



Research Article

Rethinking the Brand-Influencer-Consumer Relationship in the Metaverse Era: Toward New Dynamics of Co-Constructed Engagement

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Article Information

Article History

Received: 26 September 2025

Revised: 10 November 2025

Accepted: 28 December 2025

Published online: 17 January 2026

Keywords

Metaverse

Brand-Influencer-Consumer

Relationship

Immersive Experiences

Value Co-Creation

Co-Constructed Engagement

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Abstract

The rise of Web 3.0, immersive technologies, and the metaverse has profoundly transformed influencer marketing. Beyond the traditional formats developed in digital social networks, relationships between brands, influencers, and consumers are being redefined in 3D virtual environments, where immersion, co-creation, and storytelling are emerging as key drivers of engagement. Through a literature review, case analyses, and observation of emerging technological trends, this article aims to explore how the metaverse is reconfiguring the tripartite relational dynamics of influencer marketing and to establish a strategic framework for the development of lasting tripartite relationships in the metaverse. The research highlights three major developments : the role of brands as architects of immersive experiences ; the transformation of influencers into avatar figures with experiential influence ; and the emergence of the consumer-actor, involved in the active co-creation of value. These developments have led to new relational dynamics, including a shift from content-based marketing to interaction-driven marketing, a reconfiguration of trust-building methods, and the emergence of new metrics to measure engagement. The proposed strategic framework includes five essential steps : establishing an ethical foundation, ensuring strategic alignment, governing tripartite relationships, creating shared engagement, and steering through listening and flexibility. Brand managers working in the metaverse are now called upon to rethink their immersive strategies to make them more participatory and ethical, in order to respond to contemporary consumers' quest for authenticity, transparency, and co-constructed experiences.

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I. INTRODUCTION

Today, the metaverse is emerging as a technological innovation likely to disrupt traditional modes of communication, interaction, and consumption (Saridakis *et al.*, 2024; Brenk *et al.*, 2025). Although still evolving, this technology is attracting growing interest among both companies and marketing researchers because it allows for the creation of immersive, interactive, and persistent environments where social and market experiences intersect seamlessly. Weinberger (2022) defines the metaverse as an interconnected network of ubiquitous virtual worlds that enrich and extend the physical world. This network opens the way for new interactions between brands, influencers, and consumers. In this context, influencer marketing-previously practiced mainly on traditional social networks (Instagram, YouTube, TikTok, etc.) -is undergoing a complete transformation. The emergence of Web 3.0, the rise of digital

avatars, the democratization of NFTs (Non-Fungible Tokens) (Sornoza Parrales & Batbayar, 2022), and the growing design of immersive 3D environments are reshaping the rules of the game. Brands are now able to organize immersive campaigns in which influencers co-create virtual experiences with their audiences, such as sports training in virtual reality, 3D showroom visits, exclusive concerts, or NFT-based events. These experiences elicit an unprecedented degree of engagement and personalization while reshaping the traditional relational dynamics of influencer marketing. In the metaverse, influencers are no longer limited to sharing visual or verbal content; they become vectors of immersion (Routray, 2025), capable of accompanying consumers through scripted virtual universes. Consumers, in turn, are no longer passive recipients of messages and recommendations but become active participants in the experience: they

interact, explore, personalize, and co-create (Chakraborty *et al.*, 2025). The immersive experience is thus co-created, breaking with classical consumption logics and blurring the boundaries between entertainment, advertising, and commercial relationships. In this new ecosystem, the tripartite relationship among influencers, brands, and consumers is becoming increasingly complex and warrants reconsideration in light of these technological shifts. Although several studies have examined influencer marketing and its effectiveness drivers on Web 2.0-type social networks (Rajput & Walvekar, 2018; Vrontis *et al.*, 2021; Cheung *et al.*, 2022), few academic studies have explored in depth the effects of the metaverse on the nature of the relationships formed within it.

Current scientific knowledge on influencer-brand-consumer interactions in 3D virtual worlds remains limited, fragmented, and often descriptive. While many professional and journalistic publications focus on isolated cases (e.g., Lil Miquela, VeeFriends), little conceptual work has been done to structure these relational shifts within established or emerging theoretical frameworks. This lack of conceptualization constitutes a significant research gap that must be addressed to better understand the sociotechnical dynamics at work in immersive influencer marketing. The issue is all the more important as investments in the metaverse and influencer marketing are growing rapidly (Bobier *et al.*, 2022): influencer marketing spending exceeded \$16 billion in 2022 (Buckley *et al.*, 2025) and reached \$24 billion in 2024, according to the Influencer Marketing Hub report (2024).

In this new situation, brands are increasingly positioning themselves as architects of immersive universes, influencers become mediators who connect consumers to these environments, and consumers are becoming actors contributing to the architecture of these experiences. Consequently, the concepts of proximity, authenticity, co-creation, engagement, and trust deserve to be rethought in light of these transformations. This article is based on a review of the literature, an analysis of emerging technological trends, and case studies of brands to examine the extent to which the metaverse is transforming the relational dynamics among brands, influencers, and consumers.

It adopts an exploratory approach to uncover changes in roles and forms of interaction within immersive environments, with a particular focus on:

1. The new roles adopted by brands in the scripting of immersive experiences;
2. The transformation of influencers' roles through the use of avatars (real or virtual) and co-experiential content; and
3. The rapid development of the consumer-actor status, actively immersed in the co-creation of relational value.

Finally, following these explorations, this article proposes a strategic framework to guide brand managers in developing

privileged and sustainable tripartite relationships within metaverses. Managers can thereby better supervise collaborations with influencers and strengthen consumer trust. Trust-often weakened by practices perceived as manipulative-remains a central issue in redefining relationships among brands, influencers, and consumers.

II. METHODOLOGY

This research first aims to explore the new relational dynamics that characterize the tripartite relationship between brands, influencers, and consumers in the metaverse. For this purpose, it is based on a review of past academic works and an analysis of professional practices observable in the metaverse. Subsequently, adopting a conceptual approach, the research proposes a strategic framework to guide brands in establishing privileged and sustainable tripartite relationships (brand-influencer-consumer) in the metaverse. Academic sources were mainly identified via open-access databases such as Google Scholar and ResearchGate, with a focus on articles published in indexed or ranked journals in order to provide a relevant theoretical foundation. The period covered extends from 2017 to 2025, consistent with the rise of Web3, immersive technologies, and new forms of relationship marketing in 3D virtual environments.

Although the literature review does not follow a systematic protocol, the selection of works is based on explicit criteria of relevance, topicality, and diversity of approaches. This enabled the identification of key concepts and emerging trends. At the same time, a selection of emblematic cases (e.g., Gucci, Nike, VeeFriends, etc.) was made. These brands were chosen for their pioneering role in establishing immersive strategies and co-constructed experiences in the metaverse. Their analysis aims to concretely illustrate the reconfiguration of relationships between brands, influencers, and consumers through initiatives such as the creation of immersive worlds, fostering community engagement, and promoting the co-creation of value.

III. LITERATURE REVIEW

A. Definition and Characteristics of the Metaverse

The concept of the metaverse, although recently popularized by major technology companies such as Meta (formerly Facebook), has its roots in science fiction, notably in Neal Stephenson's novel *Snow Crash* (1992). In its contemporary definition, the metaverse refers to a collective, shared, and persistent virtual space built from the convergence of physical and digital realities. Weinberger (2022) defines it as “an interconnected network of ubiquitous virtual worlds that overlap and enhance the physical world,” where users, represented by avatars, interact in immersive, synchronous, and evolving environments. Several key characteristics define the uniqueness of the metaverse as a new space for interaction:

1. *Persistence*: The metaverse is persistent (Mystakidis, 2022): it never stops, never restarts, and never pauses. The virtual world continues to function and evolve even when

users are offline, fostering the emergence of sustainable communities and ongoing collective narratives.

