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Exploring Marketing in the Metaverse: A Paper Collection on Phygital
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INTRODUCTION

1. Premise and Research Objectives

The emergence of the Metaverse as a socio-technical infrastructure for interaction and consumption adds an immersive and persistent dimension to the continuum of digital channels, with potential implications for redefining touchpoints and the customer experience along the entire customer journey (Lemon & Verhoef, 2016). From this perspective, customer experience is no longer limited to “flat” (2D) contact points in time and space, but extends to immersive environments characterized by presence, embodiment, and multi-user synchronicity, where value exchanges intertwine with practices of play, identity, and co-creation (Dwivedi *et al.*, 2023; Hoyer *et al.*, 2020; Slater & Sanchez-Vives, 2016).

The managerial relevance of this transformation is evident both on the hardware-platform side - with the XR technologies market rebounding in 2024 and maintaining a long-term growth trajectory despite short-term slowdowns - and on the ecosystem side (e.g., Roblox, Fortnite), which aggregates audiences and engagement times on a systemic scale, becoming genuine hybrid spaces for branding, retail, and services (IDC, 2025).

From a theoretical perspective, the Metaverse lies at the intersection between the concepts of servicescape (Bitner, 1992) and omnichannel marketing (Verhoef *et al.*, 2015), but it transcends both. The “service environment” is no longer purely physical or digital, but socio-material and persistent, while the omnichannel logic evolves into a phygital model with high sensory intensity, implying new challenges for experience design, measurement of immersion, and data/identity governance. Moreover, platformization (Nieborg & Poell, 2018) shifts the competitive balance toward platforms that standardize affordances and monetization rules, deeply influencing the design of experiences and the extraction of value by brands (e.g., virtual goods and in-game retail). These transformations - still only partially conceptualized in marketing literature - require a theoretical advancement that distinguishes between the

Metaverse as “content” (a specific touchpoint) and as “container” (the medium or environment of the entire experience), thereby clarifying the underlying mechanisms of value creation (Simoni *et al.*, 2025).

Theoretically, this dissertation aims to:

- propose an integrated framework connecting servicescape, omnichannel logic, and immersion;
- develop a functional typology of the Metaverse’s role within customer experience;
- present an immersive extension of the Retail Mix.

From a managerial perspective, it offers actionable insights for managers and policymakers regarding the design and measurement of metaversal experiences.

1.1. Context and Relevance of the Metaverse Phenomenon

From a definitional standpoint, the Metaverse has been described as a persistent multi-user environment where physical reality and digital virtuality converge, enabling multisensory interactions through XR technologies (Mystakidis, 2022). Within marketing literature, it is positioned as a new sphere of symbolic and functional exchange in which branding, advertising, services, and well-being are redefined (Dwivedi *et al.*, 2023; Hollensen *et al.*, 2022).

The experiential foundation of this relevance lies in the mechanisms of immersion and presence (Slater & Sanchez-Vives, 2016), which sustain distinctive psychological and behavioral effects compared to 2D interfaces, influencing attention, memory, and engagement.

From the perspective of technological adoption, the AR/VR market resumed growth in 2024 (+10% in global shipments) thanks to new launches (Meta, Apple) and expanding commercial demand. IDC forecasts a slowdown in 2025 (-12%) due to product delays but a strong rebound in 2026 (+87%), with a CAGR of 38.6% for 2025-2029 and volumes exceeding the 2021 peak (11.2 million units) (IDC, 2025).

These dynamics indicate a consolidation phase in the adoption cycle, in which mixed reality serves as a bridge between consumer use cases (gaming, entertainment) and professional applications (education, operations).

From the ecosystem/platform perspective, audience scale is already substantial: Roblox recorded 111.8 million daily active users (DAU) and 27.4 billion hours of engagement in Q2 2025 (+41% and +58% year-over-year), confirming its role as an environment for social play, user-generated content, and brand activation (Roblox Corporation, 2025).

Fortnite likewise reached historic records - 44.7 million players in a single day during “Fortnite OG”-, demonstrating its capacity to capture attention and engagement on a massive scale (Morris, 2023). Moreover, recent studies highlight that approximately 80% of users in these virtual worlds are under the age of 18 (DemandSage, 2025). Although heterogeneous, these scale metrics suggest that a significant portion of consumer culture is already unfolding within immersive and platform-governed spaces, directly impacting the design of phygital touchpoints and retail logics (virtual goods, tokenized assets, eventization) (Nieborg & Poell, 2018; Verhoef *et al.*, 2015; Lemon & Verhoef, 2016). The massive presence of underage users also opens perspectives for a future in which online consumption will increasingly occur through immersion and interactivity rather than today’s prevailing “digital staticity”.

On the socio-economic level, global projections reveal large-scale growth. The World Economic Forum (2023) estimates that the overall value of the Metaverse market could reach approximately USD 3 trillion by 2032, with a user base exceeding 700 million people by 2030. In the same context, the report Exploring the Industrial Metaverse (World Economic Forum, 2023a) highlights how the industrial component of the Metaverse - including applications in manufacturing, education, and healthcare - constitutes a strategic lever for innovation and digital transformation of production processes. These forecasts confirm that the Metaverse is

not a passing phenomenon but a structural evolution of digitalization, capable of reshaping consumption models, operational processes, and value creation mechanisms.

Regarding social perception, a global survey conducted by Ipsos (2022) for the World Economic Forum, involving over 21,000 adults in 29 countries, found that 52% of respondents were familiar with the concept of the Metaverse, while about 50% expressed a positive attitude toward the use of extended reality in daily life.

The findings reveal greater openness in emerging markets and among younger age groups, suggesting that familiarity with immersive environments is already an integral part of new forms of sociality and digital consumption. This underscores the cultural relevance of the Metaverse as a space for symbolic and participatory experimentation, influencing engagement dynamics and brand loyalty.

The impact of the Metaverse on marketing therefore unfolds among three interconnected dimensions:

1. Experiential-sensory dimension - XR technologies transform the “atmosphere” of the servicescape into a synesthetic, co-constructed experience capable of modulating perceptions, emotions, and purchase intentions (Bitner, 1992).
2. Omnichannel-phygital dimension - the convergence of physical and digital channels generates seamless customer journeys, redefining roles, metrics, and modes of interaction (Verhoef *et al.*, 2015; Lemon & Verhoef, 2016).
3. Economic-strategic dimension - the logic of digital platforms and their standardized governance mechanisms (e.g., creator payouts, virtual assets, monetization rules) shifts the focus of firms from traditional media buying toward the design of integrated and interactive ecosystems (Nieborg & Poell, 2018; Verhoef *et al.*, 2021).

1.2. General and Specific Objectives of the Thesis

The overarching goal of this research is to conceptualize the Metaverse as a new paradigm of marketing and experiential value creation, analyzing its theoretical, managerial, and social implications for the phygital customer experience. This objective is grounded in a fundamental principle of contemporary management research: the need to understand technological transitions not merely as innovations, but as socio-material reconfigurations (Nambisan *et al.*, 2017; Orlikowski, 2007) that redesign roles, interactions, and market logics.

Despite the vast number of studies on digital marketing, the literature on metaverse marketing remains fragmented and still in an emerging phase (Dwivedi *et al.*, 2023; Lee *et al.*, 2024). Existing research tends to focus predominantly on technological dimensions or conceptual and narrative perspectives (Hollensen *et al.*, 2022; Park & Kim, 2022), while empirical evidence remains limited (Shukla *et al.*, 2024). In particular, there is a lack of systematic exploration of experiential value creation mechanisms and their integration with established marketing theories.

This gap translates into three main research deficits:

1. definitional and theoretical gap, due to the absence of a shared framework clarifying the Metaverse's role within marketing processes;
2. an empirical gap, stemming from the scarcity of observational data or qualitative studies in real contexts;
3. a managerial gap, related to the translation of experiential marketing and retail mix principles into virtual and hybrid environments.

This dissertation aims to address these gaps through a progressive, multi-paper, and multi-method approach, designed to generate a cumulative path of knowledge (Van Maanen *et al.*, 2007). Each contribution represents an analytical component of a broader theoretical

framework in which the Metaverse is explored along three interconnected dimensions: conceptual, experiential, and strategic.

The paper-based structure adopted follows contemporary paradigms of research in marketing and management (Podsakoff *et al.*, 2016), organizing the dissertation so that each scientific paper contributes complementarily to achieving the general objective.

The first paper, “*Marketing in the Metaverse: A Comprehensive Bibliometric Literature Review*” (Venturini & Sorrentino, 2025), occupies the exploratory phase of the project. It maps the state of the art of Metaverse marketing studies through a bibliometric analysis (Aria & Cuccurullo, 2017) conducted using the Biblioshiny software. Its contribution lies in identifying emerging thematic clusters, research trajectories, and unexplored areas, outlining a future research agenda consistent with existing literature gaps (Zupic & Čater, 2015).

The second paper, “*Understanding the Potentialities of the Metaverse for Marketers. Insights from Italy*” (Sorrentino *et al.*, 2024), continues the conceptual inquiry by exploring Italian managers’ perceptions and expectations regarding the Metaverse’s potential as a marketing tool. Using a qualitative case study methodology, it investigates opportunities related to the Metaverse as a virtual environment for marketing strategies, showing how it may support the implementation of omnichannel strategies that extend beyond digital channels toward immersive and virtual experiences.

The third contribution, “*Metaverse as Content or Container? Exploring the Future of Customer Experience in Tourism*” (Simoni *et al.*, 2025), focuses on the experiential dimension of the phenomenon, aiming to clarify the Metaverse’s ontological function in customer experience processes. Through a qualitative analysis based on interviews with tourism stakeholders, this study distinguishes between the Metaverse as a touchpoint (the content of interaction) and as an environment (the container of experience). It elaborates an interpretative framework that

extends Lemon and Verhoef's (2016) customer journey model to immersive and virtual touchpoints.

Lastly, the fourth paper, "*Monetizing in Free-to-Play Games: A Retail Mix Perspective*" (Ghezzi & Venturini, 2025), addresses the economic and strategic dimension of the phenomenon, extending retail mix theory (Levy & Grewal, 2023; McCarthy *et al.*, 1979) to virtual and free-to-play gaming ecosystems. Based on immersive netnography (Kozinets, 2022) and interviews with expert gamers, this study analyzes perceptions of value and monetization logics, exploring the relationship between ludic dynamics and commercial strategies. Its main contribution lies in the proposal of the Virtual Retail Mix conceptual model, which integrates gamification and retail strategy within interactive and participatory digital contexts.

Taken together, these four papers define a coherent theoretical and empirical pathway that evolves from mapping the phenomenon to constructing applicative models. This approach not only helps bridge the identified gaps but also enables a systemic interpretation of the Metaverse as a new marketing ecosystem, in which value, experience, and interaction are co-created through hybrid and interdependent socio-technological dynamics.

1.3. Research Questions and Thesis Structure

The formulation of the research questions represents the operational translation of the theoretical framework into a coherent and progressive investigative program.

In line with the general objective of conceptualizing the Metaverse as a new paradigm of marketing and experiential value creation, the research questions arise from the intersection of the three previously identified gaps - theoretical, empirical, and managerial - and from the intent to provide a systemic contribution to the emerging literature on metaverse marketing. They aim to understand what the Metaverse is from a marketing perspective but also how and why it is redefining the logics of experience, relationships, and value within the contemporary phygital context.

The first line of inquiry concerns the conceptual dimension, namely, the need to understand how the Metaverse aligns with or departs from traditional models of digital marketing and brand experience. Specifically, the dissertation asks whether the Metaverse should be interpreted as a linear evolution of social platforms and immersive media, or rather as a new autonomous ecosystem endowed with its own rules of interaction, exchange, and meaning. This perspective responds to the need for a shared theoretical definition of the phenomenon - one that integrates the technological, symbolic, and relational dimensions characterizing its hybrid nature (Dwivedi *et al.*, 2023; Hollensen *et al.*, 2023).

RQ1: What are the main marketing opportunities related to the use of the Metaverse as a virtual servicescape?

The second line of investigation focuses on the experiential dimension, addressing how immersive technologies reshape the logic of the customer journey and the structure of value co-creation processes. Rather than concentrating on individual perceptions or identity construction, this perspective explores how the Metaverse redefines the continuity and circularity of experiences, connecting pre-, during-, and post-consumption stages through hybrid and persistent touchpoints (Lemon & Verhoef, 2016; Buhalis *et al.*, 2023). The objective is to understand how the Metaverse functions as both content and container of experience, enabling new modalities of engagement, co-creation, and accessibility within service interactions.

RQ2: How does the Metaverse operate as an immersive touchpoint within the different phases of the customer journey?

The third perspective addresses the strategic and managerial dimension of the phenomenon. It seeks to understand how firms can translate the logics of experiential marketing and retail mix into digital and hybrid environments, where value is co-constructed not merely through products or services but through interactive experiences, events, and digital objects. The central

question thus becomes how the Metaverse is transforming paradigms of offering and monetization, and to what extent models such as platformization (Nieborg & Poell, 2018) or free-to-play ecosystems may represent the new competitive architectures of digital consumption. Within this framework, the dissertation analyzes the evolution of touchpoints, omnichannel integration strategies, and new performance metrics related to interaction, presence, and immersion, aiming to propose models useful for managerial practice.

RQ3: How are product, price, place, promotion, people, and presentation reconfigured within virtual free-to-play environments?

These research questions are not treated in isolation but are addressed through the multi-paper structure of the dissertation, which allows them to be explored along a logical and cumulative trajectory.

The first contribution, exploratory and bibliometric in nature, maps the scientific field and clarifies the conceptual trajectories of the phenomenon.

The second contribution deepens the managerial perspective, investigating perceptions and expectations regarding the adoption of the Metaverse as a marketing tool, with the aim of identifying interpretative patterns that can reveal opportunities for marketers in its application.

The third study focuses on the experiential dimension, interpreting the Metaverse as a space of interaction for tourism customer experience and proposing a conceptual framework that extends the Lemon and Verhoef (2016) model to immersive touchpoints.

Lastly, the fourth paper addresses the economic-strategic dimension, examining monetization logics within free-to-play gaming worlds and proposing the Virtual Retail Mix model, which translates experiential marketing principles into interactive digital contexts.

