback shape this process.

Besides, this study proposes a dynamic framework for evaluating brand experience value in metaverse contexts. Our findings reveal that when brand image is perceived as outdated, organizations tend to prioritize Generation Z engagement through metaverse strategy, thereby shaping youthful and identifiable brand personality. This finding aligns with Kniazeva et al.'s (2024) work. Established brands demonstrate stronger recognition of metaverse strategy's long-term value. Informants noted that organizations leverage familiar brand elements to evoke emotional resonance and enhance a sense of belonging—both being core markers of intimate brand relationships. Synthesizing the empirical evidence, these findings provide both cross-sectional and longitudinal comparative perspectives for research on metaverse brand strategy outcomes.

Interactive experiential design in the metaverse emphasizes the dynamic interplay and systematic coordination of relationships. For instance, both user-to-user and user-to-system interactions facilitate the formation of meaningful social connections and alleviate loneliness in virtual spaces. Our findings significantly contribute to the existing research on the interrelationships between technology adoption, consumer psychology, and marketing strategies (Caporusso, 2023).

## 5.2 Practical implications

While metaverse adoption has progressed beyond the hype cycle's peak, it remains unmatched in creating immersive customer experiences. Metaverse transcends the limitations of the physical world, allowing brands to create virtual merchandise showrooms, host metaverse concerts, gamify experiences to enhance engagement, and deploy brand agents to guide users in exploring brand culture. However, managers still lack clear guidelines in metaverse experience design. This study's findings provide actionable insights to help firms design experiential routes aligned with their strategic objectives.

The findings indicate that the most innovative brands have successfully leveraged metaverse technologies to establish highly interconnected and immersive virtual experiential channels, thus enhancing brand equity. Brands should view their metaverse presence not merely as a short-term tactic, but as a key component of their channel management strategy, prioritizing customer experience (Hu et al., 2025).

The findings of this study demonstrate that a supportive organizational culture serves as a key driver of metaverse adoption. Error-tolerant corporate behaviors contribute to more robust customer feedback acquisition. Firms with higher organizational readiness are better positioned for metaverse adoption; prior assessment of readiness dimensions—infrastructure, processes, and culture (Shankar et al., 2025) —is essential to ensure effective metaverse integration and utilization. This study recommends that firms cultivate proactive environments that encourage experimentation and innovation, thereby unlocking the potential for novel and personalized brand experiences. Normative pressure serves as an external driver for organizational adoption of metaverse brand strategies. In this context, firms should avoid impulsive technology adoption. Prior to the implementation, organizations should conduct systematic assessments of innovation-related resource availability and accessibility.

The findings demonstrate that metaverse brand strategies hold significant potential for enhancing hedonic customer experiences. By hosting large-scale virtual branding events, firms can circumvent the substantial costs and temporal constraints inherent in creating comparable novel entertainment experiences in the physical world.

To strengthen utilitarian brand experiences, minimizing restrictions on virtual goods manipulation encourages user exploratory behaviors. Furthermore, to enhance brand culture comprehension and facilitate brand knowledge absorption, organizations should not only enable user participation in brand storytelling through avatars but also establish structured virtual brand heritage experience communities (e.g., role-playing and Q&A communities).

To facilitate user self-exploration and expression, organizations should mitigate both technical and cognitive barriers in co-creation processes while providing customizable virtual goods. Empirical evidence demonstrates that sharing co-created virtual artifacts reinforces customers' self-identity construction. Nevertheless, marketers must conduct comprehensive assessments of product attributes, privacy considerations, and contextual variables.

As key informants emphasized, cultivating close brand relationships requires longitudinal investment. The brand affect developed through temporal processes demonstrates both endurance and capacity for transformation into future-oriented loyalty.

Despite significant organizational investments in functional virtual brand experiences, persistent customer dissatisfaction remains unaddressed. Researchers have found that the lack of social presence may induce feelings of loneliness in metaverse spaces, and this sense of isolation undermines the potential of the metaverse to deliver its theorized social advantages (Alexander et al., 2025). This study proposes two organizational interventions to mitigate user loneliness in metaverse environments: (1) creating virtual brand communities with integrated Q&A functionalities, and (2) enhancing avatar expressiveness and interaction flexibility. These interventions can strengthen customers' engagement through improved social connectivity.