2. *Synchrony*: Unlike traditional social networks, where interactions can be asynchronous, the metaverse promotes real-time exchanges between participants, which accentuates the relational and emotional dimensions of the experiences (Hatami *et al.*, 2024).
3. *Interactivity and Co-Creation*: The metaverse encourages interactivity not only among users but also with content and experiences generated by other individuals or organizations (Hussain *et al.*, 2023), as well as collaborative creation and the exchange of experiences.
4. *Avatars*: Each user is represented by a customizable avatar (Wu *et al.*, 2023), which serves as an extension of

the self in the virtual environment. These avatars play a central role in establishing social presence and digital identity (Alcántara *et al.*, 2024).

5. *NFTs (Non-Fungible Tokens)*: NFTs enable the ownership and exchange of unique digital assets in the metaverse (artwork, virtual clothing, access to exclusive events, etc.). They introduce scarcity and perceived value into marketing interactions (Hofstetter *et al.*, 2024).
6. *Principle of Interoperability*: The metaverse aims to ensure the compatibility of assets, identities, and experiences between different virtual worlds, thereby addressing the challenge of interoperability-allowing an object, a piece of clothing, or an identity to circulate freely across multiple virtual worlds (Rawat & Hagos, 2024).



Fig.1 Characteristics of Metaverse

These characteristics radically transform the way individuals interact with each other, with content, and, above all, with brands. They also provide unprecedented leverage for building influential relationships, where emotion, shared experiences, and immersive storytelling replace the simple logic of one-way message dissemination.

B. Brand-Influencer-Consumer Relationships: State of the Art

In the classic influencer marketing paradigm, the three-way relationship between the brand, the influencer, and the consumer is based on a relatively stable and linear structure. The brand chooses an influencer whose symbolic capital-credibility, authenticity, attractiveness, and community engagement-matches its values and marketing objectives. The influencer acts as an intermediary, disseminating messages via diverse content (posts, videos, stories) (Freberg *et al.*, 2011), while the consumer responds by engaging with this content or making purchases (Lou & Yuan, 2019; Abidin, 2016). This relationship is supported by several theoretical concepts such as influencer credibility, parasocial interaction, brand equity, and value co-creation.

1. *The Credibility of the Influencer*: The credibility of the influencer is a fundamental pillar of influencer marketing. It acts as a powerful lever for trust, authenticity, and performance, directly enhancing communication and persuasion effectiveness. The credibility capital of influencers can be broken down into three dimensions (AlFarraj *et al.*, 2021):

- a. *Perceived Expertise*: relates to the influencer's competence and knowledge in a specific field.
- b. *Trustworthiness*: refers to the perception of the influencer as honest and transparent.
- c. *Attractiveness*: incorporates the influencer's physical, stylistic, or emotional appeal.

These elements directly influence the influencer's ability to persuade and generate engagement and are decisive in the selection of influencers by brands. In a context where consumers are exposed to a multitude of advertising messages, a credible influencer helps overcome mistrust and makes the message more authentic. Followers engage more (through likes, shares, and comments) with content from a source they perceive as credible and competent, which increases the reach and effectiveness of communication. The brand associated with a credible influencer benefit from a

more positive image and gains legitimacy with its target audience (Babay *et al.*, 2023).

2. Para Sociality : Parasociality refers to the phenomenon in which a consumer feels they have a personal relationship with an influencer or online celebrity (Horton & Wohl, 1956), even though this connection is actually one-way. By following an influencer on social media, commenting on their posts, or receiving a response from them, users may feel that they are engaging in a real and authentic exchange with that influencer (Rasmussen, 2018). Moreover, regularly seeing posts, stories, or live streams from a digital celebrity reinforces this feeling of closeness and trust (Ashraf *et al.*, 2023). With the rise of social media and social commerce, this phenomenon has become increasingly commonplace, and parasocial interactions now significantly influence consumers' purchasing decisions (Sokolova & Kefi, 2020) while amplifying their emotional engagement and loyalty (Vo *et al.*, 2025).

3. Brand Equity and Co-Creation of Value : Keller's (1993) concept of consumer-based brand equity fits perfectly into the tripartite brand-influencer-consumer relationship, as it emphasizes consumer perception and experience. Influencers, as credible intermediaries, shape mental associations with the brand, enriching its storytelling and perceived values. They also increase awareness through visibility and repeated exposure of the brand to targeted audiences. Co-creation of content involving the brand, the influencer, and the consumer fosters co-created value, which sustainably strengthens brand equity (Pham *et al.*, 2023 ; Marchowska-Raza & Rowley, 2024) and consolidates the ties within the relational triad.

C. Technological Disruptions and New Opportunities for Relationship Marketing in the Metaverse

The advent of the metaverse introduces a series of major technological disruptions that are likely to transform relationship practices in influencer marketing. First, the relative disintermediation of traditional platforms allows brands to create their own virtual worlds, independent of centralized social networks. In these environments, influencers can become experience orchestrators, hosting immersive experiences (e.g., virtual events, games, 3D fashion shows) that engage consumers emotionally and sensorially.

Secondly, the use of digital avatars, whether human or virtual, is disrupting traditional benchmarks of authenticity (Andersson & Sobek, 2020). Whereas authenticity was historically correlated with an influencer's real personality, it is now becoming a scripted artifact, embodied by digital entities such as Lil Miquela, Noonouri, and FN Meka. This evolution raises questions about the simulation of trust, enabled by AI and algorithmic storytelling techniques.

Thirdly, the use of NFTs as loyalty or reward tools introduces a transactional and symbolic dimension to the relationship. Consumers are no longer content with simply "liking" or commenting; they are acquiring a virtual asset or an exclusive

experience (concert, VIP access, virtual product), which reinforces their sense of belonging to a community or brand.

Finally, the immersive design of experiences (through spatialization of sound, gestural interactions, and non-linear storytelling) profoundly changes the nature of engagement: it is no longer just cognitive or emotional, but also behavioral and collective. This paves the way for a reconfiguration of performance metrics (time spent, active interactions, participation in virtual quests, etc.) to measure the success of influence campaigns in the metaverse. Thus, the metaverse is not just a new channel but a complete relational ecosystem where interactions between brands, influencers, and consumers take on new forms, calling for new analytical frameworks and raising both strategic and ethical questions.

IV. EVOLUTION OF THE MECHANISMS AND POSITIONS OF RELATIONAL TRIAD IN THE METAVERSE

Immersive environments have distinctive characteristics compared to more traditional spaces for interaction between brands, influencers, and consumers. Technological advances are introducing new interaction mechanisms that are transforming the way each player performs their role. These developments appear to be influencing the relational dynamics within the brand-influencer-consumer triad. The following section analyzes the roles and mechanisms specific to each player in order to highlight the transformations they are bringing about in the relationships between these stakeholders.

A. The Brand as Architect of Immersive Worlds

In the metaverse, brands go beyond their traditional role as producers of goods or messages to become architects of interactive, experiential worlds. They no longer simply communicate values, but showcase them in environments where consumers can interact, create, and enjoy collective experiences. This shift places brands at the heart of a relational and experiential logic, redefining their role in the brand-influencer-consumer triad.