This structure does not represent a mere juxtaposition of studies but an organic knowledge-building process, in which each paper contributes to constructing a cumulative theory of

metaverse marketing. Following the progressive focusing approach (Parlett & Hamilton, 1972; Stake, 1995), the dissertation advances gradually - from theoretical and conceptual mapping, to empirical exploration, and finally to applied model development. This progression enables the combination of rigor and relevance, two fundamental criteria in contemporary managerial research (Kieser & Leiner, 2009), and provides a systemic overview of the Metaverse's potential as a new experiential and strategic touchpoint for the marketing of the future.

1.4. The Research Process Model

The methodological model adopted to structure the research design is based on the framework proposed by Saunders *et al.* (2009), known as the *Research Onion* (see Figure 1). This model enables a systematic and multi-layered representation of the different dimensions of the research process. Widely recognized in the social and managerial sciences, it provides an analytical structure that is both linear and circular, capable of combining rigor and flexibility in the organization of a scientific project's phases. Its strength lies in its ability to integrate the epistemological, methodological, and operational components of the research process, offering a clear - though not rigid - framework for the decisions that guide the entire investigation. As the authors emphasize (Saunders *et al.*, 2009), there is no fixed or universally valid sequence of steps: the construction of a research design is a dynamic, iterative, and reflective process, in which topic definition, literature review, research question formulation, methodological choice, and data collection influence one another continuously. It is precisely this cyclical and interactive nature that the model seeks to represent through the metaphor of the "onion", in which each layer - from research philosophy to data collection techniques - encloses and conditions the next.

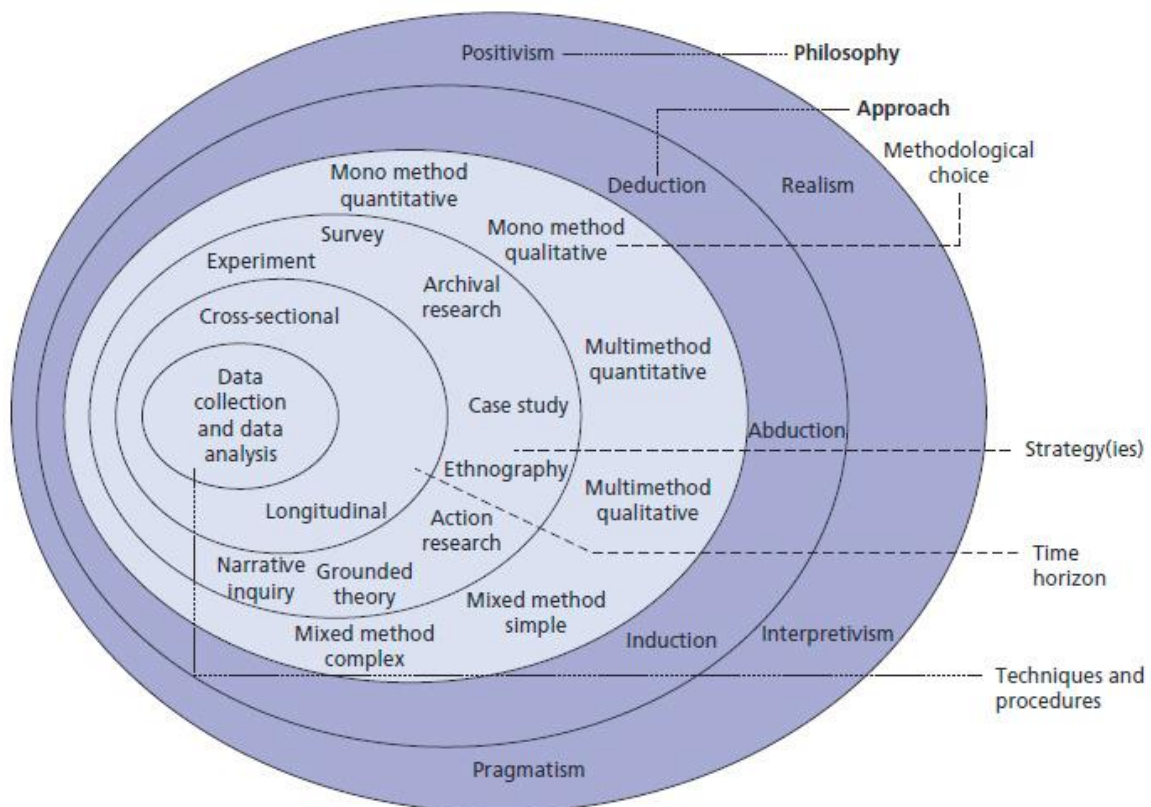


Figure 1 The Research Onion. Source: Saunders et al. (2009)

The initial stages, devoted to problem definition and literature analysis, rarely follow a strictly sequential order. Rather, they are dialectical moments, during which the researcher continually refines the theoretical framework while simultaneously shaping the empirical questions. Hence, the literature review is not a static preliminary phase but a continuous process accompanying the conceptual and methodological development of the research. It is precisely because of this reflective and adaptive nature that the *Research Onion* proves particularly suitable for exploratory and multi-method studies such as the present one, where understanding the phenomenon - in this case, the Metaverse as a new marketing ecosystem - requires a constant dialogue between theory and empirical evidence.

In this dissertation, the Saunders model is adopted not as a prescriptive scheme but as a conceptual reference framework guiding epistemological and methodological choices. Its six layers - research philosophy, research approach, research strategy, methodological choices, time

horizon, and techniques & procedures - make it possible to coherently consider both macro aspects (ontological and epistemological vision) and micro aspects (data collection and analysis techniques). This structure provides a comprehensive view of the knowledge-generation process while leaving room for interpretive flexibility and continuous adaptation, essential in studying an emerging, fluid, and socio-technically complex phenomenon such as the Metaverse. The chosen model therefore reflects the need to represent research as a nonlinear yet generative process, capable of embracing the complexity and evolving nature of the object studied. Within this dissertation, it serves as an interpretive matrix for the subsequent sections dedicated to research philosophy, approach, strategy, and methods, outlining a process consistent with the iterative and cumulative logic of the adopted paper-based structure.

1.4.1 Research Philosophy

The research philosophy that guides this work is grounded in an interpretivist–constructivist paradigm, according to which social reality is conceived as an intersubjective construction, and knowledge as a dialogical process of interpretation. From this perspective, the goal of research is not to discover universal laws or stable causal relationships, but to understand how individuals and organizations attribute meaning to their experiences within specific socio-cultural contexts (Guba & Lincoln, 1994; Lincoln *et al.*, 2011). Interpretivism rests on the assumption that the social world does not exist independently of the actors who experience it but is continuously produced, negotiated, and transformed through discursive and symbolic practices (Crotty, 1998). Applied to this dissertation, such a perspective implies that the Metaverse is not viewed merely as a technological environment or digital platform, but as a socio-material device in which practices, meanings, platform rules, and interactions are mutually co-determined (Orlikowski, 2007). Following the classical perspective of Berger and Luckmann (2016), metaversal reality can thus be interpreted as an emerging social construction, in which human and technological actions intertwine in the ongoing definition of what is

perceived as *real*, *present*, or *authentic*. Studying the Metaverse as a marketing phenomenon therefore means investigating a process of meaning co-construction, where identity, experience, and economic value are collectively formed. The adopted paradigm aligns with the taxonomy proposed by Saunders *et al.* (2009), which distinguishes interpretivism from positivist paradigms for its emphasis on context, multiplicity of perspectives, and meaning specificity. Knowledge is thus situated and contextual; the researcher is not a neutral observer but an involved interpreter, whose epistemic position influences the construction of knowledge (Alvesson & Sköldberg, 2017). In this logic, reflexivity plays a central role: it constitutes an epistemic practice that makes transparent the interpretive mediations and positional conditions influencing the researcher's fieldwork (Charmaz, 2006). The choice of an interpretivist orientation reflects the awareness that the phenomenon under study - the Metaverse as a new ecosystem for marketing and experiential value creation - is emergent, fluid, and unstable, and that its understanding requires conceptual tools capable of capturing its processual and relational nature. To be explained, metaversal reality (intrinsically hybrid) demands a hermeneutic and phenomenological approach oriented toward *thick description* (Geertz, 1973) and toward reconstructing the meanings that actors attribute to their immersive experiences.

Within this interpretivist framework, the research draws upon Constructivist Grounded Theory (Charmaz, 2006) as the methodological approach most consistent with the adopted philosophy. Although classical Grounded Theory (Glaser & Strauss, 1967) was rooted in a post-positivist paradigm, its constructivist evolution overcomes the logic of "objective discovery" and embraces a reflexive co-construction process between researcher and participants. From this standpoint, theory is not found within data, but built through interaction, acquiring the status of a situated interpretation. This version allows the combination of analytical rigor and contextual sensitivity, making Grounded Theory a methodological device perfectly aligned with the interpretivist vision underlying the entire structure of the dissertation.

Consistent with the qualitative research tradition outlined by Denzin and Lincoln (2011), this work values the plurality of perspectives, attention to context, and situated construction of knowledge. The goal is not to produce statistical generalizations, but to develop middle-range theories (Merton, 1968) capable of offering transferable interpretive frameworks useful for future studies, including quantitative ones. Thus, the adopted research philosophy acknowledges that organizational and consumer realities within the Metaverse are co-constructed by humans and technologies, and that knowledge about them can only emerge through iterative processes of understanding and reflexivity. It is upon this foundation that the methodological path of the dissertation is built, with a focus on generating theoretical insights that can contribute meaningfully to both academic literature and managerial practice.

1.4.2 Research Approach

The methodological approach guiding this dissertation is qualitative, inductive, and progressive, consistent with the interpretivist–constructivist philosophy outlined in the previous section. Since the Metaverse represents an emerging and empirically underexplored phenomenon, the primary objective of this research is not to test predefined hypotheses but to explore, interpret, and conceptualize the dynamics of meaning, value, and experience that develop within it. This approach acknowledges that, in the absence of established theoretical models, qualitative inquiry provides the most suitable framework for understanding the socio-material and symbolic processes through which actors construct meaning, interact, and generate value (Eisenhardt, 1989; Gioia *et al.*, 2013). The qualitative approach adopted here is grounded in an inductive logic, progressing from empirical data toward higher-order theoretical constructs. However, pure induction is complemented by moments of abduction - a constant dialogue between theory and data - where emerging interpretations are compared with existing theoretical concepts to progressively refine the understanding of the phenomenon (Dubois & Gadde, 2002). This circular alternation between empirical observation and theoretical

reflection enables the development of theoretically sensitive knowledge (Charmaz, 2006), allowing the Metaverse to be interpreted not as an objective reality but as a meaningful construction co-created by participants and the researcher.

Within this context, the principle of progressive focusing (Stake, 1995) serves as the epistemic backbone of the entire dissertation. Progressive focusing implies that the researcher does not rigidly define research questions at the outset, but progressively refines them during the investigation, adapting them to emerging insights and evidence. In this dissertation, this logic operates both within individual studies and across the studies composing the paper collection, which is structured as a cumulative process of theory building.

Specifically, the sequence of the four papers follows a progressive focusing trajectory:

- The first paper performs a theoretical mapping function, identifying the main thematic areas, conceptual gaps, and unexplored research directions within the field of Metaverse marketing.
- The second paper, based on qualitative interviews with pioneering managers, explores perceived opportunities in using the Metaverse for marketing purposes, providing the empirical foundations for subsequent theorization.
- The third and fourth papers apply Grounded Theory (Charmaz, 2006) to generate theory, the former by exploring the construction of immersive experiences (Metaverse customer experience) and the latter by developing a conceptual model of digital retail strategy (Virtual Retail Mix).

This structure demonstrates how progressive focusing operates on multiple levels: on one hand, it reflects the continuous theoretical refinement occurring within each study; on the other, it expresses the evolutionary coherence of the entire dissertation, in which each paper informs the next in a process of cumulative learning and progressive theorizing (Corley & Gioia, 2011).

The resulting trajectory moves from systematic description of the field, to empirical interpretation of managerial perceptions, and finally to conceptual theory building, maintaining a constant tension between observation, reflection, and theoretical abstraction.

In summary, the methodological approach integrates qualitative inquiry, inductive-abductive reasoning, and the principle of progressive focusing, forming an open, iterative, and cumulative research pathway capable of adapting to the complexity of the Metaverse and capturing its experiential, strategic, and socio-technical depth. This configuration reflects a vision of research as a process of progressive theoretical construction, in which each phase contributes to the development of a more mature and grounded interpretive paradigm - one that can guide future studies, including those of a quantitative nature.

1.4.3 Research Method

The research method adopted in this dissertation is configured as a qualitative multi-method approach, consistent with the interpretivist orientation and the inductive-abductive logic that guide the entire project. According to the model proposed by Saunders *et al.* (2009), the research method defines the combination and sequencing of techniques employed in the research design, clarifying whether the investigation is mono- or multi-methodological and specifying the balance between qualitative and quantitative components.

In this work, the methodological perspective is predominantly qualitative, as the main goal is to gain an in-depth understanding of the practices and processes of co-constructing meaning and experiential value within the Metaverse. Except for a preliminary quantitative-descriptive phase - limited to the bibliometric analysis, used exclusively to frame the state of the art - the entire empirical core of the dissertation is qualitative and sequential, grounded in interpretive approaches aimed at theory building rather than hypothesis testing. This configuration follows the logic of progressive focusing, in which research questions and levels of analysis are progressively refined based on the evidence that emerges, and of systematic combining (Dubois

& Gadde, 2002), which entails a continuous dialogue between theory and empirical data. Such an approach enables the complexity of the phenomenon to be addressed in a flexible and cumulative manner, integrating different perspectives within a single interpretive paradigm. The result is a coherent, open, and adaptive methodological framework, supporting a process of progressive and contextually grounded theory construction.

1.4.4 Research Strategy

The research strategy operationalizes the qualitative methodological framework of the dissertation through a sequence of complementary empirical approaches, each corresponding to one paper of the collection. In line with the logic of progressive focusing (Stake, 1995), the different strategies are not independent but interconnected, as each phase of the investigation stems from the insights generated by the previous one and contributes to a cumulative understanding of the Metaverse as a new paradigm of experiential marketing.

The first study adopts a systematic literature review strategy with bibliometric integration, aimed at mapping and synthesizing the state of the art of academic research on Metaverse marketing. The analysis, conducted on a corpus of publications indexed in Web of Science, sought to identify the main thematic areas, conceptual connections, and theoretical gaps in the field (Zupic & Čater, 2015). This quantitative-descriptive approach provides the systematic reference framework on which the subsequent empirical phases are based.