#### 5.3 Limitations and future research directions

This paper conceptualizes brand relationships as outcomes of metaverse-mediated brand experiences, while addressing practical corporate needs and advancing relationship marketing theory. However, the study's comprehensive evaluation of brand relationship dynamics was limited by data constraints. To extend the boundaries of metaverse brand experience and relationship research, future studies should: (1) conceptualize and operationalize brand relationships (Simon & Tossan, 2018), (2) develop typologies of heterogeneous brand relationships to enable cross-stage intimacy comparisons (Bergner et al., 2023), and (3) investigate how memory systems (e.g., episodic vs. semantic) influence brand equity (Kostyk et al., 2024).

Cross-cultural comparative studies on brand experience strategy remain underdeveloped. Future research could employ comparative frameworks to analyze differences in metaverse adoption strategies between Chinese and Western firms. For example, Chinese firms primarily leverage the metaverse to enhance social media engagement, while Western firms focus on brand equity building. Additionally, Moutai's metaverse recreation of its 1979 brewing scene harnesses collective memory symbolism, while Burberry's virtual customization service embodies brand exclusivity. Subsequent studies ought to investigate how indigenous cultural values shape corporate metaverse branding strategies.

Individuals process information distinctly in augmented reality environments compared to conventional online or physical environments, and some scholars have called for new programs and theories to explain these differential cognitive mechanisms (Hilken et al., 2022).

During early stage technology adoption, experiential designs that significantly deviate from customers' habits risk triggering resistance. For example, Jung et al.'s (2021) research demonstrates that certain types of VR narratives may elicit negative customer responses. Future studies should further investigate contextual moderators, particularly the influence of consumers' daily lifestyle habits on the efficacy of virtual brand narratives.

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# **Data Availability Statement**

The data used to support the findings of this study are available from the corresponding author upon reasonable request.

# **Conflicts of Interest**

The authors declare no conflicts of interest.

# References

Ahn, S. J., Kim, J., & Kim, J. (2022). The bifold triadic relationships framework: A theoretical primer for advertising research in the metaverse. *Journal of Advertising*, 51(5), 592–607. https://doi.org/10.1080/00913367.2022.2111729

Alexander, B., Blazquez, M., & Chrimes, C. (2025). Metaverse retailing and the customer experience journey: A case study approach. *International Journal of Retail & Distribution Management*, 53(4), 364–380. https://doi.org/10.1108/IJRDM-08-2024-0439

Alvarez-Milán, A., Felix, R., Rauschnabel, P. A., & Hinsch, C. (2018). Strategic customer engagement marketing: A decision making framework. *Journal of Business Research*, 92, 61–70. https://doi.org/10.1016/j.jbusres.2018.07.017

Arya, V., Sambyal, R., Sharma, A., & Dwivedi, Y. K. (2024). Brands are calling your AVATAR in metaverse-A study to explore XR-based gamification marketing activities & consumer-based brand

equity in virtual world. *Journal of Consumer Behaviour*, 23(2), 556–585. https://doi.org/10.1002/cb.2214

Barrera, K. G., & Shah, D. (2023). Marketing in the metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420. https://doi.org/1 0.1016/j.jbusres.2022.113420

Bergner, A. S., Hildebrand, C., & Häubl, G. (2023). Machine talk: How verbal embodiment in conversational AI shapes consumer–brand relationships. *Journal of Consumer Research*, 50(4), 742–764. https://doi.org/10.1093/jcr/ucad014

Bilgihan, A., Leong, A. M. W., Okumus, F., & Bai, J. (2024). Proposing a metaverse engagement model for brand development. *Journal of Retailing and Consumer Services*, 78, 103781. https://doi.org/10.1016/j.jretconser.2024.103781

Bleize, D. N. M., & and Antheunis, M. L. (2019). Factors influencing purchase intent in virtual worlds: A review of the literature. *Journal of Marketing Communications*, 25(4), 403–420. https://doi.org/10.1080/13527266.2016.1278028

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 73(3), 52–68. https://doi. org/10.1509/jmkg.73.3.052

Braun, V., & and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Caporusso, N. (2023). Generative Artificial Intelligence and the emergence of creative displacement anxiety: Review. *Research in Psychology and Behavior*, 3(1). https://doi.org/10. 53520/rdpb2023.10795

Cordova, J. V., & Scott, R. L. (2001). Intimacy: A behavioral interpretation. *The Behavior Analyst*, 24(1), 75–86. https://doi.org/10.1007/BF03392020