Several features embody this transformation:

- 1. Identity Co-Creation*: The metaverse opens up new spaces for brands to collaborate with their communities. Users are no longer mere recipients but co-creators, able to customize virtual products (skins, NFTs, avatar accessories), participate in governance through decentralized organizations (DAOs), or influence the narrative of certain campaigns. This mechanism promotes symbolic appropriation of the brand and shared identity-building, strengthening loyalty through active participation.
- 2. Augmented Storytelling*: In immersive worlds, storytelling is being reconfigured; it is becoming interactive, multisensory, and participatory. Brands design scenarios in which consumers act as participants rather than passive spectators, co-producing meaning and emotion. Nike's example in Nikeland illustrates this dynamic: players can take on sporting challenges,

customize their avatars with Nike products, and even create their own mini-games, transforming the brand into a catalyst for collectively experienced stories (Temperino, 2023).

3. *Experiential Scenography*: The metaverse allows brands to script every element of the environment (sets, sound, pace of interactions) to produce a total experience comparable to that of a virtual amusement park. This scenography embodies the brand promise not through words, but through the experience of the consumer's avatar (Bornmann, 2022).

Thus, brands in the metaverse are no longer just content providers but designers of interactive environments, where experience, participation, and co-creation become the main drivers of relationships (Yoon *et al.*, 2025). This repositioning profoundly transforms the dynamics of the relational triad, giving consumers an active role and positioning influencers as mediators of the worlds that brands orchestrate.

B. The Influencer as an Emotional and Immersive Mediator

In the metaverse, influencers are no longer limited to being figures of proximity or recommendation. Their role is being redefined around new emotional and immersive forms of mediation, driven by the technological features specific to virtual environments. They are becoming emotional mediators, narrative guides, and facilitators of collective experiences, thereby altering the relational balance within the brand-influencer-consumer triad.

These transformations are manifested through several mechanisms:

1. *Emergence of Virtual Influencers*: Artificial avatars such as Lil Miquela and Noonooori illustrate a major shift. Supported by algorithms and creative teams, these digital entities offer brands a controlled presence, free from human contingencies (errors, inconsistencies, controversies). They embody an identity that is perfectly aligned with the brand's values, thereby strengthening consistency in the relationship with consumers.
2. *Performative extension of the Self*: For human influencers, the avatar becomes a device for identity hybridization (Messinger *et al.*, 2019). It allows them to explore styles, genres, or behaviors that would be inaccessible in real life while maintaining their perceived authenticity. This extension of the self opens up new modes of storytelling and emotional projection, redefining the way the community interacts with the influencer and, by extension, with the brand.
3. *Gamified Storytelling*: The influencer becomes a player character, taking their community on virtual quests, immersive challenges, and branching narrative arcs. A practical example is Travis Scott in *Fortnite*, who, in the form of a giant avatar, leads players through a concert scenario with phases and transitions similar to game

levels. This playful dimension, inspired by game design, encourages active engagement from followers while strengthening brand loyalty through collectively experienced journeys.

C. The Consumer as An Active Participant

In the metaverse ecosystem, consumers go beyond the role of mere spectators or buyers to become active participants in the brand experience (Tao *et al.*, 2025). Their role is no longer limited to passively receiving messages but extends to identity building, co-creation, and collective participation, thereby transforming the dynamics of the relational triad. The changes surrounding their position revolve around:

1. *Avatarization as an Identity Mechanism*: Access to the metaverse involves creating an avatar, a digital and symbolic projection of the self. This mechanism allows consumers to choose the identity they wish to embody (gender, style, behaviors), paving the way for new forms of personalization. Brands exploit this avatarization to offer environments, virtual products, and digital objects aligned with this chosen identity, promoting a sense of ownership and symbolic anchoring.
2. *Participation in Synchronous and Collective Co-Experiences*: The metaverse stands out for its ability to generate experiences that are shared simultaneously by multiple users through a shared and synchronized mode of presence. Virtual concerts, interactive events, online competitions, and scripted community spaces allow consumers to share immersive experiences. These synchronous moments reinforce the relational and emotional dimension of the connection to the brand and the community, promoting collective engagement (Hatami *et al.*, 2024).
3. *Co-Constructed Engagement*: In immersive environments, consumers become co-producers of experiences by interacting not only with content and products but also with other users' avatars and influencers. Participation mechanisms include the co-creation of virtual goods, involvement in interactive campaigns, and collective decision-making via organized communities. Engagement is then measured less by traditional indicators (likes, clicks) than by time invested, personalized or co-created objects, and community contributions (Wasiq *et al.*, 2024).

Thus, in the metaverse, consumers shift from a reactive role to a proactive and co-constructive one, participating in the storytelling, governance, and animation of the brand universe. This redefinition of their position profoundly changes the dynamics of the triad, placing consumers at the center of an interactive ecosystem where brands and influencers must adapt to their increased power of expression and creation.

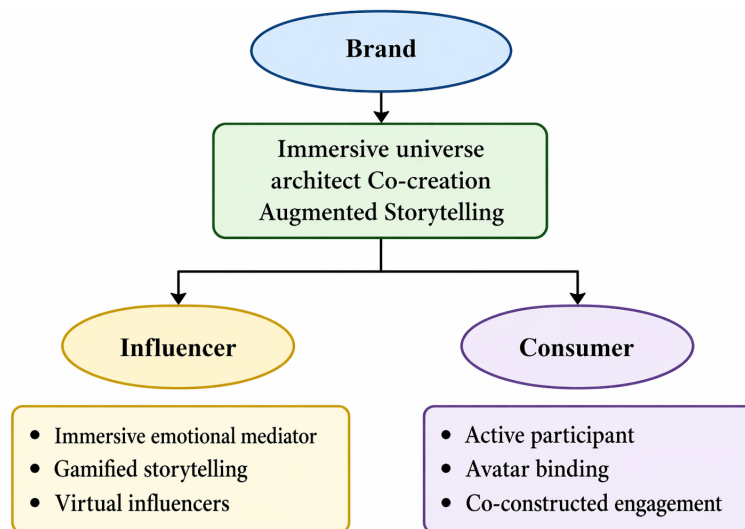


Fig.2 The Triad Brand-Influencer-Consumer in the Metaverse's Era

As a result of these changes, the traditional dynamics of relationship marketing have been transformed. Roles are no longer fixed or linear; instead, they have become flexible,

hybrid, and co-constructed. The table below highlights this profound reconfiguration of stakeholder roles in the metaverse through five major transformations.

TABLE I ROLE TRANSFORMATIONS IN THE METAVERSE ERA

Traditional Marketing	Immersive Marketing in the Metaverse	Nature of Transformation	Concrete Example(s)
Fixed Roles Brand = Sender Influencer = Intermediary Consumer = Receiver	Fluid and Interchangeable Roles Brand = Interactive Avatar Influencer = Co-creator of Experiences Consumer = Creator / Influencer	Role Unfreezing	In Nike Nikeland (Roblox), players create their own mini-games and become brand advocates themselves.
Linear Communication Brand → Influencer → Consumer	Circular and Community-based Communication Consumer ↔ Brand ↔ Influencer ↔ Community	Linearity Disruption	1. In Gucci Garden (Roblox), visitors interact with each other, share experiences, and in turn influence brand perception. 2. In Decentraland Fashion Week, users comment live on shows and simultaneously interact with brands, creators, and influencers.
Fixed Functions Actors remain in predefined roles	Modular Functions Actors shift roles depending on space or context	Role Modularity	1. In Fortnite x Balenciaga, a player can simultaneously be an event spectator, a brand ambassador via their Balenciaga-dressed avatar, and a content creator streaming on Twitch. 2. In Minecraft Education x WWF, a child is both a learner, an environmental ambassador and a creator of playful spaces to raise community awareness.
Distinct Identities Clear separation between actors	Hybrid Identities Prosumer, Avatar-Influencer, Brand as Space	Identity Hybridization	Virtual influencers like Lil Miquela embody a person, a brand, and a community simultaneously, blurring the boundary between human and avatar identity.
Top-down Role Assignment Roles defined by brands or agencies	Co-constructed Roles Emerging from collaboration and interaction	Social Co-construction of Roles	In Sandbox, player communities co-develop sponsored experiences where the brand does not impose but negotiates and co-creates with users.