The second paper develops a case study strategy (Eisenhardt, 1989), applied to the first Italian marketing agency specialized in the design of virtual environments within the Metaverse. The investigation was based on semi-structured interviews (McCracken, 1988) with founders, creatives, and project managers, triangulated with secondary data (corporate reports, press releases, digital content). The analysis followed the thematic approach of Braun and Clarke (2006), which made it possible to identify interpretive patterns-related opportunities on the usage of the Metaverse as a new marketing channel.

The third study adopts a constructivist Grounded Theory strategy (Charmaz, 2006), with the goal of understanding how the Metaverse influences the construction of customer experience in the tourism sector. Data were collected through semi-structured interviews based on scenario development (Van Notten *et al.*, 2003), allowing participants to reflect exploratively on possible applications and impacts of the Metaverse on experiential tourism. The analysis follows the Gioia methodology (Gioia *et al.*, 2013), with the aim of generating an emerging theoretical structure that connects perceptions, practices, and meanings.

The fourth and final paper adopts an immersive netnographic strategy (Kozinets, 2022), centered on participant observation within free-to-play gaming ecosystems and social gaming platforms that share common metaversal features. The investigation combines direct observation of interaction practices with qualitative interviews with expert players, exploring the dynamics of consumption, identity, and value within digital gaming contexts. In this phase as well, the analysis follows a grounded theory approach, supported by the Gioia *et al.* (2013) model, to construct an original conceptual framework - the Virtual Retail Mix - which interprets ludic consumption as both a commercial and relational experience.

Taken together, these strategies form a coherent, progressive, and theoretically grounded methodological pathway. The first paper defines the context and research gaps; the second explores the managerial dimension; the third generates theory in the field of tourism customer experience; and the fourth extends the reflection to consumption and retail logic within virtual worlds. This articulation reflects a sequential triangulation that integrates theoretical, exploratory, and interpretive analyses, maintaining a balance between methodological rigor and conceptual depth. The overall strategy thus constitutes an advanced qualitative design, oriented toward theory building and the in-depth understanding of a phenomenon still largely unexplored in marketing literature.

1.5 Overview of the Chapters

This dissertation is structured into four main sections.

The introductory section, now nearing its conclusion, serves to frame the context of reference, outline the motivations and objectives of the research, and present the methodological model adopted. It highlights the academic and managerial relevance of the Metaverse phenomenon, defines the research questions, and describes the philosophy, approach, and methodological strategies that guide the entire investigation. This section therefore constitutes the interpretive and methodological foundation upon which the three main parts of the dissertation are built.

The first part, entitled *The Metaverse in Marketing: Theoretical, Technological, and Managerial Foundations*, develops the theoretical foundations of the study by retracing the evolution of the Metaverse concept, its technological origins, and the main interpretive frameworks through which it has been analyzed. This section also discusses the economic, social, and cultural implications of the phenomenon, as well as its impact on marketing and customer experience processes. Particular attention is devoted to digital transformation and the emergence of phygital touchpoints, immersive brand experiences, and value co-creation processes, with the goal of outlining an integrated perspective on the convergence between physical and virtual dimensions in consumer behavior.

The second part, *Paper Collection*, represents the empirical core of the dissertation and includes four interconnected studies, each contributing in a complementary way to the theoretical construction of the work.

The first paper presents a systematic literature review combined with bibliometric analysis, aimed at mapping the academic field of Metaverse marketing and identifying its main thematic trajectories.

The second paper develops a case study on an Italian company that is a pioneer in the field, analyzing - through semi-structured interviews triangulated with secondary data and a thematic analysis (Braun & Clarke, 2006) - the managerial competencies and barriers involved in Metaverse adoption.

The third paper applies a Grounded Theory approach (Charmaz, 2006), based on scenario-driven interviews and analyzed according to the Gioia Methodology (Gioia *et al.*, 2013), to explore the role of the Metaverse in customer journey processes.

Lastly, the fourth study adopts immersive netnography (Kozinets, 2022) to observe consumption dynamics and monetization strategies in free-to-play gaming contexts, combining participant observation and gamer interviews, with an analysis also grounded in a theory-building perspective.

The interludes connecting the individual papers serve as moments of reflection and synthesis, summarizing results and highlighting the logical and methodological continuity of the research process. They help maintain a consistent narrative thread and emphasize the progressive and cumulative nature of the multi-paper design.

The third part, *General Discussion*, collects and interprets the overall findings of the research, discussing their theoretical, managerial, and social implications. It offers an integrated view of the contributions emerging from the different studies, with the aim of providing a unified framework for understanding the Metaverse as a new space for experiential value creation and as a relational interface among firms, individuals, and technologies. Finally, this section discusses the main limitations of the study and suggests future research directions for the continued development of this line of inquiry.

1.6 Dissertation's Editorial Positioning

The four studies composing this dissertation have been published in leading academic journals and conference proceedings. Specifically:

- Paper 1: *Marketing in the Metaverse: A Comprehensive Bibliometric Literature Review* - Venturini, L., & Sorrentino, A (2025). Published in *Advanced Perspectives and Trends in Digital Transformation of Firms, Networks, and Society*. DOI: 10.1007/978-3-031-80692-6
- Paper 2: *Understanding the Potentialities of the Metaverse for Marketers. Insights from Italy* - Sorrentino, A., Simoni, M., Venturini, L., & Caratù, M. (2024). Published in *Sinergie-SIMA Management Conference Proceedings Management of sustainability and well-being for individuals and society*. ISBN 978-88-94-7136-5-7
- Paper 3: *Metaverse as Content or Container? Exploring the Future of Customer Experience in Tourism* - Simoni, M., Sorrentino, A., & Venturini, L. (2025). Published in *Techonological Forecasting and Social Change*. DOI: 10.1016/j.techfore.2025.124334
- Paper 4: *Monetizing in Free-to-Play Games: A Retail Mix Perspective* - Ghezzi, A., & Venturini, L. (2025). Published in *Proceedings of the Colloquium on European Research in Retailing (CERR) 2025*. ISBN: 978-91-989295-3-9

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References

- Alvesson, M., & Sköldböck, K. (2017). Reflexive methodology: New vistas for qualitative research.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, 11(4), 959-975.
- Berger, P., & Luckmann, T. (2016). The social construction of reality. In *Social theory re-wired* (pp. 110-122). Routledge.
- Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of marketing*, 56(2), 57-71.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. sage.
- Corley, K. G., & Gioia, D. A. (2011). Building theory about theory building: what constitutes a theoretical contribution? *Academy of management Review*, 36(1), 12-32.
- Crotty, M. J. (1998). The foundations of social research: Meaning and perspective in the research process.

- DemandSage. (2025). 22 *Metaverse Statistics 2025 [Daily & Monthly Users]*.
<https://www.demandsage.com/metaverse-statistics/>
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. sage.
- Dubois, A., & Gadde, L.-E. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), 553-560.
- Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., & Dutot, V. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, 40(4), 750-776.
- Geertz, C. (1973). *The interpretation of cultures*. Basic books.
- Ghezzi, A. I., & Venturini, L. (2025). Monetizing in Free-to-Play Games: A Retail Mix Perspective. COLLOQUIUM ON EUROPEAN RESEARCH IN RETAILING,
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16(1), 15-31.
- Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology the journal of the British sociological association*, 12(1), 27-49.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105.
- Hollensen, S., Kotler, P., & Opresnik, M. O. (2022). Metaverse—the new marketing universe. *Journal of Business Strategy*, 44(3), 119-125.
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71.

- IDC. (2025). *AR & VR headsets market insights*.
https://www.idc.com/promo/arvr/?utm_source=chatgpt.com
- Ipsos. (2022). *Global Advisor – Metaverse*.
<https://www.ipsos.com/sites/default/files/ct/news/documents/2022-05/Global%20Advisor%20-%20WEF%20-%20Metaverse%20-%20May%202022%20-%20Graphic%20Report.pdf>
- Kieser, A., & Leiner, L. (2009). Why the rigour–relevance gap in management research is unbridgeable. *Journal of Management Studies*, 46(3), 516-533.
- Kozinets, R. V. (2022). Immersive netnography: a novel method for service experience research in virtual reality, augmented reality and metaverse contexts. *Journal of Service Management*, 34(1), 100-125.
- Lee, L.-H., Braud, T., Zhou, P. Y., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2024). All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda. *Foundations and trends® in human-computer interaction*, 18(2–3), 100-337.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69-96.
- Levy, M., & Grewal, D. (2023). *Retail management*. McGraw-Hill.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research*, 4(2), 97-128.
- McCarthy, E. J., Shapiro, S. J., & Perreault, W. D. (1979). *Basic marketing*. Irwin-Dorsey Ontario.
- McCracken, G. (1988). *The Long Interview*. SAGE Publications.
- Merton, R. K. (1968). *Social theory and social structure*. Simon and Schuster.

- Morris, C. (2023, 06 November). Fortnite just had its biggest day ever, 5.5 years after it launched, with 44.7 million players in one day. *Fortune*.
https://fortune.com/2023/11/06/fortnite-record-players-epic-games-fortniteog/?utm_source=chatgpt.com
- Mystakidis, S. (2022). Metaverse. *Encyclopedia*, 2(1), 486-497.
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management. *Mis Quarterly*, 41(1), 223-238.
- Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New media & society*, 20(11), 4275-4292.
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization studies*, 28(9), 1435-1448.
- Park, S.-M., & Kim, Y.-G. (2022). A metaverse: Taxonomy, components, applications, and open challenges. *IEEE Access*, 10, 4209-4251.
- Parlett, M., & Hamilton, D. (1972). "Evaluation as Illumination: A New Approach to the Study of Innovatory Programs". Occasional Paper.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational research methods*, 19(2), 159-203.
- Roblox Corporation. (2025). *Roblox reports second quarter 2025 financial results*.
https://ir.roblox.com/news/news-details/2025/Roblox-Reports-Second-Quarter-2025-Financial-Results/default.aspx?utm_source=chatgpt.com
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

- Shukla, A., Mishra, A., Rana, N. P., & Banerjee, S. (2024). The future of metaverse adoption: A behavioral reasoning perspective with a text-mining approach. *Journal of Consumer Behaviour*, 23(5), 2217-2233.
- Simoni, M., Sorrentino, A., & Venturini, L. (2025). Metaverse as content or container? Exploring the future of customer experience in tourism. *Technological Forecasting and Social Change*, 220, 124334.
- Slater, M., & Sanchez-Vives, M. V. (2016). Enhancing our lives with immersive virtual reality. *Frontiers in Robotics and AI*, 3, 74.
- Sorrentino, A., Simoni, M., Venturini, L., & Caratu, M. (2024). Understanding the potentialities of metaverse for marketers. Insights from Italy. Sinergie-SIMA Management Conference Proceedings,
- Stake, R. (1995). Case study research. *Cham: Springer*.
- Van Maanen, J., Sørensen, J. B., & Mitchell, T. R. (2007). The interplay between theory and method. *Academy of management Review*, 32(4), 1145-1154.
- Van Notten, P. W., Rotmans, J., Van Asselt, M. B., & Rothman, D. S. (2003). An updated scenario typology. *Futures*, 35(5), 423-443.
- Venturini, L., & Sorrentino, A. (2025). Marketing in the Metaverse: A Comprehensive Bibliometric Literature. Advanced Perspectives and Trends in Digital Transformation of Firms, Networks, and Society: 2nd International Conference of the Digital Transformation Society, Naples, Italy, May 23-24, 2024,
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: introduction to the special issue on multi-channel retailing. *Journal of retailing*, 91(2), 174-181.

World Economic Forum. (2023a). *Exploring the industrial metaverse: A roadmap to the future*.

W. E. Forum. <https://www.weforum.org/publications/exploring-the-industrial-metaverse-a-roadmap-to-the-future/>

World Economic Forum. (2023b). *This chart shows how big the metaverse market could*

become. available at: www.weforum.org/agenda/2023/02/chart-metaverse-market-growthdigital-economy/

Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational research methods*, 18(3), 429-472.

Part I – The Metaverse in Marketing: Theoretical, Technological, and Managerial Foundations

The evolution of digital technologies is profoundly redefining the boundaries of economic, social, and cultural experience. Within this process, the Metaverse emerges as one of the most significant and paradigmatic developments of digital transformation, introducing a novel way of conceiving interaction among individuals, technologies, and organizations. Originally a metaphor for a parallel universe - born in literary imagination and later adopted by the technology industry - the concept of the Metaverse has progressively evolved into an experiential and relational platform in which physical and virtual dimensions merge, giving rise to a phygital continuum of communication, consumption, and participation (Dwivedi *et al.*, 2022; Buhalis *et al.*, 2023). Within this scenario, marketing plays a crucial role as a discipline tasked with interpreting and designing new forms of value creation. The Metaverse offers the opportunity to experiment with immersive and interactive spaces where the consumer is no longer a mere spectator but the protagonist of sensory and symbolic experiences that unfold within three-dimensional and socially shared environments (Hoyer *et al.*, 2020; Hilken *et al.*, 2022). This transformation demands a reconsideration of traditional marketing categories - from the notion of product to the dynamics of consumption relationships - and opens the way to a new experiential and co-creative logic, in which technology acts both as a mediator of meaning and a catalyst of value (Vargo & Lusch, 2004; Lusch & Nambisan, 2015).

This chapter therefore analyzes the theoretical, technological, and managerial foundations underpinning the evolution of the Metaverse as a marketing context. The first section traces the technological development that has accompanied its emergence, highlighting the contribution of enabling infrastructures such as immersive technologies, blockchain, and artificial intelligence. Subsequently, the main theoretical frameworks used to interpret the phenomenon are discussed, to clarify how immersive digital experiences generate new forms of participation

and value. Lastly, the managerial implications of the Metaverse are examined, showing how companies are progressively integrating metaversal environments into their business models and strategic marketing processes.

Through this analysis, the chapter aims to outline a unified conceptual framework linking technological evolution to the transformation of firm–consumer relationships. The Metaverse is not conceived here as a simple extension of the digital domain but as a new socio-economic space in which value emerges through experience and co-creation. In this sense, Part I represents the bridge between the introductory reflection and the empirical core of the dissertation, providing the theoretical and managerial foundations necessary to understand the role of the Metaverse as both an experiential touchpoint and a strategic lever for innovation in contemporary marketing.