Crick, J. M. (2021). Qualitative research in marketing: What can academics do better? *Journal of Strategic Marketing*, 29(5), 390–429. https://doi.org/10.1080/0965254X.2020.1743738

Dincelli, E., & Yayla, A. (2022). Immersive virtual reality in the age of the metaverse: A hybrid-narrative review based on the technology affordance perspective. *Journal of Strategic Information Systems*, 31(2), 101717. https://doi.org/10.1016/j.jsis.2022.101717

Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M. K., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D. P., Gustafsson, A., Hinsch, C., Jebabli, I., ... Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 66, 102542. https: //doi.org/10.1016/j.ijinfomgt. 2022. 10 2542

Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., Dutot, V., Felix, R., Filieri, R., Flavian, C., Gustafsson, A., Hinsch, C., Hollensen, S., Jain, V., Kim, J., Krishen, A. S., ... Wirtz, J. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, 40(4), 750–776. https://doi.org/10.1002/mar.21767

Eggenschwiler, M., Linzmajer, M., Roggeveen, A. L., & Rudolph, T. (2024). Retailing in the metaverse: A framework of managerial considerations for success. *Journal of Retailing and Consumer Services*, 79, 103791. https://doi.org/10.1016/j.jretconser. 2024.103791

Felix, R., Rauschnabel, P. A., & Hinsch, C. (2017). Elements of strategic social media marketing: A holistic framework. *Journal of Business Research*, 70, 118–126. https://doi.org/10.1016/j.jbusres.2016.05.001

Golf-Papez, M., Heller, J., Hilken, T., Chylinski, M., de Ruyter, K., Keeling, D. I., & Mahr, D. (2022). Embracing falsity through the metaverse: The case of synthetic customer experiences. *Business Horizons*, 65(6), 739–749. https://doi.org/10.1016/j.bushor.2022.07.007

Hadi, R., Melumad, S., & Park, E. S. (2024). The Metaverse: A new digital frontier for consumer behavior. *Journal of Consumer Psychology*, 34(1), 142–166. https://doi.org/ 10. 1002/jcpy.1356

Hatane, S. E., Sondak, L., Tarigan, J., Kwistianus, H., & Sany, S. (2023). Eyeballing internal auditors' and the firms' intention to adopt metaverse technologies: Case study in Indonesia. *Journal of Financial Reporting and Accounting*, 22(2), 350–365. https://doi.org/10.1108 /JFRA-02-2023-0096

Hilken, T., Chylinski, M., Keeling, D., Heller, J., de Ruyter, K., & Mahr, D. (2022). How to strategically choose or combine augmented and virtual reality for improved online experiential retailing. *Psychology & Marketing*, 39(3), 495–507. https://doi.org/10.1002/ mar. 21600

Holbrook, M., & Hirschman, E. (1982). The experiential aspects of consumption—consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132–140. https://doi.org/10.1086/208906

Hollensen, S., Kotler, P., & Opresnik, M. O. (2022). Metaverse-the new marketing universe. *Journal of Business Strategy*, 44(3), 119–125. https://doi.org/10.1108/ JBS -01 -2022-0014

Hu, L., Olivieri, M., Giovannetti, M., & Cedrola, E. (2025). The retail strategies of luxury fashion firms in the metaverse: Enhancing brand experiences. *Journal of Retailing and Consumer Services*, 84, 104202. https://doi.org/10.1016/j.jretconser.2024.104202

Huang, C.-C. (2017). The impacts of brand experiences on brand loyalty: Mediators of brand love and trust. *Management Decision*, 55(5), 915–934. https://doi.org/ 10.1108/ MD-10-2015 - 0465

Joel-Edgar, S., Chowdhury, S., Nagy, P., & Ren, S. (2025). Virtual influencers in social media versus the metaverse: Mind perception, blame judgements and brand trust. *Journal of Business Research*, 189, 115139. https://doi.org/10.1016/j.jbusres.2024.115139

Jung, J., Yu, J., Seo, Y., & Ko, E. (2021). Consumer experiences of virtual reality: Insights from VR luxury brand fashion shows. *Journal of Business Research*, 130, 517–524. https://doi.org/10.1016/j.jbusres.2019.10.038

Kahn, K. B. (2018). Understanding innovation. *Business Horizons*, 61(3), 453–460. https://doi.org/10.1016/j.bushor.2018.01.011 Ki, C.-W., Chong, S. M., Aw, E. C.-X., Lam, M. M.-L., & Wong, C. W. Y. (2025). Metaverse consumer behavior: Investigating factors driving consumer participation in the transitory metaverse, avatar personalization, and digital fashion adoption. *Journal of Retailing and Consumer Services*, 82, 104094. https://doi.org/10.1016/j.jretconser.2024.104094