V. NEW RELATIONAL DYNAMICS

The transformations in the approaches and mechanisms used by brands, influencers, and consumers in the metaverse are shaping new relational dynamics. These dynamics are particularly evident in the shift from content-centric marketing to experience-centric marketing, the redefinition of how trust and authenticity are built, and the emergence of new metrics for measuring engagement.

A. From Content to Experience

Traditionally focused on the production and distribution of informational or promotional content, digital marketing is now shifting toward an experiential model (Urdea *et al.*, 2021; Torres & Doherty, 2022; More, 2023; Cevher, 2024). This paradigm shift marks the transition from content publication-oriented marketing to marketing centered on interaction and participation. The traditional approach was based on a top-down communication model in which the brand had complete control over messages, channels, and timing. Today, with the emergence of Web 3.0, immersive spaces (metaverses, virtual reality, augmented reality), and conversational interfaces, brands are increasingly expected to co-create experiences in which users become actors in the narrative or co-producers of content (Hollensen *et al.*, 2023). In this context, perceived value no longer lies solely in the quality of content, but in the intensity of the experience—its sensory, emotional, and personalized dimensions. The experience is now seen as a driver of differentiation, a lever for engagement, and a tool for building loyalty. Brands such as Nike with NIKELAND or Louis Vuitton with *Louis: The Game* illustrate this shift by developing interactive and narrative environments where users navigate autonomously, with immediate feedback and personalized journeys.

B. Rethinking Methods for Building Trust and Authenticity

It may seem paradoxical that avatars, originating from artificially programmed worlds, are capable of eliciting feelings of attachment, self-projection, and emotional closeness in consumers. However, this tension between the fictional nature of these representations and the sense of authentic presence raises important questions about how trust, identification, and emotional engagement are established or maintained within these dematerialized environments. Faced with this paradoxical reality, it is essential to reconfigure these methods, paying particular attention to key aspects such as:

1. *Algorithmic Transparency*: This refers to a brand's ability to explain transparently how its algorithms operate, detailing how user data is collected, used, and personalized. This approach helps build trust, as users feel that their privacy is respected, their preferences are better understood, and they are less exposed to forms of algorithmic manipulation perceived as intrusive or lacking transparency (Sonboli *et al.*, 2021).
2. *Perceived Authenticity of Avatars/Brands in Simulated Environments*: In digital worlds (games, metaverses,

simulated realities), brands sometimes embody avatars or virtual entities. Trust then depends on the consistency, transparency, and perceived emotional authenticity of these avatars (Kim *et al.*, 2023; Vernuccio *et al.*, 2025). Consistency in behavior, tone, and values allows users to identify and follow a stable narrative thread, creating a sense of familiarity. Transparency—even in a fictional context—reassures users about the brand's intentions and establishes a relational framework perceived as honest and respectful. As for perceived emotional reality, it relies on the avatar's ability to simulate credible and personalized emotions, generating a mirror effect that nurtures emotional attachment. Together, these elements promote the development of a sense of authenticity and sincere closeness, which is essential for establishing lasting trust between the user and the brand, even within an immersive and simulated environment.

3. *Emotional Safety*: Emotional safety means ensuring that users can interact without being emotionally manipulated (Zheng *et al.*, 2022), without undue commercial pressure, excessive nudging, or exclusionary dynamics. This safety becomes an essential lever for trust within these immersive environments because it allows users to enjoy the experience without fearing that their emotions will be exploited. However, guaranteeing this safety requires a delicate balance: persuasion dynamics must operate without crossing the threshold of intrusion or compromising the user's free will, in order to maintain an ethical, credible, and sustainable relationship.
4. *Verifiability of CSR Commitments*: In a virtual world, CSR commitments must be visible, traceable, verifiable, and not just declarative. CSR initiatives can no longer be limited to declarations of intent; they must be visible, traceable, and verifiable. Verifiability is becoming a central pillar of this new form of trust, whether through algorithmic transparency mechanisms, proof of impact (particularly via blockchain), or tangible representations of responsible actions in the immersive universe (Hina *et al.*, 2024). Thus, trust is no longer based solely on the brand's previous reputation but on its behavior observable in real time within the immersive environment.
5. *Reinvented Trust Contract*: In immersive environments, trust is no longer a unilateral relationship between the consumer and the brand but is built collaboratively among the various stakeholders who co-create the experience (Mansoor *et al.*, 2024). This active involvement transforms the relational dynamic: the brand no longer has sole control over the narrative but must now trust the user, granting them a certain degree of autonomy, recognizing the value of their interactions, and accepting the degree of unpredictability inherent in these open universes.

In return, users are more inclined to trust a brand that recognizes their active role, respects their choices, and offers them a space for authentic expression and action. In this way, trust becomes mutual, evolving, and context-dependent, based on principles of transparency, reciprocity, and continuous listening.

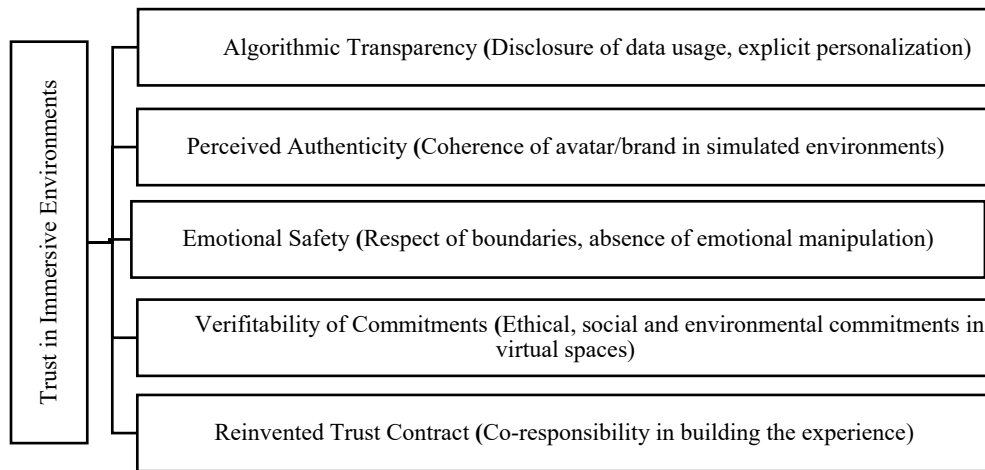


Fig.3 Redefinition of Trust in Immersive Environments

C. New Metrics for Engagement

Traditional digital marketing performance indicators—impressions, clicks, and shares—are increasingly being supplemented or even replaced by more qualitative and behavioral metrics, such as interaction time, degree of immersion, and users’ perceived experiential value (Shrivastava & Choithrani, 2024). In interactive and immersive environments, engagement is no longer measured solely by visible actions, but by the duration, depth, and frequency of interaction. The time spent in a virtual experience, the narrative choices made, participation in quests, or the adoption of visual brand elements by avatars are new indicators of emotional attachment to a brand. Furthermore, branded NFTs, virtual badges, or digital collectibles also serve as markers of social recognition, strengthening consumer loyalty and identification with the brand (Xie *et al.*, 2023; Lu *et al.*, 2023; Li *et al.*, 2025). Although intangible, these assets create strong symbolic value, often associated with a sense of belonging to the brand’s universe. This redefinition of metrics also leads to a

rethinking of the role of influencers. The linear influence model based on reach is gradually giving way to engaged communities, immersive creators, and co-constructed experiences—particularly through platforms such as Twitch and Discord, as well as within the framework of DAOs (Decentralized Autonomous Organizations).