2.1 Origins and Technological Development of the Metaverse

The term *Metaverse* was first introduced in Neal Stephenson’s novel *Snow Crash* (1992), where it was described as a shared, three-dimensional digital space populated by avatars through which individuals interact within a parallel reality (Arya *et al.*, 2024; Dionisio *et al.*, 2013). Although originally fictional, this representation has progressively evolved into a technological and social concept, used to describe immersive and persistent digital environments (Kye *et al.*, 2021; Lee *et al.*, 2024; Wang *et al.*, 2023) in which the distinction between the real and the virtual tends to blur (Kumar, 2024; Park & Kim, 2022).

From a technological standpoint, Lee *et al.* (2024) define it as a collective virtual space created by the convergence between augmented physical reality and persistent digital environments, encompassing the sum of all virtual and augmented realities. Mystakidis (2022) offers a socio-technical interpretation, describing the Metaverse as a multi-user and persistent universe where physical and digital realities merge through extended reality (XR) technologies and blockchain-based digital economies.

From an economic-managerial perspective, Dwivedi *et al.* (2022) conceive the Metaverse as a convergent ecosystem where virtual, augmented, and physical realities coexist, enabling immersive, interactive, and transactional experiences. Park and Kim (2022) identify four structural dimensions: technological infrastructure (hardware, networks, computing), three-dimensional virtual environments, decentralized digital economies, and social interactions that shape collective experience.

From a marketing-oriented perspective, Kaplan and Haenlein (2024) interpret the Metaverse as a virtual environment in which individuals - through digital avatars - can interact, work, learn, and consume, enabled by the convergence of augmented reality, virtual reality, and artificial intelligence. This view highlights the relational nature of the phenomenon: the value created in the Metaverse emerges from the integration of technology, identity, and participation (Dwivedi *et al.*, 2023; Hoyer *et al.*, 2020; Slater & Sanchez-Vives, 2016).

A key contribution to a systemic conceptualization of the Metaverse is offered by Barrera and Shah (2023), who propose an integrated view encompassing technological, experiential, and relational dimensions. They describe the Metaverse as an immersive, interactive, and persistent digital environment where the convergence between the physical and virtual worlds generates new forms of consumer value and participation. They articulate the user experience around three interdependent dimensions - immersiveness, sociability, and environmental fidelity - supported by a set of technological building blocks (AI, XR, blockchain, IoT, networks, and computing). In their conceptual model, the circular relationship between enabling technologies and user experience demonstrates how digital infrastructures and interface devices form the foundation of the system, while at its core lies the subjective and social experience, determined by the level of immersion, environmental fidelity, and perceived sociability. This framework enables the Metaverse to be visualized as a multidimensional ecosystem in which technology and experience co-determine one another. The conceptual map proposed by Barrera and Shah

(2023) - illustrated in *Figure 2* - effectively connects technological and experiential dimensions, serving as a bridge between conceptual definition and technical-operational structure. The elements of immersiveness and environmental fidelity recall Steuer’s (1992) *presence theory* and Slater’s (2018) studies, according to which the perception of “being inside” a virtual environment depends on sensory richness and interactivity. The sociability factor, instead, reflects the centrality of relationality, previously emphasized by Kaplan and Haenlein (2024) and Dwivedi *et al.* (2023), who argue that the value generated by the Metaverse primarily stems from its ability to create community and shared identity.



Figure 2 The Metaverse: An Organizing Framework. Proposed by Barrera & Shah (2023)

The development of the Metaverse is made possible by a set of converging technologies that operate synergistically, constituting its material and cognitive infrastructure. These technologies - often referred to as *technological building blocks* - enable not only the construction of digital environments but also the perception of presence, social interaction, and economic value creation (Ball, 2022; Dwivedi *et al.*, 2022).

Extended Reality, which encompasses Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), represents the sensory foundation of the Metaverse (Benaben *et al.*, 2025). It allows immersive and interactive simulation of three-dimensional environments through devices such as headsets, haptic controllers, and motion sensors (Flavián *et al.*, 2024; Jerald, 2015; Kaplan & Haenlein, 2024; Loureiro *et al.*, 2019). According to Jerald (2015), the quality of virtual experience depends on the system's ability to ensure perceptual coherence among visual, auditory, and motor stimuli, while Slater and Sanchez-Vives (2016) emphasize that the sense of presence arises from the integration of technical (fidelity, interactivity) and psychological (engagement, agency) factors. Recent studies show that XR applications are evolving from visualization tools to social and commercial interaction environments (Heller *et al.*, 2019; Hilken *et al.*, 2022; Orús *et al.*, 2021). In this context, Virtual Reality (VR) provides the highest level of perceptual immersion, while Augmented Reality (AR) extends digital information into the real world, creating hybrid environments (Milgram & Kishino, 1994). The combined use of these dimensions generates Mixed Reality (MR), where physical and digital elements coexist and interact in a coherent and dynamic manner (Asoodar *et al.*, 2024). This fusion is fundamental for constructing phygital experiences, where the boundaries between online and offline become permeable (Batat, 2024).

A second pillar of the Metaverse is Artificial Intelligence (AI), which constitutes its cognitive engine (Ioannidis & Kontis, 2023). AI enables the generation of adaptive environments, realistic avatars, and autonomous interactions through machine learning and natural language

processing (Dwivedi *et al.*, 2023; Kaplan & Haenlein, 2024; Soliman *et al.*, 2024). It also allows real-time behavioral analysis, personalizing the experience through recommendation and prediction systems (Soliman *et al.*, 2024; Wedel & Kannan, 2016). From a managerial perspective, AI supports the optimization of virtual services and automated management of the metaversal customer journey, consistent with the logic of smart marketing ecosystems (Dwivedi *et al.*, 2023; Gandhi *et al.*, 2024; Hoyer *et al.*, 2020).

Blockchain represents the backbone of the metaversal economy, providing a decentralized infrastructure for the exchange and ownership of digital assets (Gadekallu *et al.*, 2022). Smart contracts ensure verifiable transactions without intermediaries, while non-fungible tokens (NFTs) certify the uniqueness of virtual assets (Belk *et al.*, 2022; Sung *et al.*, 2023). This technology reshapes the economic relationship between firms and consumers by introducing models of ownership and participation based on digital scarcity and traceability (Chang *et al.*, 2024). Furthermore, blockchain underpins new forms of the creator economy, where users monetize content and activities directly through interoperable platforms (Chen & Cheng, 2022; Shalender & Singla, 2024).

The Internet of Things (IoT) extends interconnection to the physical world, enabling real objects to communicate with virtual ones (Nitti *et al.*, 2015). Environmental sensors, wearable devices, and biometric data are integrated in real time with digital simulations (Atzori *et al.*, 2017), fostering coherent and dynamic phygital experiences (Barile *et al.*, 2025). At a systemic level, IoT represents the link between material infrastructure and virtual environment, enabling continuous synchronization between the two levels and contextual information processing (Farooq *et al.*, 2015).

Next-generation networks and distributed computing provide the computational capacity required for persistence and simultaneous interaction (Dhelim *et al.*, 2022). 5G and 6G

networks guarantee high bandwidth and low latency - essential for real-time rendering and multi-user co-presence (Chang *et al.*, 2022; Park & Kim, 2022; Zawish *et al.*, 2024). At the same time, cloud computing and edge computing enable decentralized data management, reducing response times and enhancing the scalability of virtual environments (Xu & Niyato, 2023). The integration of these technologies facilitates the transition from centralized architectures to distributed networks, positioning the Metaverse as a global networked infrastructure (Ball, 2022).

Another key component is the digital twin, a dynamic virtual model of a physical object, process, or place updated in real time through data flows (Batty, 2018; Grieves, 2014). Initially employed in industrial contexts (Grieves, 2023), digital twins are now applied to urban simulation, experiential retail, and virtual tourism environments (Caprari *et al.*, 2022; Deng *et al.*, 2024; Singh *et al.*, 2022). They act as cognitive interfaces, enabling experimentation and analysis of future scenarios, and facilitating the design of experiences and services within the Metaverse (Aloqaily *et al.*, 2022; Buhalis *et al.*, 2022).

Taken together, these technologies operate not as independent entities but as an integrated socio-technical system, in which infrastructures, algorithms, and interfaces determine the quality of the user experience (Ball, 2022; Barrera & Shah, 2023). The Metaverse does not exist as a mere sum of digital tools, but as an emergent ecosystem born from the interconnection of technology, perception, and social interaction. Understanding its building blocks is therefore essential for analyzing the experiential, cognitive, and market dynamics that will be explored in the following chapters.

2.2 Ecosystems and Platforms of the Metaverse

The Metaverse can be understood as a heterogeneous ensemble of interconnected digital ecosystems (Schöbel & Leimeister, 2023; Yang *et al.*, 2025), where social platforms, gaming environments, virtual workspaces, and decentralized markets converge. These ecosystems

operate according to the logic of platformization (Nieborg *et al.*, 2022) - that is, the processes through which cultural, economic, and social production become increasingly mediated by digital platforms that act both as infrastructures and as regulators of value. Such platforms function as multi-sided ecosystems where users, firms, and developers interact through logics of networks, standards, and interoperability (Constantinides *et al.*, 2018; Evans & Schmalensee, 2016; Parker *et al.*, 2016). The structure of these environments generates a competitive lock-in effect, since entry and switching costs are high, and dependence on proprietary architectures can influence the distribution of economic and informational power.

In the current landscape, two macro-models of metaversal platforms can be distinguished: centralized and decentralized (Sorrentino *et al.*, 2024). The former - represented by ecosystems such as Meta Horizon Worlds - are characterized by proprietary architectures and vertical control over both the technological infrastructure and data flows (Kaplan & Haenlein, 2024). These platforms prioritize scalability and standardized user experience, but limit interoperability and full ownership of digital assets. The latter - such as Decentraland or The Sandbox - are based on blockchain and smart contracts, promoting an idea of an open Metaverse founded on transparency, distributed ownership, and interoperability (Karaarslan & Yazici Yilmaz, 2023; Ud Din *et al.*, 2023). However, these environments still face limitations in user base size and economic sustainability (Wang *et al.*, 2023).

Centralized platforms currently represent the dominant form. Meta Horizon Worlds embodies the social and immersive vision of the Metaverse promoted by Meta Platforms, where avatars and 3D environments serve as tools for interaction, collaboration, and entertainment. Yet, the lack of interoperability and the high degree of proprietary control reduce their potential for economic co-creation.

Decentralized platforms, by contrast, represent the experimental dimension of the Metaverse, centered on digital ownership and tokenized economies. Through NFTs and smart contracts, users can own, exchange, and monetize virtual assets in a verifiable manner (Ghosh *et al.*, 2024). These platforms promote a form of digital capitalism (Schiller, 1999), in which the symbolic value of experience intertwines with the economic scarcity of virtual goods (Schapis *et al.*, 2025). However, fragmentation and the absence of shared standards still hinder effective interoperability (Wang *et al.*, 2023).

A third category of metaversal ecosystems has progressively emerged - hybrid platforms - which combine elements of centralized systems (scalability, technological control, unified governance) with aspects typical of decentralized ones (creative participation, personalization, and partial ownership of digital assets) (Gent, 2022). These platforms operate as semi-open participatory environments, where companies retain control over the infrastructure but delegate content creation and modulation to users (Tailleur & Ramis, 2025). Hybrid platforms - among which Roblox, and Fortnite stand out - thus function as transmedia ecosystems, where gaming, entertainment, and social interaction converge (Shamsrizi, 2023). In these spaces, the boundary between playful and commercial experiences dissolves, giving rise to shared experiential consumption spaces (Ball, 2024; Tailleur & Ramis, 2025). According to Ball (2022), these ecosystems represent a form of “proto-Metaverse”, since they enable interactivity, internal economies, and persistent digital environments, even if they have not yet achieved full interoperability. Their hybrid nature fosters a convergence of ludic, social, and commercial logics, positioning them at the intersection of the gaming paradigm and the Metaverse paradigm (Shamsrizi, 2023; Tailleur & Ramis, 2025). From an economic perspective, these platforms are based on the principle of distributed co-creation, where the user is not only a consumer but also a producer of value (prosumer) (Kotler, 2010; Toffler, 2022), in line with the logic of the creator economy (Edeling & Wies, 2024; Shalender & Singla, 2024; Singla *et al.*, 2024). This model

has enabled the rise of self-sustaining internal economies, based on virtual currencies and reward systems, capable of supporting continuous innovation cycles and new forms of brand engagement.

The relationship between video games and the Metaverse represents one of the most significant theoretical and managerial intersections (Barrera & Shah, 2023; Buhalis *et al.*, 2023; Simon, 2023; Zhang *et al.*, 2025). Gaming environments indeed constitute the operational prototype of the Metaverse (Yoo *et al.*, 2023), where immersion, social interaction, and monetization have long coexisted. According to Zubek (2020), gaming culture provides the cognitive and experiential grammar necessary to navigate virtual worlds, anticipating the engagement and reward logics typical of the Metaverse. Studies by Cai *et al.* (2014) and Hamari and Keronen (2017) show that Free-to-Play (F2P) and Game-as-a-Service (GaaS) models have revolutionized the very concept of value, replacing one-time purchases with systems of microtransactions (Gibson *et al.*, 2022; McMahon, 2025), aesthetic goods (Koles *et al.*, 2025), and temporary memberships (Mai & Hu, 2023). This economic logic is based on engagement and personalization, which are also central to experiential marketing (Hoyer *et al.*, 2020). The avatar becomes a space of identity and symbolism (Lee *et al.*, 2023; Li *et al.*, 2013), while digital objects - skins, accessories, emotes - turn into markers of status and belonging. The progressive fusion of playful and commercial logics leads to the gamification of consumption and the ludification of marketing (Ghezzi & Venturini, 2025). Global brands such as Nike, Gucci, and Balenciaga have already experimented with the integration between gaming and retail (Bellary & Raghavendra, 2025), using platforms like Roblox or Fortnite to activate immersive brand experience strategies (Dwivedi *et al.*, 2023). According to Alimamy and Jung (2024), these experiences embody the new frontier of value co-creation, where the consumer is no longer a passive recipient but an active participant in an environment that mediates experiences and meanings.