Kiger, M. E., & and Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846–854. https://doi.org/10.1080/0142159X.2020.1755030

Kim, D. Y., Lee, H. K., & Chung, K. (2023). Avatar-mediated experience in the metaverse: The impact of avatar realism on user-avatar relationship. *Journal of Retailing and Consumer Services*, 73, 103382. https://doi.org/10.1016/j.jretconser.2023.103382

Kim, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141–144. https://doi.org/ 10.1080/ 15252019. 2021.2001273

Kniazeva, M., Aiello, G., Dasmi, C., Mazzoli, V., Nechaeva, O., & Syed, F. U. (2024). Why fashion brands enter the metaverse: Exploring the motivations of fast fashion and luxury fashion brands. *Journal of Global Fashion Marketing*, 15(1), 62–89. https://doi.org/ 10. 1080/20932685.2023.2269952

Koohang, A., Nord, J. H., Ooi, K.-B., Tan, G. W.-H., Al-Emran, M., Aw, E. C.-X., Baabdullah, A. M., Buhalis, D., Cham, T.-H., Dennis, C., Dutot, V., Dwivedi, Y. K., Hughes, L., Mogaji, E., Pandey, N., Phau, I., Raman, R., Sharma, A., Sigala, M., ... Wong, L.-W. (2023). Shaping the metaverse into Reality: A holistic multidisciplinary understanding of opportunities, challenges, and avenues for future investigation. *Journal of Computer Information Systems*, 63(3), 735–765. https://doi.org/10.1080/08874417.2023.2165197

Koronaki, E., Vlachvei, A., & Panopoulos, A. (2023). Managing the online customer experience and subsequent consumer responses across the customer journey: A review and future research agenda. *Electronic Commerce Research and Applications*, 58, 101242. https://doi.org/10.1016/j.elerap.2023.101242

Kostyk, A., Cowan, K., Dessart, L., & Schyns, M. (2024). Memories of tourism brands in virtual reality. *Annals of Tourism Research*, 109, 103824. https://doi.org/ 10.1016/ j.annals. 2024.103824

Kshetri, N. (2022). Web 3.0 and the metaverse shaping organizations' brand and product strategies. *IT Professional*, 24(2), 11–15. https://doi.org/10.1109/MITP.2022.3157206

Kumar, R., Aneja, P., Jadaun, R., Kiran, P. B. N., Saxena, N., Saxena, S., Singh, P. K., & Painoli, A. K. (2025). Metaverse marketing: A review and future research agenda. *Information Discovery and Delivery*. https://doi.org/10.1108/IDD-05-2024-0066

Kumar, V., & Kaushik, A. K. (2020). Building consumer–brand relationships through brand experience and brand identification. *Journal of Strategic Marketing*, 28(1), 39–59. https://doi. org/10.1080/0965254X.2018.1482945

Lee, C. T., Ho, T.-Y., & Xie, H.-H. (2023). Building brand engagement in metaverse commerce: The role of branded non-fungible toekns (BNFTs). *Electronic Commerce Research and Applications*, 58, 101248. https://doi.org/10.1016/j.elerap.2023.101248

McMillan, S. J., & Hwang, J. S. (2002). Measures of perceived interactivity: An exploration of the role of direction of communication, user control, and time in shaping perceptions of interactivity. *Journal of Advertising*, 31(3), 29–42. https://doi.org/10.1080/00913367. 2002. 1067 3674

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook, 2nd ed.* Sage Publications, Inc. https://books.google.co.kr/books?id=O3WZL-33\_zYC

Mogaji, E., Wirtz, J., Belk, R. W., & Dwivedi, Y. K. (2023). Immersive time (ImT): Conceptualizing time spent in the metaverse. *International Journal of Information Management*, 72, 102659. https://doi.org/10.1016/j.ijinfomgt.2023.102659

Morrison, S., & Crane, F. G. (2007). Building the service brand by creating and managing an emotional brand experience. *Journal of Brand Management*, 14(5), 410–421. https://doi.org/10.1057/palgrave.bm.2550080

Motta-Filho, M. A. (2021). Brand experience manual: Bridging the gap between brand strategy and customer experience. *Review of Managerial Science*, 15(5), 1173–1204. https://doi. org/10.1007/s11846-020-00399-9