VI. FRAMEWORK

To ensure that the relationship between brands, influencers, and consumers in the metaverse is ethical and sustainable, it is essential to rethink and structure collaborations, interactions, and exchanges between these stakeholders within a coherent strategic framework. This framework is based on five complementary dimensions that, together, help reconcile digital responsibility, immersive relevance, inclusive governance, authentic engagement, and strategic adaptability. Each of these dimensions mobilizes technological, emotional, and social levers that are essential for establishing a renewed quality of relationships in these immersive environments.

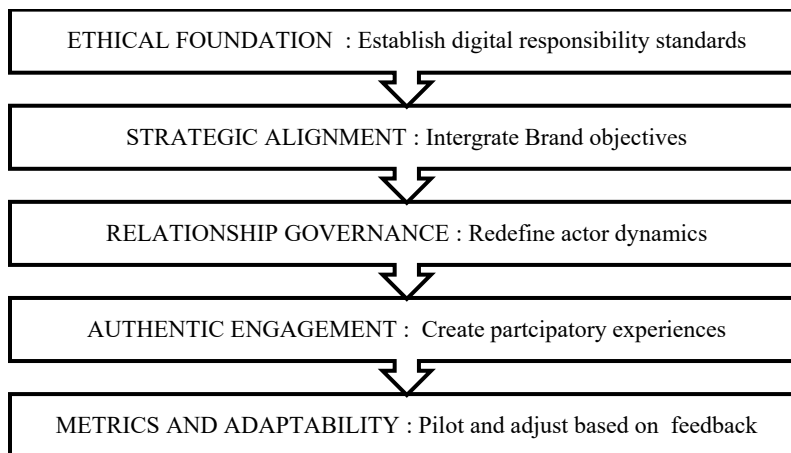


Fig.4 A Strategic Framework for Developing a Sustainable Brand-Influencer-Consumer Relationship in the Metaverse

A. Ethical Foundation: Defining a Basis for Digital Responsibility

In the metaverse, brands must establish a solid ethical foundation before interacting with consumers and influencers. This foundation is based on digital responsibility, algorithmic transparency, respect for personal data, and user inclusion (Zhuk, 2024). However, rather than being dictated by brands, this foundation would benefit from being co-constructed. Co-construction here means involving consumers and influencers in defining these standards-consultation, feedback, and collaboration to develop clear rules that are accepted by all. Concrete measures may include participatory ethical charters, co-managed reporting mechanisms, and moderation protocols developed with the community. This ethical foundation is essential for building trust (Zhuk, 2024) and preparing for sustainable engagement (Bilgihan *et al.*, 2024).

B. Strategic Alignment of Brand Objectives with Customer Aspirations

Aiming for sustainability and continuous development, the brand must align its business and societal objectives with customer aspirations. In a co-construction logic, this is not about setting objectives unilaterally, but about listening to and integrating feedback from consumers and influencers to design relevant and responsible immersive experiences (Luan & Phan, 2024). To this end, brands can invite users to contribute to the definition of digital products or provide feedback on CSR initiatives in the metaverse, thereby fostering a balance between commercial performance and shared ethical values. A significant example here is the Coach brand, which has repositioned itself to align with the preferences of Generation Z. In particular, the brand has introduced affordable bags, customizable accessories, and an urban aesthetic to meet the expectations of this audience. This approach has allowed Coach to strengthen its position in the accessible luxury market. In the same perspective, Amazon sets itself the goal of being the most customer-centric company in the world. Indeed, by listening carefully to user feedback and constantly adapting its services (personalized recommendations, logistical improvements, etc.), Amazon meets the immediate needs of its customers while focusing on their future expectations.

C. Governance of Brand-Influencer-Consumer Relationships

In the immersive world of the metaverse, the traditional boundaries between the roles of brand, influencer, and user are blurring, giving way to hybrid, fluid, and co-constructed interactions. Relational governance is thus rethinking the dynamics between these actors: influencers no longer simply recommend products; they actively participate in the co-creation of content (Zhang *et al.*, 2024; Trikha *et al.*, 2025) and usage standards, while consumers contribute to the design and improvement of the experience (Kim, 2023). This transformation requires the implementation of explicit, shared, and scalable operating rules that promote transparent

communication, ethical collaboration, and mutual recognition of roles. Best practices to Promote include:

1. The contractual formalization of roles and commitments in immersive environments (codes of conduct, ethical charters, confidentiality rules (Hadan *et al.*, 2024));
2. Enhancing the role of the user as a co-actor (through gamification, spaces for creative expression, customizable avatars, and reward mechanisms (Komariyatin, 2025));
3. The establishment of advisory committees including brands, influencers, and consumers, as well as dialogue protocols to resolve conflicts or adjust practices;
4. The use of relational governance indicators, including consumer-brand collaboration rates, post-interaction feedback, and influencer reputation indices.

Finally, effective governance requires ethical management of the algorithms that govern the visibility of content and interactions (Al-Kfairy *et al.*, 2025), in order to avoid bias, limit attention drift, and ensure a balance between personalization of the experience and respect for privacy. This model is part of a regenerative relationship approach, where each actor can co-create, express themselves, and evolve within a structured, equitable framework that promotes shared value.

D. Authentic Engagement: Creating Participatory Experiences

In the metaverse, authentic engagement does not result from passive exposure to brand content or worlds. It is built through immersive, participatory, rewarding, and meaningful experiences that encourage voluntary, intentional, and thoughtful user contribution and emotional involvement (Ahmed *et al.*, 2024). Co-construction practices-content personalization, co-creation of immersive journeys, the organization of interactive events, or the collaborative design of digital objects-transform each interaction into a moment of shared value, where consumers actively choose to get involved and leave a personal mark on the virtual universe.

E. Metrics and Adaptability: Leading through Listening and Flexibility

In the fast-moving environment of the metaverse, characterized by high information density, continuous interactivity, and evolving social dynamics, brands' ability to steer their immersive strategies relies on an adaptive approach based on listening, measuring, and adjusting in real time. It is no longer simply a matter of tracking traditional KPIs, but of integrating qualitative and contextual metrics that reflect the richness of interactions in these virtual environments (Jha, 2023; Shrivastava & Choithrani, 2024). Adaptability involves actively listening to users, particularly through emotional data analysis tools, behavioral feedback, and presence and engagement indicators such as:

1. Time spent in virtual environments,
2. Voluntary repetition of interactions,
3. Level of contribution to collaborative spaces,

4. The fluidity of transition between roles (consumer, creator, ambassador).

This approach is complemented by the co-construction of experiential journeys, establishing iterative test-and-learn loops where consumers and influencers continuously provide feedback to adjust immersive experiences, ethical standards, and interaction quality. Participatory analysis tools, collaborative surveys, and open dashboards make it possible to evaluate not only commercial performance, but also

satisfaction, ethical perception, and the social value of interactions. This flexible management approach promotes co-evolution between the brand and its communities, taking into account new expectations and technological and social transformations in the metaverse. The following table summarizes this strategic framework, highlighting key levers, examples, and indicators to help brands design an ethical, engaging, and credible immersive strategy in the metaverse.