From a managerial and marketing perspective, metaversal ecosystems require a redefinition of interaction models between firms and consumers. The customer journey becomes fragmented and extended into virtual environments, generating three-dimensional touchpoints that integrate sensory, social, and symbolic dimensions (Alexander *et al.*, 2025; Gleim *et al.*, 2025; Zhong *et al.*, 2024). The firm assumes the role of experience designer, curating the aesthetics, narrative, and functionality of digital spaces (Buhalis *et al.*, 2022; Hoffman & Novak, 2018). From a strategic perspective, the Metaverse represents a platform for experiential orchestration in which companies must balance control and participation, scalability and authenticity, innovation and responsibility (Dwivedi *et al.*, 2022). The key challenge lies in creating value in a context where consumption becomes performance, and loyalty is measured by immersive engagement rather than transaction frequency. Finally, the tension among centralized, decentralized, and hybrid ecosystems opens new research directions on Metaverse governance (Egliston *et al.*, 2025; McStay, 2023). Issues related to data ownership, energy sustainability of infrastructures, and digital inclusion remain unresolved. Understanding how platforms negotiate power among technologies, users, and institutions is crucial for the future development of marketing in immersive environments.

2.3 Theoretical Frameworks

Analyzing the Metaverse as a socio-technical and marketing phenomenon requires a multidimensional theoretical approach that integrates perspectives from cognitive science, perceptual psychology, organization studies, and digital marketing. The goal is not only to understand the technological workings of virtual environments, but also to explain how they produce meaning, value, and interaction (Dwivedi *et al.*, 2023; Hoyer *et al.*, 2020; Kaplan & Haenlein, 2024).

One of the most established references in the literature is the paradigm of presence and immersion. According to Steuer (1992), virtual reality can be defined as a digital environment

that maximizes telepresence, namely the psychological sensation of “being in” a technologically mediated space. This perception results from two fundamental dimensions: vividness (the sensory richness of information) and interactivity (the ability to influence the virtual environment in real time). Subsequent theoretical developments, such as Lombard and Ditton (1997), extended this concept by introducing the idea of “presence as a perceptual illusion of nonmediation”, that is, the sensation that technological mediation disappears, generating an experience of direct reality. In this perspective, immersion is not only a technical condition but also a psychological experience that depends on the integration of visual, auditory, and motor stimuli (Loureiro *et al.*, 2019; Slater, 2018; Slater & Sanchez-Vives, 2016). Slater (2018) shows that presence rests on two distinct yet complementary factors: place illusion (the feeling of being physically located within the virtual space) and plausibility illusion (the sense that what occurs in that environment is genuinely possible). These mechanisms explain the transformative potential of the Metaverse in terms of cognitive and emotional engagement—central aspects for experiential marketing as well (Heller *et al.*, 2019; Hilken *et al.*, 2022; Pine & Gilmore, 1998).

A second theoretical lens is embodied cognition, the idea that cognition is rooted in bodily and sensory processes (Barsalou, 2008; Wilson, 2002). This approach challenges the Cartesian separation between mind and body, arguing that knowledge and perception emerge from the dynamic interaction between the organism and its environment (Shapiro, 2019). Applied to digital contexts, the embodiment paradigm makes it possible to interpret the role of the avatar as an extension of the self (Belk, 2013; Nowak & Fox, 2018) and the embodied nature of virtual experience as a form of situated learning (Biocca, 1997; Kiltner *et al.*, 2012). In the Metaverse, the sensation of embodiment - perceiving the avatar as part of one’s own body - decisively influences behavior, empathy, and intention (Kiltner *et al.*, 2012; Kim, 2021; Kowert, 2014). Recent literature connects these processes to extended identity and self-representation (Belk,

2013; Freeman & Maloney, 2021), showing how immersive presence fosters the construction of personal - and branded - narratives. The user does not merely live in a virtual environment but embodies it, becoming both producer and consumer of the experience (Dwivedi *et al.*, 2023; Yee & Bailenson, 2007). These dynamics form the cognitive and symbolic basis of value co-creation in metaverse marketing (Buhalis *et al.*, 2022; Ramadan & Ramadan, 2025).

The Metaverse can also be read through the lens of sociomateriality, a perspective that rejects a rigid distinction between technology and social context (Leonardi, 2012; Nieborg *et al.*, 2022; Orlikowski, 2007). In this view, technologies are not mere tools but entities that co-construct practices and meanings. The user–system interaction becomes a performative process in which action is shaped by digital materiality while, at the same time, technology is continuously redefined by social practices (Nambisan *et al.*, 2017; Suchman, 2007). From this standpoint, the Metaverse appears as an assemblage of technical, human, and symbolic elements, whose configuration varies depending on relationships and uses. This perspective is particularly useful for understanding the Metaverse as an adaptive system of co-production among users, platforms, and algorithms - rather than as a static environment. It enables analysis beyond the immersive dimension, considering issues of power, governance, and control intrinsic to digital infrastructures (Floridi, 2022; Nieborg & Poell, 2018; Nieborg *et al.*, 2022).

The integration of presence, embodiment, simulation, and sociomateriality provides a comprehensive theoretical framework for interpreting the Metaverse as an experiential and relational ecosystem, in which technology functions as a cognitive and symbolic mediator of the firm-consumer relationship (Dwivedi *et al.*, 2023; Hoyer *et al.*, 2020; Lemon & Verhoef, 2016).

2.4 Socio-economic and Cultural Implications of the Metaverse

After analyzing the technologies that enable the functioning of the Metaverse (Section 2.1) and the ecosystems and platforms that structure its operational infrastructure (Section 2.2), the

subsequent examination of the main theoretical frameworks (Section 2.3) has made it possible to interpret the experiential and relational foundations of the phenomenon. Building on these premises, this section explores how such technological and theoretical dynamics translate into systemic transformations in production, consumption, and social interaction models. The Metaverse is not merely a technological advancement, but a paradigmatic shift in the forms of value creation and meaning construction, where technologies, experiences, and culture converge within a new socio-economic space (Ball, 2022; Buhalis *et al.*, 2022; Dwivedi *et al.*, 2023; Hoyer *et al.*, 2020; Lemon & Verhoef, 2016). This perspective aligns with the principles of Service-Dominant Logic (Lusch & Nambisan, 2015; Vargo & Lusch, 2008), according to which value is not embedded in the product but co-created through the interaction of actors, resources, and technologies within service ecosystems.

Within marketing, this evolution gives rise to a new experience economy (Hoyer *et al.*, 2020; Pine & Gilmore, 1998), in which perceived value derives from consumer immersion and active participation. In the Metaverse, experience becomes the main unit of exchange, and co-creation of meaning replaces traditional transactional logic (Lemon & Verhoef, 2016; Prahalad & Ramaswamy, 2004). According to Hoyer *et al.* (2020), experiential value manifests through multisensory and symbolic interactions that enhance engagement and memorability. Firms no longer simply communicate with consumers but design environments and interaction rules that enable the emergence of co-creative consumption practices (Dwivedi *et al.*, 2022; Hilken *et al.*, 2022; Hollebeek & Macky, 2019). This dynamic connects to concepts of identity immersion and self-representation, central to consumer studies. Metaversal environments foster processes of identity play (Jenkins & Deuze, 2008; Turkle, 2011), through which individuals construct and experiment with multiple versions of themselves via their avatars (Ki *et al.*, 2025; Kim *et al.*, 2023; Taylor *et al.*, 2024; Yang *et al.*, 2024). In this sense, consumption becomes a performative act of self-expression and cultural belonging (Chen *et al.*, 2025; Lin & Deng,

2024). Brand communities in the Metaverse extend the logics of co-production and fan labor already observed in participatory media (Abrahamsson & Stenalm, 2018; Cova & Dalli, 2009; Huotari & Hamari, 2017; Yoon *et al.*, 2025). At the same time, the Metaverse fosters the rise of a culture of creativity and individual entrepreneurship, expressed in the creator economy (Bleier *et al.*, 2024; Edeling & Wies, 2024). In these contexts, users and developers generate content, experiences, and virtual goods that fuel distributed micro-economies (Cheng, 2023; Shalender & Singla, 2024; Singla *et al.*, 2024). This phenomenon reshapes the structure of value in digital chains, shifting it from industrial to experiential production and introducing new challenges regarding rights, governance, and remuneration.

From an organizational perspective, the Metaverse compels firms to rethink their business models strategically. According to Dwivedi *et al.* (2022), companies must develop metaverse readiness capabilities to integrate physical and digital experiences, designing new immersive touchpoints along the customer journey (Lemon & Verhoef, 2016; Verhoef *et al.*, 2021). These capabilities include managing virtual assets, defining three-dimensional engagement metrics, and orchestrating technological partnership ecosystems (Constantinides *et al.*, 2018; Evans & Schmalensee, 2016).

From a cultural standpoint, the Metaverse acts as a hybrid space between reality and virtuality, where symbolic production and social interaction intersect (Hadi *et al.*, 2024). The digital media literature highlights how these environments foster the creation of communities of meaning and belonging (Nakamura, 2020; Tsutsui *et al.*, 2025), while also reproducing power dynamics and digital inequalities (Al-Kfairy *et al.*, 2025; Waligórski, 2025; Wiederhold, 2022). Thus, the cultural dimension of the Metaverse is ambivalent: on one hand, it offers opportunities for inclusion, education, and participation; on the other, it raises ethical questions regarding privacy, data ownership, and behavioral manipulation.

Finally, the social implications extend to the themes of digital well-being and sustainability. Recent studies show that prolonged use of immersive environments can affect bodily perception and cognitive balance (Chang *et al.*, 2020; Kourtesis *et al.*, 2023), while also promoting new forms of empathy and connection (Divakaran *et al.*, 2024; Ud Din & Almogren, 2023). From a systemic perspective, the Metaverse raises questions about the energy sustainability of XR and blockchain infrastructures (De Giovanni, 2023; Shaju, 2023), requiring governance models oriented toward technological ethics and corporate social responsibility.

The socio-economic and cultural implications of the Metaverse thus reveal that it is not merely an emerging technological phenomenon but a new economic-relational paradigm, in which consumption, production, and culture converge. Understanding it requires simultaneous analysis of the processes of value creation, meaning, and governance that define the transformation of marketing in the phygital era.

2.5 Strategic Implications and Opportunities for Marketing in the Metaverse

The emergence of the Metaverse as a new competitive and relational environment offers firms unprecedented opportunities for experiential value creation, while at the same time raising complex strategic, ethical, and social issues. As highlighted by Dwivedi *et al.* (2023), the Metaverse does not merely represent a technological frontier but a laboratory for rethinking the role of marketing in an increasingly data-driven, immersive, and interconnected society. Its managerial relevance lies in the ability to combine customer engagement, product innovation, immersive storytelling, and participatory economic models (Cheung *et al.*, 2024; Hazan *et al.*, 2022; Kraus *et al.*, 2022; Lin *et al.*, 2024; Manuri *et al.*, 2023).

From a strategic perspective, firms find in the Metaverse a platform to expand their symbolic presence and to experiment with new modes of interaction with consumers (Rane *et al.*, 2023a). The possibility of constructing three-dimensional brand worlds, hosting experiential events or virtual showrooms, and integrating gamification into communication strategies allows firms to

overcome the limits of traditional marketing (Arya *et al.*, 2024; Hazan *et al.*, 2022; Li & Jia, 2025).

In these environments, value is not generated by mere exposure to a message but by active participation, by the consumer's ability to contribute to brand narratives, and to become a co-author of experiential meaning.

Immersive technologies also enable a new form of customer insight (Rane *et al.*, 2023b) based on the observation of avatariar behaviors, biometric user data, and real-time interactions (Balica *et al.*, 2022; Sorrentino & López-Guzmán, 2025). However, the growing granularity of such data demands ethical and responsible management (Togbolo *et al.*, 2024; Zhuk, 2024), consistent with the principles of privacy by design (Tang, 2025). Immersive environments can generate unprecedented quantities of biometric data (Oláh & Nica, 2022) - such as eye movements, voice, gestures, and posture - which, if not adequately protected, may lead to forms of behavioral surveillance (McStay, 2023). However, the collection and processing of these data raise issues related to informed consent, profiling, and the risk of perceptual manipulation (Moerel, 2024).

The potential for competitive differentiation in the Metaverse lies in firms' ability to integrate immersive technologies with customer experience modeling strategies (Hoyer *et al.*, 2020; Teixeira *et al.*, 2012). Companies capable of creating coherent and fluid experiential journeys between the physical and the virtual can strengthen loyalty, advocacy, and willingness to pay (Dash *et al.*, 2021; Dwivedi & Hasan, 2025; Jafar & Ahmad, 2024; Mishra & Gupta, 2025; Simonetti *et al.*, 2025). Immersiveness thus becomes a value multiplier, capable of transforming the relationship with the consumer into a co-evolutionary partnership (Luan & Phan, 2024). Among the main emerging opportunities are: the creation of virtual commerce (v-commerce) experiences (Bilquise *et al.*, 2024; Jeong *et al.*, 2022; Shen *et al.*, 2021); the offering of digital

twins of products (Sharma & Bansal, 2023); and the introduction of AI driven personalization mechanisms (Ibrahim, 2024; Soliman *et al.*, 2024).

Overall, the establishment of the Metaverse as a competitive and relational space marks a critical transition for contemporary marketing. Firms are no longer merely communicating value but co-constructing it with consumers, transforming experience into a space of continuous interaction and co-creation. Immersive technologies thus become mediators of meaning, capable of merging sensory, symbolic, and social dimensions into a single experiential architecture. From this perspective, managerial capability does not consist solely in adopting innovative tools, but in designing relational contexts in which consumers can find authenticity, engagement, and belonging. Companies that succeed in combining creativity, technology, and human sensitivity will be able to transform the Metaverse from a mere digital environment into a shared space of value, where experience becomes the primary language of the relationship between brand and individual.

2.6 Theoretical Synthesis and Transition Toward Empirical Research

The theoretical framework outlined in this first part has shown how the Metaverse constitutes a complex socio-technical ecosystem in which digital infrastructures, consumption practices, and co-creation processes converge to generate new forms of experiential and relational value. The analysis of enabling technologies (Section 2.1) clarified the technological and sensory foundations of the phenomenon, highlighting how the integration of extended reality, artificial intelligence, blockchain, IoT, and next-generation networks forms the backbone of the immersive experience.

Section 2.2, dedicated to ecosystems and platforms, illustrated the logics of platformization and the centralized, decentralized, and hybrid governance models that regulate value creation and distribution.

The exploration of the theoretical frameworks of reference (Section 2.3) provided an

interpretive perspective on the processes of perception, embodiment, and socio-material interaction that make immersive experience a site for the construction of meaning and identity. Finally, Sections 2.4 and 2.5 highlighted, respectively, the socio-economic and cultural implications and the strategic opportunities for marketing, emphasizing the potential of the Metaverse as a new competitive and relational infrastructure for contemporary firms.