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

Patil, K. P., Paul, J., Bharathi, S. V., & Pramod, D. (2025). Unveiling the metaverse retail environments: Understanding consumer gratifications and buying behavior. *Journal of Research in Interactive Marketing*. https://doi.org/10.1108/JRIM-07-2024-0326

Payal, R., Sharma, N., & Dwivedi, Y. K. (2024). Unlocking the impact of brand engagement in the metaverse on Real-World purchase intentions: Analyzing pre-adoption behavior in a futuristic technology platform. *Electronic Commerce Research and Applications*, 65, 101381. https://doi.org/10.1016/j.elerap.2024.101381

Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1–3), 53–67. https://doi.org/10.1362/026725799784870496

Shankar, A., Gupta, R., Kumar, A., Biswas, B., & Rathore, B. (2025). Exploring the adoption of enterprise metaverse in Business-to-Business (B2B) organisations. *Industrial Marketing Management*, 124, 224–238. https://doi.org/ 10.1016/ j.indmarman. 2024. 11.017

Sharma, N., & Dutta, N. (2023). Omnichannel retailing: Exploring future research avenues in retail marketing and distribution management. *International Journal of Retail & Distribution Management*, 51(7), 894–919. https://doi.org/10.1108/ IJRDM -05 - 2022-0166

Shi, S., Leung, W. K. S., & Munelli, F. (2022). Gamification in OTA platforms: A mixed-methods research involving online shopping carnival. *Tourism Management*, 88, 104426. https://doi.org/10.1016/j.tourman.2021.104426

Shteynberg, G. (2015). Shared attention. *Perspectives on Psychological Science*, 10(5), 579–590. https://doi.org/10.1177/1745691615589104 Sidorenko-Bautista, P., Castillo-Abdul ,Bárbara, Herranz-de-la-Casa, José-María, & and Abellán-Hernández, M. (2025). Marketing, advertising, and branding in Fortnite: How do brands and companies connect today to audiences through the metaverse? *Cogent Social Sciences*, 11(1), 2458058. https://doi.org/10.1080/23311886.2025.2458058

Simon, F., & Tossan, V. (2018). Does brand-consumer social sharing matter? A relational framework of customer engagement to brand-hosted social media. *Journal of Business Research*, 85, 175–184. https://doi.org/10.1016/j.jbusres.2017.12.050

Smith, J. B., & and Colgate, M. (2007). Customer value creation: A practical framework. *Journal of Marketing Theory and Practice*, 15(1), 7–23. https://doi.org/ 10.2753/ MTP 10 69-6679150101

Sprott, D. E., Hollebeek, L. D., Sigurdsson, V., Clark, M. K., & Urbonavicius, S. (2025). Avatars' phygital social presence in the metaverse: An engaged theory perspective. *Psychology & Marketing*. https://doi.org/10.1002/mar.22191

Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, 93(2), 119–135. https://doi.org/10.1037/0033-295X.93.2.119

Sung, E. (2021). The effects of augmented reality mobile app advertising: Viral marketing via shared social experience. *Journal of Business Research*, 122, 75–87. https://doi.org/10. 1016/j.jbusres.2020.08.034

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63–75. https://doi.org/10.3316/QRJ1102063

Trabelsi-Zoghlami, A., & Touzani, M. (2019). How real are virtual experiences? For a better understanding of virtual experiences and their impact on consumers' real life. *European Journal of Marketing*, 53(8), 1612–1636. https://doi.org/10.1108/EJM-10-2017-0776

Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: Problematising thematic emergence, triangulation, saturation and member checking. *Medical Education*, 51(1), 40–50. https://doi.org/10.1111/medu.13124

Yoo, K., Welden, R., Hewett, K., & Haenlein, M. (2023). The merchants of meta: A research agenda to understand the future of retailing in the metaverse. *Journal of Retailing*, 99(2), 173–192. https://doi.org/10.1016/j.jretai.2023.02.002

Zhao, Y., Jiang, J., Chen, Y., Liu, R., Yang, Y., Xue, X., & Chen, S. (2022). Metaverse: Perspectives from graphics, interactions and visualization. *Visual Informatics*, 6(1), 56–67. https://doi.org/10.1016/j.visinf.2022.03.002

Zheng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63(7), 763–771. https://doi.org/10.1016/j.jbusres.2009.06.005