TABLE II STRATEGIC FRAMEWORK FOR DEVELOPING SUSTAINABLE TRIPARTITE RELATIONSHIP IN THE METAVERSE

Strategic Dimension	Objective	Best Practices	Mobilized Levers	Implementation Examples
1. Ethical Foundation	Ensure an inclusive, secure, and respectful immersive environment	Define an immersive ethics charter; Activate reporting and moderation systems; Ensure data protection	Digital ethics: transparency and GDPR compliance; Security: automated moderation and avatar anonymity; Inclusivity: gender-neutral and accessible design	Meta (Horizon Worlds): “safe space” zones and blocking options; Roblox: strict code of conduct and proactive moderation
2. Strategic Alignment of brand objectives with customer aspirations	Align commercial and societal objectives with consumer needs and aspirations	Collect and analyze user feedback ; Co-create products with users ; Ensure transparency and ethics	Feedback platforms and social networks Immersive VR/metaverse environments Storytelling and gamification	Adidas (Roblox): Co-created necklace; Airbnb: Improved reservations Gucci Cosmos Land: Immersive exhibition The Ordinary: Feedback-based products Amazon: Predictive recommendations
3. Governance of Brand-Influencer-Consumer Relationships	Structure interactions to ensure trust and active participation	Define clear roles and responsibilities; Establish co-creation and validation mechanisms; Integrate influencers strategically	Collaborative spaces and community 3D studios Participatory gamification Clear contracts and agreements with influencers	Adidas × Bored Ape Yacht Club: co-creation of virtual NFT outfits Zepeto: creation spaces for influencers and fans
4. Authentic Engagement	Build a deep and lasting emotional bond with consumers	Immersive and sensory storytelling; Avatar and content personalization; Emotional and interactive rewards; Visible transparency on commitments	Immersive storytelling, music, and haptics Empathetic chatbots Gamification Social interactions (Oh et al., 2023) Public NFTs and accessible smart contracts	Coca-Cola Metaverse: NFT “loot box” with sensory experiences; Gucci Garden (Roblox): immersive exhibition with avatar personalization; The Sandbox: community voting for project funding Decentraland: DAO governance for policy and initiative adjustments
5. Metrics and Adaptability	Monitor performance and adjust initiatives to remain relevant	Continuous feedback and evaluation; Reliability and satisfaction metrics; Adoption and retention of immersive experiences	Analytical dashboards	NPS: loyalty and recommendations; Engagement: time and interactions; Satisfaction: UX survey scores; Conversion: completed actions; Participation: co-creation involvement; New users: acquisition count; Completion: journey completion rate; Cohort: user behavior analysis

VII. THEORETICAL AND MANAGERIAL CONTRIBUTIONS

This article contributes to the literature on relationship marketing in an immersive context by offering a fresh perspective on interactions between brands, influencers, and consumers through the lens of the metaverse. It sheds light on the changing roles within the relational triad by incorporating emerging concepts such as experiential scenography, gamification of storytelling, and consumer avatarization. Furthermore, it questions the traditional foundations of trust, authenticity, and commitment in the context of dematerialized environments, thus providing a conceptual basis for the study of affective and symbolic dynamics in virtual worlds. Finally, it proposes a strategic framework for the development of privileged and lasting tripartite relationships, respecting the principles of ethical relationship marketing in immersive spaces. From a managerial perspective, the article calls on brand managers who wish to invest in the metaverse to rethink their strategies in order to make them more participatory and ethical, drawing on the dimensions outlined in the proposed strategic framework. In particular, it invites them to align their marketing objectives with the aspirations of their communities and to collect and analyze feedback from consumers and influencers to continuously refine immersive experiences, as Nike does with Nikeland on Roblox, where mini-games and VR experiences are regularly adjusted according to user preferences.

Co-creation is also presented as an essential strategic lever, encouraging the creation of collaborative spaces where consumers and influencers can design content, test digital products, or participate in interactive campaigns, as exemplified by Adidas and the Bored Ape Yacht Club, which involved the community in the design of NFT outfits. The article also emphasizes the need for ethical and transparent governance, with clearly defined rules for participation, data protection, and content moderation mechanisms, as demonstrated by Roblox with its strict code of conduct and proactive content monitoring. It also recommends implementing metaverse-specific performance indicators, such as the adoption and retention of immersive features, emotional engagement, or participation in co-creation, as illustrated by community voting and cohort analysis used by The Sandbox to adjust its projects.

Finally, these principles should be seen as a flexible framework adaptable to the brand's identity and strategy, as well as to the stage of its relationship with consumers, with initiatives being adjusted gradually, as exemplified by Gucci and its immersive exhibitions in Gucci Cosmos Land. By combining strategic alignment, co-creation, ethical governance, and continuous measurement, managers can

develop privileged and lasting tripartite relationships with their communities in immersive environments.

VIII. LIMITATIONS AND FUTURE RESEARCH

This paper is based on a review of the literature, an examination of emerging technological trends, and a study of emblematic cases illustrating successful immersive strategies in the metaverse. While this approach allows us to establish a robust theoretical framework and identify novel relational dynamics, it nevertheless has certain limitations. On the one hand, the lack of empirical data limits the generalizability of the proposals put forward. On the other hand, although the cases analyzed are illustrative, they do not capture the diversity of practices across sectors, cultures, or types of actors.

Thus, future research could adopt a qualitative or mixed methodology in order to validate, nuance, or enrich the findings formulated. Ethnographic surveys, semi-structured interviews, or longitudinal studies conducted within metaverse environments could allow a more detailed analysis of users' perceptions, behaviors, and attachment mechanisms. In addition, comparative research between virtual universes or between different types of influencers (human, virtual, hybrid) would offer additional insights into engagement modalities and the levers of trust in these new relational spaces. Finally, a more in-depth exploration of the ethical and legal implications related to the exploitation of data, avatarization, and the monetization of interactions would deserve particular attention from a transdisciplinary perspective.

IX. CONCLUSION

In the age of the immersive web, the metaverse profoundly redefines the relational dynamics between brands, influencers, and consumers. By offering a space for synchronous, personalized, and sensorially enhanced interactions, it transforms the traditional roles of relationship marketing actors and paves the way for co-constructed experiences that are emotionally engaging and symbolically rich. This article highlights the way in which the metaverse acts as a catalyst for relational change: the brand becomes an architect of immersive universes, the influencer acts as an immersive mediator, while the consumer adopts an active participatory posture. This transformation is accompanied by the emergence of new evaluation metrics, a renewal of forms of trust, and a refocus on authenticity in artificial environments. Faced with these upheavals, it seems necessary to develop an ethical and sustainable strategic framework capable of ensuring a balance between technological innovation, respect for users, and brand performance. Far from constituting a simple trend, the metaverse thus establishes itself as a new relational

ecosystem in its own right, calling on researchers and practitioners to rethink the foundations of relational marketing and to explore the potentialities of co-constructed engagement.

Declaration of Conflicting Interests

The author declares no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

Use of Artificial Intelligence (AI)-Assisted Technology for Manuscript Preparation

The author confirms that no AI-assisted technologies were used in the preparation or writing of the manuscript, and no images were altered using AI.