Taken together, these contributions reveal several interpretative gaps that guide the subsequent empirical investigation:

- the need to understand how individuals experience and interpret metaversal environments, and how such experiences shape perceptions of value, belonging, and identity;
- the need to explore the organizational and design practices through which firms experiment with the Metaverse as a space for innovation, communication, and relationship building;
- the need to investigate the emerging forms of co-creation and participation that manifest in hybrid physical-digital contexts, where the boundaries between producer and consumer are increasingly permeable;
- the need to understand how culture and meaning are formed and negotiated within communities, virtual environments, and brand worlds, revealing new logics of experiential value construction.

From these premises, the Metaverse emerges as an interpretive laboratory in which technology acts as a mediator of practices, identities, and relationships, and marketing as a privileged field of observation for processes of signification and co-production.

Part II of the dissertation therefore aims to translate these theoretical assumptions into the empirical domain, adopting qualitative and interpretive approaches to analyze how value is

constructed, shared, and lived within real metaversal experiences .

Through the examination of cases, practices, and testimonies, the research seeks to uncover patterns of meaning, interaction logics, and relational dynamics that can contribute to redefining the paradigms of experiential marketing in the phygital era.

References

- Abrahamsson, A.-L., & Stenalm, J. (2018). Metaverse: Co-creating value in a galaxy not so far away? *Interactive Marketing, 51*, 57-71.
- Al-Kfairy, M., Alrabaee, S., Alfandi, O., Mohamed, A. T., & Khaddaj, S. (2025). Navigating ethical dimensions in the metaverse: Challenges, frameworks, and solutions. *IEEE Access*.
- 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.
- Alimamy, S., & Jung, T. (2024). The AR cloud: Navigating metaverse augmentation technologies for enhanced co-creation of value within services. *Journal of Service Research, 10946705241265753*.
- Aloqaily, M., Bouachir, O., Karray, F., Al Ridhawi, I., & El Saddik, A. (2022). Integrating digital twin and advanced intelligent technologies to realize the metaverse. *IEEE Consumer Electronics Magazine, 12*(6), 47-55.
- 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.
- Asoodar, M., Janesarvatan, F., Yu, H., & de Jong, N. (2024). Theoretical foundations and implications of augmented reality, virtual reality, and mixed reality for immersive learning in health professions education. *Advances in Simulation, 9*(1), 36.
- Atzori, L., Iera, A., & Morabito, G. (2017). Understanding the Internet of Things: definition, potentials, and societal role of a fast evolving paradigm. *Ad Hoc Networks, 56*, 122-140.

- Balica, R.-Ș., Majerová, J., & Cuțitoi, A.-C. (2022). Metaverse applications, technologies, and infrastructure: predictive algorithms, real-time customer data analytics, and virtual navigation tools. *Linguistic and Philosophical Investigations*, 21, 219-235.
- Ball, M. (2022). *The metaverse: and how it will revolutionize everything*. Liveright Publishing.
- Ball, M. (2024). *The metaverse: Fully revised and updated edition: Building the spatial internet*. Liveright Publishing.
- Barile, D., Secundo, G., & Del Vecchio, P. (2025). Discovering the phygital customer experience: which digital technologies influence leading companies' processes? *European Journal of Innovation Management*, 1-26.
- Barrera, K. G., & Shah, D. (2023). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420.
- Barsalou, L. W. (2008). Grounded cognition. *Annu. Rev. Psychol.*, 59(1), 617-645.
- Batat, W. (2024). Phygital customer experience in the metaverse: A study of consumer sensory perception of sight, touch, sound, scent, and taste. *Journal of Retailing and Consumer Services*, 78, 103786.
- Batty, M. (2018). Digital twins. In (Vol. 45, pp. 817-820): Sage Publications Sage UK: London, England.
- Belk, R., Humayun, M., & Brouard, M. (2022). Money, possessions, and ownership in the Metaverse: NFTs, cryptocurrencies, Web3 and Wild Markets. *Journal of Business Research*, 153, 198-205.
- Belk, R. W. (2013). Extended self in a digital world. *Journal of consumer research*, 40(3), 477-500.
- Bellary, S., & Raghavendra, A. H. (2025). The Metaverse Chronicles: Success Stories in Virtual Retail. In *The AI Metaverse Revolution: Transforming Multi-Business Scenarios (Volume 2)* (pp. 33-43). Emerald Publishing Limited.

- Benaben, F., Congès, A., & Fertier, A. (2025). A prospective vision of the evolution of immersive technologies: Towards a definition of metaverse. *Technovation, 140*, 103154.
- Bilquise, G., Shaalan, K., & Alkhatib, M. (2024). A Systematic Review of Virtual Commerce Solutions for the Metaverse. *International Journal of Advanced Computer Science & Applications, 15*(8).
- Biocca, F. (1997). The cyborg's dilemma: Progressive embodiment in virtual environments. *Journal of computer-mediated communication, 3*(2), JCMC324.
- Bleier, A., Fossen, B. L., & Shapira, M. (2024). On the role of social media platforms in the creator economy. *International Journal of Research in Marketing, 41*(3), 411-426.
- Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management, 97*, 104724. <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104724>
- Buhalis, D., Lin, M. S., & Leung, D. (2022). Metaverse as a driver for customer experience and value co-creation: implications for hospitality and tourism management and marketing. *International Journal of Contemporary Hospitality Management, 35*(2), 701-716.
- Cai, W., Chen, M., & Leung, V. C. (2014). Toward gaming as a service. *IEEE Internet Computing, 18*(3), 12-18.
- Caprari, G., Castelli, G., Montuori, M., Camardelli, M., & Malvezzi, R. (2022). Digital twin for urban planning in the green deal era: A state of the art and future perspectives. *Sustainability (Switzerland), 14*(10), 6263.
- Chang, C.-W., Lai, C.-J., & Yen, C.-C. (2024). Examining drivers of NFT purchase intention: The impact of perceived scarcity and risk. *Acta Psychologica, 248*, 104424.
- Chang, E., Kim, H. T., & Yoo, B. (2020). Virtual reality sickness: a review of causes and measurements. *International Journal of Human-Computer Interaction, 36*(17), 1658-1682.

- Chang, L., Zhang, Z., Li, P., Xi, S., Guo, W., Shen, Y., Xiong, Z., Kang, J., Niyato, D., & Qiao, X. (2022). 6G-enabled edge AI for metaverse: Challenges, methods, and future research directions. *Journal of communications and information networks*, 7(2), 107-121.
- Chen, L.-X., Chang, K.-M., Su, S.-W., & Hou, K.-C. (2025). Cultural Influences on Avatar Creation in Social Metaverses: Comparing Self-Presentation Among Individualistic and Collectivistic Users. *International Journal of Human-Computer Interaction*, 1-21.
- Chen, Y., & Cheng, H. (2022). The economics of the metaverse: A comparison with the real economy. *Metaverse*, 3(1), 19.
- Cheng, S. (2023). Metaverse. In *Metaverse: Concept, content and context* (pp. 1-23). Springer.
- Cheung, M. L., Leung, W. K., Chang, L. M. K., Aw, E. C.-X., & Wong, R. Y. (2024). Immersive time in the metaverse and visits to the physical world: why not both? A holistic customer engagement framework. *International Journal of Contemporary Hospitality Management*, 36(11), 3674-3703.
- Constantinides, P., Henfridsson, O., & Parker, G. G. (2018). Introduction—platforms and infrastructures in the digital age. In (Vol. 29, pp. 381-400): Informs.
- Cova, B., & Dall'Aglio, D. (2009). Working consumers: the next step in marketing theory? *Marketing Theory*, 9(3), 315-339.
- Dash, G., Kiefer, K., & Paul, J. (2021). Marketing-to-Millennials: Marketing 4.0, customer satisfaction and purchase intention. *Journal of Business Research*, 122, 608-620.
- De Giovanni, P. (2023). Sustainability of the Metaverse: A transition to Industry 5.0. *Sustainability (Switzerland)*, 15(7), 6079.
- Deng, B., Wong, I. A., & Lian, Q. L. (2024). From metaverse experience to physical travel: the role of the digital twin in metaverse design. *Tourism Review*, 79(5), 1076-1087.

- Dhelim, S., Kechadi, T., Chen, L., Aung, N., Ning, H., & Atzori, L. (2022). Edge-enabled metaverse: The convergence of metaverse and mobile edge computing. *arXiv preprint arXiv:2205.02764*.
- Dionisio, J. D. N., Iii, W. G. B., & Gilbert, R. (2013). 3D virtual worlds and the metaverse: Current status and future possibilities. *ACM Computing Surveys (CSUR)*, *45*(3), 1-38.
- Divakaran, A., Yang, H.-J., Kim, S.-w., Shin, J.-e., & Kim, S.-H. (2024). Beyond Presence: Exploring Empathy within the Metaverse. *Applied Sciences*, *14*(19), 8958.
- Dwivedi, R., & Hasan, N. (2025). Enhancing Brand Awareness and Loyalty Through Gamification in the Metaverse. In *Addressing Practical Problems Through the Metaverse and Game-Inspired Mechanics* (pp. 259-288). IGI Global Scientific Publishing.
- 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., Janssen, M., Kim, Y.-G., Kim, J., Koos, S., Kreps, D., Kshetri, N., Kumar, V., Ooi, K.-B., Papagiannidis, S., Pappas, I. O., Polyviou, A., Park, S.-M., Pandey, N., Queiroz, M. M., Raman, R., Rauschnabel, P. A., Shirish, A., Sigala, M., Spanaki, K., Wei-Han Tan, G., Tiwari, M. K., Viglia, G., & 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/https://doi.org/10.1016/j.ijinfomgt.2022.102542>
- Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., & Dutot, V. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, *40*(4), 750-776.

- Edeling, A., & Wies, S. (2024). Embracing entrepreneurship in the creator economy: The rise of creatrepreneurs. *International Journal of Research in Marketing*, 41(3), 436-454.
- Egliston, B., Carter, M., & Clark, K. E. (2025). Who will govern the metaverse? Examining governance initiatives for extended reality (XR) technologies. *New media & society*, 27(6), 3361-3381.
- Evans, D. S., & Schmalensee, R. (2016). *Matchmakers: The new economics of multisided platforms*. Harvard Business Review Press.
- Farooq, M. U., Waseem, M., Mazhar, S., Khairi, A., & Kamal, T. (2015). A review on internet of things (IoT). *International journal of computer applications*, 113(1).
- Flavián, C., Tussyadiah, I. P., & Orús, C. (2024). How immersive technologies are redefining the customer journey. Guest editorial. *International Journal of Contemporary Hospitality Management*, 36(11), 3557-3565.
- Floridi, L. (2022). Metaverse: a matter of experience. *Philosophy & Technology*, 35(3), 73.
- Freeman, G., & Maloney, D. (2021). Body, avatar, and me: The presentation and perception of self in social virtual reality. *Proceedings of the ACM on human-computer interaction*, 4(CSCW3), 1-27.
- Gadekallu, T. R., Huynh-The, T., Wang, W., Yenduri, G., Ranaweera, P., Pham, Q.-V., da Costa, D. B., & Liyanage, M. (2022). Blockchain for the metaverse: A review. *arXiv preprint arXiv:2203.09738*.
- Gandhi, M., Gaur, A., Kar, A. K., & Dwivedi, Y. K. (2024). Crafting user experiences in the metaverse: A design science study. *Technological Forecasting and Social Change*, 209, 123759.
- Gent, E. (2022). Lessons from a second life> before meta, philip rosdale created an online universe. *IEEE Spectrum*, 59(1), 19-19.

- Ghezzi, A. I., & Venturini, L. (2025). Monetizing in Free-to-Play Games: A Retail Mix Perspective. COLLOQUIUM ON EUROPEAN RESEARCH IN RETAILING,
- Ghosh, A., Hassija, V., Chamola, V., & El Saddik, A. (2024). A Survey on Decentralized Metaverse using Blockchain and Web 3.0 technologies, Applications, and more. *IEEE Access*.
- Gibson, E., Griffiths, M. D., Calado, F., & Harris, A. (2022). The relationship between videogame micro-transactions and problem gaming and gambling: A systematic review. *Computers in human behavior, 131*, 107219.
- Gleim, M. R., McCullough, H., Gabler, C., Ferrell, L., & Ferrell, O. (2025). Examining the customer experience in the metaverse retail revolution. *Journal of Business Research, 186*, 115045.
- Grieves, M. (2014). Digital twin: manufacturing excellence through virtual factory replication. *White paper, 1*(2014), 1-7.
- Grieves, M. W. (2023). Digital twins: past, present, and future. In *The digital twin* (pp. 97-121). Springer.
- 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.
- Hamari, J., & Keronen, L. (2017). Why do people buy virtual goods: A meta-analysis. *Computers in human behavior, 71*, 59-69.
- Hazan, E., Kelly, G., Khan, H., Spillecke, D., & Yee, L. (2022). Marketing in the metaverse: An opportunity for innovation and experimentation. *The McKinsey Quarterly*.
- Heller, J., Chylinski, M., de Ruyter, K., Mahr, D., & Keeling, D. I. (2019). Let me imagine that for you: Transforming the retail frontline through augmenting customer mental imagery ability. *Journal of retailing, 95*(2), 94-114.

- Hilken, T., Keeling, D. I., Chylinski, M., de Ruyter, K., Golf Papez, M., Heller, J., Mahr, D., & Alimamy, S. (2022). Disrupting marketing realities: A research agenda for investigating the psychological mechanisms of next-generation experiences with reality-enhancing technologies. *Psychology & Marketing*, 39(8), 1660-1671.
- Hoffman, D. L., & Novak, T. P. (2018). Consumer and object experience in the internet of things: An assemblage theory approach. *Journal of consumer research*, 44(6), 1178-1204.
- Hollebeek, L. D., & Macky, K. (2019). Digital content marketing's role in fostering consumer engagement, trust, and value: Framework, fundamental propositions, and implications. *Journal of interactive marketing*, 45(1), 27-41.
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71.
- Huotari, K., & Hamari, J. (2017). A definition for gamification: anchoring gamification in the service marketing literature. *Electronic markets*, 27(1), 21-31.
- Ibrahim, A. (2024). The Role of Artificial Intelligence in the Metaverse. *Arts and Design Studies*, 110, 20-32.
- Ioannidis, S., & Kontis, A. P. (2023). The 4 epochs of the metaverse. *Journal of Metaverse*, 3(2), 152-165.
- Jafar, R. M. S., & Ahmad, W. (2024). Tourist loyalty in the metaverse: the role of immersive tourism experience and cognitive perceptions. *Tourism Review*, 79(2), 321-336.
- Jenkins, H., & Deuze, M. (2008). Convergence culture. In (Vol. 14, pp. 5-12): Sage Publications Sage UK: London, England.

- Jeong, H., Yi, Y., & Kim, D. (2022). An innovative e-commerce platform incorporating metaverse to live commerce. *International Journal of Innovative Computing, Information and Control*, 18(1), 221-229.
- Jerald, J. (2015). *The VR book: Human-centered design for virtual reality*. Morgan & Claypool.
- Kaplan, A., & Haenlein, M. (2024). To be or not to be: will virtual worlds and the metaverse gain lasting traction? *California Management Review*, 66(4), 5-22.
- Karaarslan, E., & Yazici Yilmaz, S. (2023). Metaverse and decentralization. In *Metaverse: Technologies, Opportunities and Threats* (pp. 31-44). Springer.
- Ki, C.-W. C., Chong, S. M., Aw, E. C.-X., Lam, M. M.-L., & Wong, C. W. (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.
- Kiltner, K., Groten, R., & Slater, M. (2012). The sense of embodiment in virtual reality. *Presence: Teleoperators and Virtual Environments*, 21(4), 373-387.
- 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.
- Kim, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141-144.
- Koles, B., Nagy, P., & Vollet, G. (2025). How Players Make Use of Cosmetic Items in Video Games: A Persona Approach. *Journal of Consumer Behaviour*.
- Kotler, P. (2010). The prosumer movement: A new challenge for marketers. In *Prosumer Revisited: Zur Aktualität einer Debatte* (pp. 51-60). Springer.

- Kourtesis, P., Linnell, J., Amir, R., Argelaguet, F., & MacPherson, S. E. (2023). Cybersickness in virtual reality questionnaire (csq-vr): A validation and comparison against ssq and vrsq. *Virtual Worlds*,
- Kowert, R. (2014). *Video games and social competence*. Routledge.
- Kraus, S., Kanbach, D. K., Krysta, P. M., Steinhoff, M. M., & Tomini, N. (2022). Facebook and the creation of the metaverse: radical business model innovation or incremental transformation? *International Journal of Entrepreneurial Behavior & Research*, 28(9), 52-77.
- Kumar, H. (2024). Virtual worlds, real opportunities: A review of marketing in the metaverse. *Acta Psychologica*, 250, 104517.
- Kye, B., Han, N., Kim, E., Park, Y., & Jo, S. (2021). Educational applications of metaverse: possibilities and limitations. *Journal of educational evaluation for health professions*, 18.
- Lee, H.-W., Chang, K., Uhm, J.-P., & Owiro, E. (2023). How avatar identification affects enjoyment in the metaverse: the roles of avatar customization and social engagement. *Cyberpsychology, Behavior, and Social Networking*, 26(4), 255-262.
- Lee, L.-H., Braud, T., Zhou, P. Y., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2024). All one needs to know about metaverse: A complete survey on technological singularity, virtual ecosystem, and research agenda. *Foundations and trends® in human-computer interaction*, 18(2-3), 100-337.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69-96.
- Leonardi, P. M. (2012). Materiality, sociomateriality, and socio-technical systems: What do these terms mean? How are they different? Do we need them. *Materiality and organizing: Social interaction in a technological world*, 25(10), 1093.

- Li, D. D., Liao, A. K., & Khoo, A. (2013). Player–Avatar Identification in video gaming: Concept and measurement. *Computers in human behavior*, 29(1), 257-263.
- Li, Z., & Jia, L. (2025). Bridging the Virtual and the Real: The Impact of Metaverse Sports Event Characteristics on Event Marketing Communication Effectiveness. *Communication & Sport*, 21674795251321754.
- Lin, J., Li, Q., Wang, C., & Hu, Z. (2024). Product development and design framework based on interactive innovation in the metaverse perspective. *Applied System Innovation*, 7(4), 58.
- Lin, Y., & Deng, F. (2024). Ideal-self avatar or real-self avatar? The influence of consumer self-avatar preferences on their behavior in the retail metaverse context. *Current Psychology*, 43(44), 33975-33983.
- Lombard, M., & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of computer-mediated communication*, 3(2), JCMC321.
- Loureiro, S. M. C., Guerreiro, J., Eloy, S., Langaro, D., & Panchapakesan, P. (2019). Understanding the use of Virtual Reality in Marketing: A text mining-based review. *Journal of Business Research*, 100, 514-530.
- 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.
- Lusch, R. F., & Nambisan, S. (2015). Service innovation. *Mis Quarterly*, 39(1), 155-176.
- Mai, Y., & Hu, B. (2023). Optimizing free-to-play multiplayer games with premium subscription. *Management science*, 69(6), 3437-3456.
- Manuri, F., Sanna, A., & De Pace, F. (2023). Storytelling in the Metaverse: From Desktop to Immersive Virtual Reality Storyboarding. 2023 IEEE International Conference on

Metrology for eXtended Reality, Artificial Intelligence and Neural Engineering (MetroXRINE),

- McMahon, C. (2025). Pay to play: The ideology of microtransactions and loot boxes in video games. In *Young People in Digital Environments* (pp. 173-187). Edward Elgar Publishing.
- McStay, A. (2023). The metaverse: Surveillant physics, virtual realist governance, and the missing commons. *Philosophy & Technology*, 36(1), 13.
- Milgram, P., & Kishino, F. (1994). A taxonomy of mixed reality visual displays. *IEICE TRANSACTIONS on Information and Systems*, 77(12), 1321-1329.
- Mishra, V., & Gupta, P. (2025). Drivers of consumer brand advocacy in the metaverse. *Journal of Fashion Marketing and Management: An International Journal*, 1-19.
- Moerel, L. (2024). Metaverse and data protection. In *Research Handbook on the Metaverse and Law* (pp. 118-157). Edward Elgar Publishing.
- Mystakidis, S. (2022). Metaverse. *Encyclopedia*, 2(1), 486-497.
- Nakamura, L. (2020). Feeling good about feeling bad: Virtuous virtual reality and the automation of racial empathy. *Journal of Visual Culture*, 19(1), 47-64.
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management. *Mis Quarterly*, 41(1), 223-238.
- Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New media & society*, 20(11), 4275-4292.
- Nieborg, D. B., Poell, T., & van Dijck, J. (2022). Platforms and platformization. *The SAGE handbook of the digital media economy*, 29-49.
- Nitti, M., Pilloni, V., Colistra, G., & Atzori, L. (2015). The virtual object as a major element of the internet of things: a survey. *IEEE Communications Surveys & Tutorials*, 18(2), 1228-1240.

- Nowak, K. L., & Fox, J. (2018). Avatars and computer-mediated communication: a review of the definitions, uses, and effects of digital representations. *Review of Communication Research, 6*, 30-53.
- Oláh, J., & Nica, E. (2022). Biometric Sensor Technologies, Virtual Marketplace Dynamics Data, and Computer Vision and Deep Learning Algorithms in the Metaverse Interactive Environment. *Journal of Self-Governance & Management Economics, 10*(3).
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization studies, 28*(9), 1435-1448.
- Orús, C., Ibáñez-Sánchez, S., & Flavián, C. (2021). Enhancing the customer experience with virtual and augmented reality: The impact of content and device type. *International Journal of Hospitality Management, 98*, 103019.
- Park, S.-M., & Kim, Y.-G. (2022). A metaverse: Taxonomy, components, applications, and open challenges. *IEEE Access, 10*, 4209-4251.
- Parker, G. G., Van Alstyne, M. W., & Choudary, S. P. (2016). *Platform revolution: How networked markets are transforming the economy and how to make them work for you*. WW Norton & Company.
- Pine, B. J., & Gilmore, J. H. (1998). *Welcome to the experience economy* (Vol. 76). Harvard Business Review Press Cambridge, MA, USA.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of interactive marketing, 18*(3), 5-14.
- Ramadan, Z., & Ramadan, J. (2025). AI avatars and co-creation in the metaverse. *Consumer Behavior in Tourism and Hospitality, 20*(1), 131-147.
- Rane, N., Choudhary, S., & Rane, J. (2023a). Metaverse for enhancing customer loyalty: effective strategies to improve customer relationship, service, engagement, satisfaction,

- and experience. *Service, Engagement, Satisfaction, and Experience* (November 1, 2023).
- Rane, N., Choudhary, S., & Rane, J. (2023b). Metaverse marketing strategies: enhancing customer experience and analysing consumer behaviour through leading-edge Metaverse technologies, platforms, and models. *Platforms, and Models* (November 3, 2023).
- Schapsis, C., Micu, P., & Wingate, N. (2025). Beyond Reality: Investigating the Power of Scarcity and Rarity on Consumer Attitudes in Metaverse Fashion Retail. *Human Behavior and Emerging Technologies*, 2025(1), 7290117.
- Schiller, D. (1999). *Digital capitalism: Networking the global market system*. MIT press.
- Schöbel, S. M., & Leimeister, J. M. (2023). Metaverse platform ecosystems. *Electronic markets*, 33(1), 12.
- Shaju, A. (2023). Opportunities and risks of the “metaverse” for environmental sustainability. In *How the Metaverse will reshape business and sustainability* (pp. 95-103). Springer.
- Shalender, K., & Singla, B. (2024). Creator Economy in Metaverse Space: Use Cases, Adoption Challenges, and Integration Roadmap. In *Creator's Economy in Metaverse Platforms: Empowering Stakeholders Through Omnichannel Approach* (pp. 1-11). IGI Global Scientific Publishing.
- Shamsrizi, M. (2023). Metaverse and Gaming: Potentials for Foreign Cultural and Educational Policy.
- Shapiro, L. (2019). *Embodied cognition*. Routledge.
- Sharma, A., & Bansal, A. (2023). Digital marketing in the metaverse: Beginning of a new era in product promotion. In *Applications of Neuromarketing in the Metaverse* (pp. 163-175). IGI Global.

- Shen, B., Tan, W., Guo, J., Zhao, L., & Qin, P. (2021). How to promote user purchase in metaverse? A systematic literature review on consumer behavior research and virtual commerce application design. *Applied Sciences*, *11*(23), 11087.
- Simon, J.-P. (2023). The metaverse: updating the Internet (Web 3.0) or just a new development for immersive videogames? *Profesional de la información*, *32*(3).
- Simonetti, A., Bigne, E., & Navas, L. F. R. (2025). Consumer brand choice in the metaverse: Exploring personal and social factors. *Technological Forecasting and Social Change*, *213*, 124033.
- Singh, M., Srivastava, R., Fuenmayor, E., Kuts, V., Qiao, Y., Murray, N., & Devine, D. (2022). Applications of digital twin across industries: A review. *Applied Sciences*, *12*(11), 5727.
- Singla, B., Shalender, K., & Singh, N. (2024). *Creator's Economy in Metaverse Platforms: Empowering Stakeholders Through Omnichannel Approach: Empowering Stakeholders Through Omnichannel Approach*. IGI Global.
- Slater, M. (2018). Immersion and the illusion of presence in virtual reality. *British journal of psychology*, *109*(3), 431-433.
- Slater, M., & Sanchez-Vives, M. V. (2016). Enhancing our lives with immersive virtual reality. *Frontiers in Robotics and AI*, *3*, 74.
- Soliman, M. M., Ahmed, E., Darwish, A., & Hassanien, A. E. (2024). Artificial intelligence powered Metaverse: analysis, challenges and future perspectives. *Artificial Intelligence Review*, *57*(2), 36.
- Sorrentino, A., Simoni, M., Venturini, L., & Caratu, M. (2024). Understanding the potentialities of metaverse for marketers. Insights from Italy. Sinergie-SIMA Management Conference Proceedings,
- Sorrentino, G., & López-Guzmán, J. (2025). Rethinking privacy for avatars: biometric and inferred data in the metaverse. *Frontiers in Virtual Reality*, *6*, 1520655.

- Stephenson, N. (1992). *Snow crash: A novel* (2003rd ed.). Spectra.
- Steuer, J. (1992). Defining virtual reality: Dimensions determining telepresence. *Journal of communication*, 42(4), 73-93.
- Suchman, L. A. (2007). *Human-machine reconfigurations: Plans and situated actions*. Cambridge university press.
- Sung, E., Kwon, O., & Sohn, K. (2023). NFT luxury brand marketing in the metaverse: Leveraging blockchain-certified NFTs to drive consumer behavior. *Psychology & Marketing*, 40(11), 2306-2325.
- Tailleur, G., & Ramis, M. (2025). Metaverse and AI diffusion: an empirical assessment from a financial perspective. *IEEE Engineering Management Review*.
- Tang, A. (2025). *Safeguarding the future: Security and privacy by design for AI, Metaverse, Blockchain, and Beyond*. CRC Press.
- Taylor, A., Hook, M., Carlyle, T., & Carlson, J. (2024). Creating a metaverse-me: Exploring the consumer avatar creation process. *Journal of Consumer Behaviour*, 23(6), 2846-2861.
- Teixeira, J., Patrício, L., Nunes, N. J., Nóbrega, L., Fisk, R. P., & Constantine, L. (2012). Customer experience modeling: from customer experience to service design. *Journal of Service Management*, 23(3), 362-376.
- Toffler, A. (2022). *The third wave: The classic study of tomorrow*. Bantam.
- Togbolo, S. E. U., Elugom, U. F., & Ofomaja, N. I. (2024). Ethical use of data in the metaverse for corporate social responsibility. *Metaverse Basic and Applied Research*(3), 4.
- Tsutsui, H., Hiraki, T., Hiroi, Y., & Hasegawa, S. (2025). Community Analysis of Social Virtual Reality Based on Large-Scale Log Data of a Commercial Metaverse Platform. *arXiv preprint arXiv:2509.23654*.
- Turkle, S. (2011). *Life on the Screen*. Simon and Schuster.