REFERENCES

- Ahmed, S., Sharif, T., Ting, D. H., & Sharif, S. J. (2024). *Crafting emotional engagement and immersive experiences: Comprehensive scale development for and validation of hospitality marketing storytelling involvement*. *Psychology & Marketing*, 41(7), 1514-1529. <https://doi.org/10.1002/mar.21994>.
- Alcántara, J. C., Tasic, I., & Cano, M. D. (2024). Enhancing digital identity: Evaluating avatar creation tools and privacy challenges for the metaverse. *Information*, 15(10), 624.
- AlFarraj, O., Alalwan, A. A., Obeidat, Z. M., Baabdullah, A., Aldmour, R., & Al-Haddad, S. (2021). Examining the impact of influencers' credibility dimensions: attractiveness, trustworthiness and expertise on purchase intention in the aesthetic dermatology industry. *Review of International Business and Strategy*, 31(3), 355-374.
- Al-Kfa'ry, M., Alrabae, S., Alfandi, O., Mohamed, A. T., & Khaddaj, S. (2025). Navigating ethical dimensions in the metaverse: Challenges, frameworks, and solutions. *IEEE Access*, 13, 79996-80018. <https://doi.org/10.1109/ACCESS.2025.3564498>.
- Andersson, V., & Sobek, T. (2020). *Virtual avatars, virtual influencers & authenticity: A qualitative study from a consumer perspective* (Master's thesis). University of Gothenburg. <http://hdl.handle.net/2077/64928>.
- Ashraf, A., Bahtar, A. Z., & Karim, R. A. (2023). How do social media influencers inspire consumers' purchase decisions? The mediating role of parasocial relationships. *Journal of Marketing Theory and Practice*, 30(3), 295-311. <https://doi.org/10.1080/10696679.2021.1935275>.
- Babay, H., Erragcha, N., & Behir, S. (2023). How will influencer marketing change in the metaverse? In *Influencer marketing applications within the metaverse* (pp. 13-32). IGI Global. <https://doi.org/10.4018/978-1-6684-8898-0.ch002>.
- 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>.
- Bobier, J. F., Merey, T., Robnett, S., Grebe, M., Feng, J., Rehberg, B., ... & Hazan, J. (2022). *The corporate hitchhiker's guide to the metaverse*. Boston Consulting Group. <https://on.bcg.com/3arrxsA>.
- Bormmann, M. P. (2022). *Augmented reality character companions in theme parks: A speculative design project*. Drexel University. <https://doi.org/10.17918/00001095>.
- Brenk, K., Tomini, N., Kanbach, D. K., Stubner, S., & Pinelli, M. (2025). From virtual vision to business reality: Embracing the metaverse revolution. *Review of Managerial Science*, 1-27. <https://doi.org/10.1007/s11846-025-00878-x>.
- Buckley, O., Ashman, R., & Haenlein, M. (2025). Leveraging livestreaming to enrich influencer marketing. *California Management Review*, 67(2), 111-140. <https://doi.org/10.1177/00081256241300730>.
- Cevher, M. F. (2024). Digital marketing and customer experience strategy: Leveraging digital channels for marketing and customer engagement. In *Trends, challenges, and practices in contemporary strategic management* (pp. 149-167). IGI Global. <https://doi.org/10.4018/979-8-3693-1155-4.ch008>.
- Chakraborty, A., Jain, V., & Belk, R. (2025). Exploring avatar selves in the metaverse: Consumer co-creation of experiences. *Journal of Consumer Behaviour*, 24(2), 694-716. <https://doi.org/10.1002/cb.2440>.
- Cheung, C. M. K., Lee, M. K. O., & Jin, X. L. (2022). How social media influencers' content characteristics affect consumers' online brand-related activities. *Journal of Business Research*, 142, 1-11. <https://doi.org/10.1016/j.jbusres.2021.12.031>.
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, 37(1), 90-92. <https://doi.org/10.1016/j.pubrev.2010.11.001>.
- Hadan, H., Wang, D. M., Nacke, L. E., & Zhang-Kennedy, L. (2024). Privacy in immersive extended reality: Exploring user perceptions, concerns, and coping strategies. In *Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems* (pp. 1-24).
- Hatami, M., Qu, Q., Chen, Y., Kholidy, H., Blasch, E., & Ardiles-Cruz, E. (2024). A survey of the real-time metaverse: Challenges and opportunities. *Future Internet*, 16(10), 379. <https://doi.org/10.20944/preprints202409.0889.v2>.
- Hina, M., Islam, N., & Dhir, A. (2024). Blockchain for sustainable consumption: An affordance and consumer value-based view. *Internet Research*, 34(7), 215-250. <https://doi.org/10.1108/INTR-07-2023-0523>.
- Hofstetter, R., Fritze, M. P., & Lamberton, C. (2024). Au-delà de la rareté: Une approche fondée sur la valeur sociale pour la tarification des NFT. *Journal of Consumer Research*, 51(1), 140-150. <https://doi.org/10.1093/jcr/ucad082>.
- Hollensen, S., Kotler, P., & Oprešnik, M. O. (2023). Metaverse - The new marketing universe. *Journal of Business Strategy*, 44(3), 119-125. <https://doi.org/10.1108/JBS-01-2022-0014>.
- Horton, D., & Wohl, R. R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, 19(3), 185-206.
- Hussain, Z., Khan, A., & Ali, A. (2023). The impact of user-generated content, social interactions and virtual economies on metaverse environments. *Journal of Sustainable Economics*, 1(2), 34-44. <https://doi.org/10.32734/jse.v1i2.13798>.
- Influencer Marketing Hub. (2024). *The state of influencer marketing 2024: Benchmark report*. <https://influencermarketinghub.com/influencer-marketing-benchmark-report/>.
- Jha, A. (2023). Immersive marketing on the metaverse: Development of metrics for performance analysis and security-related challenges. In *Confronting security and privacy challenges in digital marketing* (pp. 267-289). IGI Global. <https://doi.org/10.4018/978-1-6684-8958-1.ch013>.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22. <https://doi.org/10.2307/1252054>.
- Kim, Y. (2023). Not just for play: Why the metaverse should be leveraged for cocreation. *Business Horizons*. <https://doi.org/10.1016/j.bushor.2023.11.002>.
- 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>.
- Komariyatin, N. (2025). Immersive brand experiences in the metaverse: A qualitative study of consumer-brand interactions in virtual space. *Journal of Marketing Breakthroughs*, 1(1), 32-50. [https://doi.org/10.70764/gdpu-jmb.2025.1\(1\)-03](https://doi.org/10.70764/gdpu-jmb.2025.1(1)-03).
- Li, W., de Zubieta, G. C., & Hill, S. R. (2025). Unlocking the potential of NFTs in branding: An exploration of NFT-based brand experience. *Journal of Retailing and Consumer Services*, 85, 104313. <https://doi.org/10.1016/j.jretconser.2025.104313>.
- Lu, S., Xie, Y., & Chen, X. (2023). Immediate and enduring effects of digital badges on online content consumption and generation. *International Journal of Research in Marketing*, 40(1), 146-163. <https://doi.org/10.1016/j.ijresmar.2022.06.001>.
- Luan, C. C., & Phan, T. A. (2024). Immersive technology and cause-related marketing: The role of personalization and value co-creation. *Journal of Consumer Behaviour*, 23(3), 1574-1596. <https://doi.org/10.1002/cb.2293>.

- Mansoor, S., Rahman, S. M., & Bowden, J. L. H. (2024). Purchase spillovers from the metaverse to the real world: The roles of social presence, trialability, and customer experience. *Journal of Consumer Behaviour*, 23(5), 2501-2552. <https://doi.org/10.1002/cb.2353>.
- Marchowska-Raza, M., & Rowley, J. (2024). Consumer and brand value formation, value creation and co-creation in social media brand communities. *Journal of Product & Brand Management*, 33(4), 477-492. <https://doi.org/10.1108/JPBM-01-2023-4299>.
- Messinger, P. R., Ge, X., Smirnov, K., Stroulia, E., & Lyons, K. (2019). Reflections of the extended self: Visual self-representation in avatar-mediated environments. *Journal of Business Research*, 100, 531-546. <https://doi.org/10.1016/j.jbusres.2018.12.020>.
- More, A. B. (2023). Implementing digital age experience marketing to make customer relations more sustainable. In *New horizons for Industry 4.0 in modern business* (pp. 99-119). Springer. <https://doi.org/10.3390/su13041865>.
- Mystakidis, S. (2022). Metaverse. *Encyclopedia*, 2(1), 486-497.
- Oh, H. J., Kim, J., Chang, J. J., Park, N., & Lee, S. (2023). Social benefits of living in the metaverse: The relationships among social presence, supportive interaction, social self-efficacy, and feelings of loneliness. *Computers in Human Behavior*, 139, 107498. <https://doi.org/10.1016/j.chb.2022.107498>.
- Pham, L. H., Woyo, E., Pham, T. H., & Truong, D. T. X. (2023). Value co-creation and destination brand equity: Understanding the role of social commerce information sharing. *Journal of Hospitality & Tourism Insights*, 6(5), 1796-1817.
- Rajput, M. S., & Walvekar, S. (2018). Social media communication: Influencer in apparel brand selection. *Asian Journal of Managerial Science*, 7(3), 49-53. <https://doi.org/10.51983/ajms-2018.7.3.1333>.
- Rasmussen, L. (2018). Parasocial interaction in the digital age: An examination of relationship building and the effectiveness of YouTube celebrities. *The Journal of Social Media in Society*, 7(1), 280-294.
- Rawat, D. B., & Hagos, D. H. (2024). Metaverse survey & tutorial: Exploring key requirements, technologies, standards, applications, challenges, and perspectives. *arXiv*. <https://doi.org/10.48550/arXiv.2405.04718>.
- Routray, J. K. (2025). Engaging consumers through “influencer marketing” via metaverse. In *Customer insights into innovation strategies for distributed market needs* (p. 382).
- Shrivastava, G. D., & Choithrani, S. (2024). The future of content marketing: Developing KPIs for metaverse content marketing. *ComFin Research*, 12(4), 13-22. <https://doi.org/10.34293/commerce.v12i4.7983>.
- Sornoza Parrales, G. I., & Batbayar, B. (2022). Exploring the impacts of NFTs in marketing strategies and customer relationships. <https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=9084109&fileId=9084245>.
- Sonboli, N., Smith, J. J., Cabral Berenfus, F., Burke, R., & Fiesler, C. (2021, June). Fairness and transparency in recommendation: The users' perspective. In *Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization* (pp. 274-279).
- Saridakis, G., Khan, Z., Knight, G., Idris, B., Mitra, J., & Khan, H. (2024). A look into the future: The impact of metaverse on traditional theories and thinking in international business. *Management International Review*, 64(4), 597-632. <https://doi.org/10.1007/s11575-024-00550-8>.
- Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, 53, 101742. <https://doi.org/10.1016/j.jretconser.2019.101742>.
- Stephenson, N. (1992). *Snow crash: A novel*. Bantam Books.
- Tao, M., Khan, J., Abbass, A., & Mehmood, K. (2025). Metaverse characteristics: The role of consumer experience shaping consumer behavior in the metaverse. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(3), 166. <https://doi.org/10.3390/jtaer20030166>.
- Temperino, E. (2023). The perks of being digital. Nikeland: A case study. In N. Sabatini, T. Sádaba, A. Tosi, V. Neri, & L. Cantoni (Eds.), *Fashion communication in the digital age* (pp. 1-16). Springer. https://doi.org/10.1007/978-3-031-38541-4_9.
- Torres, A., & Doherty, Á. (2022). Experiential marketing in a digital era. In *The SAGE handbook of digital marketing* (pp. 33-53). <https://doi.org/10.4135/9781529782509.n3>.
- Trikha, A., & Kaushik, M. B. (2025). Metaverse marketing: Unleashing the potential of virtual influencers. In *Cases on metaverse and consumer experiences* (pp. 303-328). IGI Global. <https://doi.org/10.4018/979-8-3693-7245-6.ch011>.
- Urdea, A. M., Constantin, C. P., & Purcaru, I. M. (2021). Implementing experiential marketing in the digital age for a more sustainable customer relationship. *Sustainability*, 13(4), 1865. <https://doi.org/10.3390/su13041865>.
- Vernuccio, M., Boccalini, S., & Patrizi, M. (2025). “Being” with the brand in the metaverse: Strengthening brand anthropomorphism to foster brand love. *Journal of Retailing and Consumer Services*, 84, 104204. <https://doi.org/10.1016/j.jretconser.2024.104204>.
- Vo, T. H., Wei-Han Tan, G., Pham, N. T., Truong, T. H. D., & Ooi, K. B. (2025). Promoting customer engagement and brand loyalty on social media: The role of virtual influencers. *International Journal of Consumer Studies*, 49(2), e70028.
- Vrontis, D., Karanasios, S., & Christofi, M. (2021). Social media influencer marketing: A systematic review, integrative framework and future research agenda. *International Journal of Consumer Studies*, 45(2), 617-644. <https://doi.org/10.1111/ijcs.12614>.
- Wasiq, M., Bashar, A., Khan, I., & Nyagadza, B. (2024). Unveiling customer engagement dynamics in the metaverse: A retrospective bibliometric and topic modelling investigation. *Computers in Human Behavior Reports*, 16, 100483. <https://doi.org/10.1016/j.chbr.2024.100483>.
- Weinberger, M. (2022). What is metaverse?-A definition based on qualitative meta-synthesis. *Future Internet*, 14(11), 310. <https://doi.org/10.3390/fi14110310>.
- Wu, S., Xu, L., Dai, Z., & Pan, Y. (2023). Factors affecting avatar customization behavior in virtual environments. *Electronics*, 12(10), 2286. <https://doi.org/10.3390/electronics12102286>.
- Xie, Q., Muralidharan, S., Edwards, S. M., & La Ferle, C. (2023). Unlocking the power of non-fungible token (NFT) marketing: How NFT perceptions foster brand loyalty and purchase intention among millennials and Gen Z. *Journal of Interactive Advertising*, 23(4), 356-373. <https://doi.org/10.1080/15252019.2023.2258875>.
- Yoon, N., Choi, D., & Lee, H. K. (2025). Exploring consumer participation in brand metaverse communities, focusing on the metaverse features-Fantasy experiences and self-expansion. *Journal of Consumer Behaviour*, 24(1), 267-281. <https://doi.org/10.1002/cb.2420>.
- Zhang, J., Cai, L., & Zheng, X. (2024). How influencers can enhance consumer responses by value co-creation. *European Journal of Marketing*, 58(11), 2566-2595. <https://doi.org/10.1108/EJM-05-2023-0362>.
- Zheng, Q., Do, T. N., Wang, L., & Huang, Y. (2022). Facing the illusion and reality of safety in social VR. *arXiv*. <https://doi.org/10.48550/arXiv.2204.07121>.
- Zhuk, A. (2024). Ethical implications of AI in the metaverse. *AI and Ethics*, 1-12. <https://doi.org/10.1007/s43681-024-00450-5>.