- Ud Din, I., & Almogren, A. (2023). Exploring the psychological effects of Metaverse on mental health and well-being. *Information Technology & Tourism*, 25(3), 367-389.
- Ud Din, I., Awan, K. A., Almogren, A., & Rodrigues, J. J. (2023). Integration of IoT and blockchain for decentralized management and ownership in the metaverse. *International Journal of Communication Systems*, 36(18), e5612.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889-901.
- Waligórski, J. (2025). From the Metaverse to the Tower of Babel: Investigating the Socio-Cultural Exclusion of Polish Users on Social VR Platforms. 2025 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW),
- Wang, H., Ning, H., Lin, Y., Wang, W., Dhelim, S., Farha, F., Ding, J., & Daneshmand, M. (2023). A survey on the metaverse: The state-of-the-art, technologies, applications, and challenges. *IEEE Internet of Things Journal*, 10(16), 14671-14688.
- Wedel, M., & Kannan, P. (2016). Marketing analytics for data-rich environments. *Journal of marketing*, 80(6), 97-121.
- Wiederhold, B. K. (2022). Sexual harassment in the metaverse. In (Vol. 25, pp. 479-480): Mary Ann Liebert, Inc., publishers 140 Huguenot Street, 3rd Floor New
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic bulletin & review*, 9(4), 625-636.
- Xu, M., & Niyato, D. (2023). Edge computing technologies for metaverse. *Metaverse Communication and Computing Networks: Applications, Technologies, and Approaches*, 183-204.

- Yang, L., Ni, S.-T., Wang, Y., Yu, A., Lee, J.-A., & Hui, P. (2025). Interoperability of the metaverse: A digital ecosystem perspective review. *IEEE Engineering Management Review*.
- Yang, S., Lin, K., Wang, X., Li, Y., Chen, Y., & Wei, J. (2024). Does personality matter? Understanding the impacts of real-self and avatar personality traits on metaverse satisfaction. *Internet research*.
- Yee, N., & Bailenson, J. (2007). The Proteus effect: The effect of transformed self-representation on behavior. *Human communication research*, 33(3), 271-290.
- 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.
- 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.
- Zawish, M., Dharejo, F. A., Khowaja, S. A., Raza, S., Davy, S., Dev, K., & Bellavista, P. (2024). AI and 6G into the metaverse: Fundamentals, challenges and future research trends. *IEEE Open Journal of the Communications Society*, 5, 730-778.
- Zhang, J., Quoquab, F., & Mohammad, J. (2025). “Do video game players dream of metaverse traveling?” The role of gamification technology and game immersion experience. *Tourism Review*.
- Zhong, L., Xu, Z., Morrison, A. M., Li, Y., & Zhu, M. (2024). Metaverse customer journeys in tourism: building viable virtual worlds. *Tourism Review*, 79(8), 1409-1426.
- Zhuk, A. (2024). Ethical implications of AI in the Metaverse. *AI and Ethics*, 1-12.
- Zubek, R. (2020). *Elements of game design*. MIT Press.

Part II – Paper Collection

Paper 1: Marketing in the Metaverse: a comprehensive bibliometric literature review

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1. Introduction

The Metaverse postulation was first proposed in Stephenson’s science fiction book ‘Snow Crash’ (1992). Stephenson’s Metaverse was envisioned as a virtual reality-based substitute for the internet, providing an immersive online world in which users could escape reality using their avatars. In recent years, Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) have introduced many innovations in devices and experiences for both businesses and consumers. Academics have analyzed virtual worlds (Bainbridge, 2007; Papagiannidis *et al.*, 2008) and immersive technologies (Flavián *et al.*, 2019; Simoni *et al.*, 2022; Wedel *et al.*, 2020) to predict their potential evolution and understand their application domains. Since the announcement of the Metaverse created by Mark Zuckerberg and the subsequent rebranding of Facebook to Meta, interest in understanding the opportunities related to it has rapidly increased among scholars and practitioners (Buhalis *et al.*, 2022; Dwivedi *et al.*, 2023; Gursoy *et al.*, 2023; Koohang *et al.*, 2023; Simoni *et al.*, 2023). The definition of the Metaverse is not yet unanimous (Dwivedi *et al.*, 2022). However, it appears to be moving away from a conceptualization rooted in the mere concepts of virtual worlds (Barry *et al.*, 2015; Owens *et al.*, 2011) and the evolution of VR (Müller, 2012; Prisco, 2009). Instead, it is turning

toward combining different technologies that can mix reality and virtuality (Barrera & Shah, 2023; Buhalis *et al.*, 2023). The increasing diffusion of new Head-Mounted Display VR devices has led to a consequential increase in possible applications in different domains, opening an era of the Metaverse. Indeed, like any other digital revolution, its application is expected to proliferate, with a projected market size of 2961.55 billion dollars by 2032 (Emergen Research, 2023) and an expected user base of more than 700 million by 2030 (World Economic Forum, 2023). Therefore, it is important to analyze this evolving topic's theoretical and managerial implications, with particular attention to possible marketing applications.

2. Objective

The research objective is to conduct a thorough bibliometric literature review to systematically map and comprehend the research trends of Metaverse marketing and the emergent research themes about this topic. Additionally, the research seeks to pinpoint influential authors and publications that have made noteworthy contributions to this discourse, highlighting intellectual influences and the evolving trajectory of thought in the field. The aim is to yield an overview of the marketing-Metaverse landscape, offering critical insights for scholars, marketing practitioners, and business decision-makers. To achieve this goal, the research answers the following research questions:

1. *RQ1: What countries, journals, and authors have exerted the biggest impact on current Metaverse-related marketing research?*
2. *RQ2: In what primary thematic areas is the Metaverse applied to marketing?*
3. *RQ3: What implications can a Metaverse-Marketing literature offer to marketers, firms, and academics?*

3. Methods

A bibliometric analysis was conducted using the PRISMA protocol (Moher *et al.*, 2015) to search and select scientific contributions for systematic analysis. Bibliometrics is a reliable approach for searching and analyzing a high volume of scientific data (Donthu *et al.*, 2021), providing insight into the current state of an area or research subject (Aria & Cuccurullo, 2017). The bibliometrics for this study were performed with the help of the bibliometrics R package (Aria & Cuccurullo, 2017) through Biblioshiny, an online application with an intuitive and well-organized interface (Maione *et al.*, 2023). The search was carried out using the Web of Science (WoS) databank, a comprehensive resource covering various scientific fields and containing numerous citations related to specific areas (Aria & Cuccurullo, 2017). The search query used was TS= Marketing AND TS= Metavers*. Initially, 237 items were retrieved from the WoS search engine using this query. Inclusion/exclusion criteria were then applied (Parmentola *et al.*, 2022), starting with a time filter to limit the study to scientific papers published after 2021, coinciding with the Meta announcement by Mark Zuckerberg on October 28, 2021. Contributions published in 2024 were excluded due to the ongoing nature of the year at the time of drafting (Maione *et al.*, 2023). Further criteria were applied to select only journal articles, review articles, and proceedings papers; the decision to include proceedings papers is entirely due to the novelty of the research topic. 'Business' and 'Management' research categories were selected based on criteria established by Aria and Cuccurullo (2017). Non-English publications were excluded to ensure replicability and an international audience (Polese *et al.*, 2017). However, no reduction was applied as all the papers in the dataset were in English. Following these steps, abstracts were independently assessed for relevance and bias risk (Adams & Larrinaga, 2019). Only contributions unanimously deemed suitable for the research purpose were included, resulting in a reduced dataset of 52 items. In the final screening phase, the remaining articles were read in full text based on predefined inclusion/exclusion criteria

(Manetti *et al.*, 2021), and 4 additional papers were excluded. Data analysis included descriptive analysis and network extraction. Bibliographic coupling and thematic analysis were used for the mapping of the current research front, as they are recommended approaches in bibliometrics.

4. Findings

The data collection yielded 48 scientific papers published between 2022 and 2023, distributed across 35 sources. Within this sample, 44 papers were published as journal articles, 2 as review articles, and 2 as proceedings articles. In total, 155 scientists contributed to these publications, of which 7 scientists were identified as single authors. The authors involved in writing on the topic of the marketing Metaverse came from 32 different countries, with a predominant contribution from the USA, India, the UK, China, South Korea, and Italy. This global distribution indicates a broad international participation in the scholarly discourse on Metaverse Marketing during the last two years. Clustering by coupling analysis (Figure 1) indicates the existence of three main clusters related to:

1. The impact of AR on the experience
2. The relationship between gamification and technology topics applied to tourism
3. Metaverse as the future of retail in the digital fashion industry

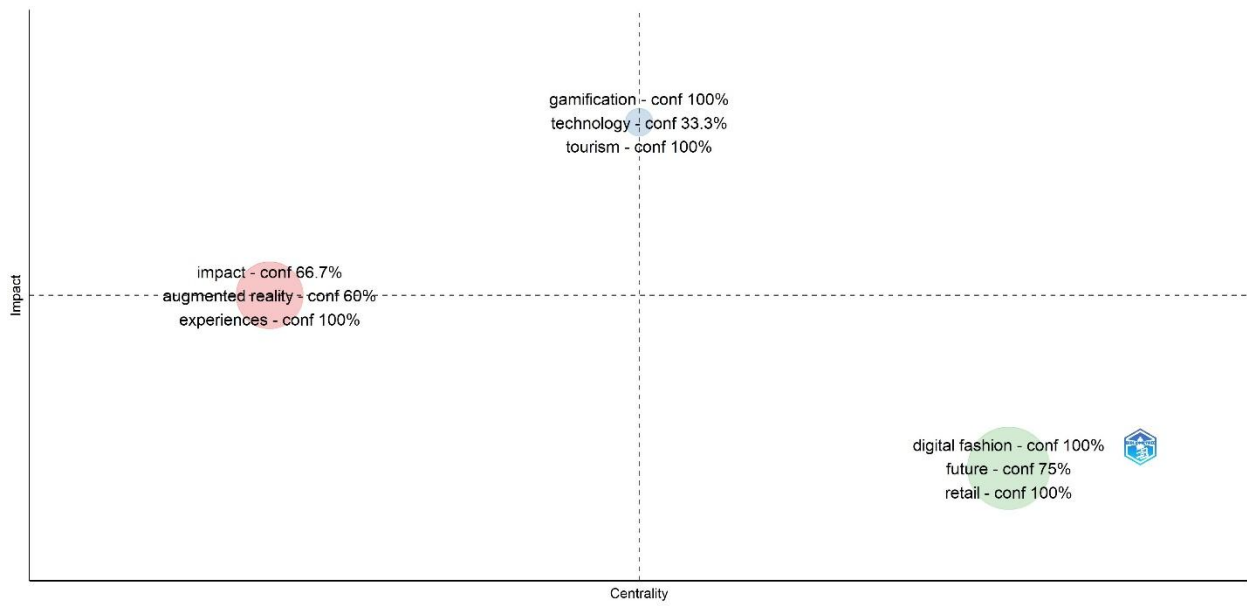


Figure 3 Clustering by coupling Source: Biblioshiny

A comparison of these clusters with the thematic analysis conducted on the same sample (Figure 2) reveals any trending themes during this period.

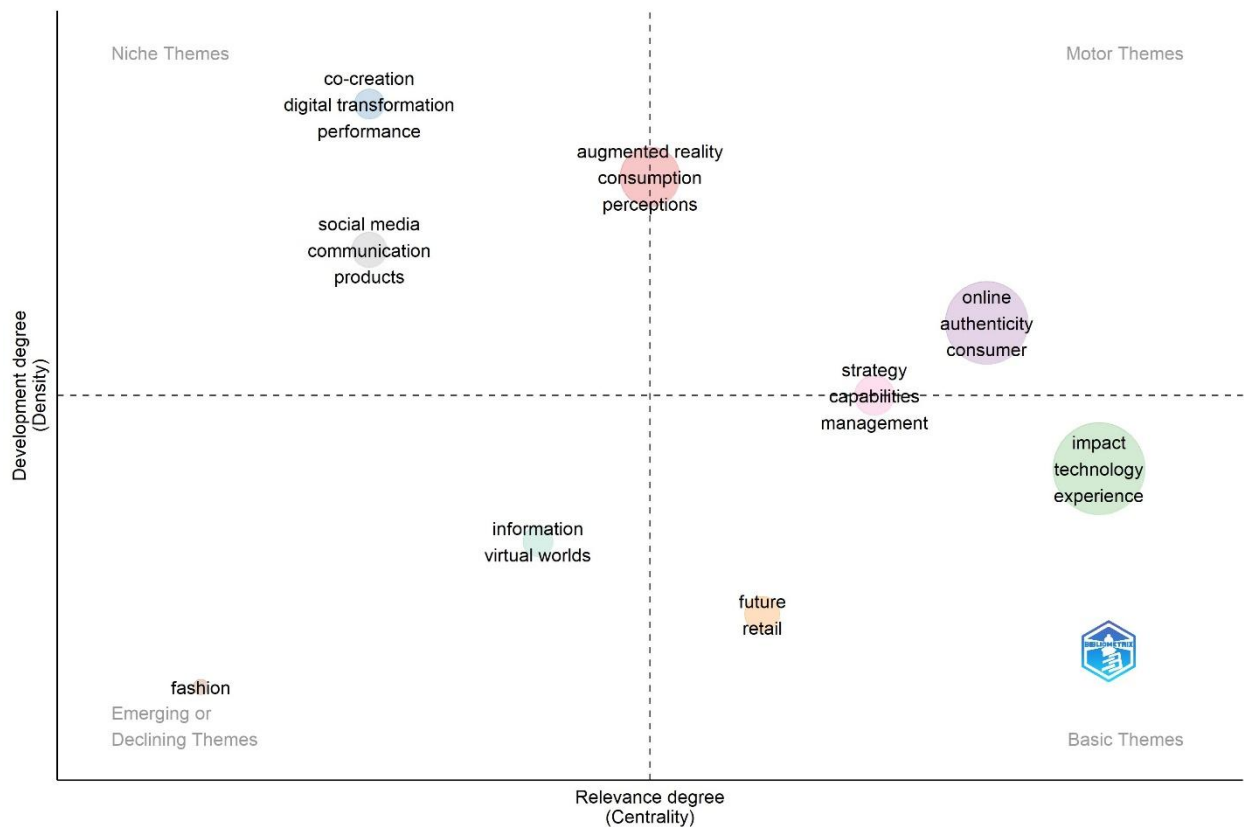


Figure 4 Thematic Analysis Source: Biblioshiny

5. Implications

The theoretical and managerial implications of the bibliometric analysis of marketing in the Metaverse are significant and promising. The international distribution of scholars and the presence of distinct thematic clusters indicate the diversity and complexity of research perspectives. The multidisciplinary nature of this emerging field is highlighted by the number of authors involved, requiring expertise in marketing, technology, and consumer behavior to converge. On the managerial side, identifying thematic clusters can guide companies in making strategic decisions when considering adopting the Metaverse in their marketing approach. For instance, understanding the influence of AR on the customer experience could influence the design of innovative advertising campaigns and reshape all the touchpoints along the customer journey. Similarly, exploring the role of gamification in the tourism context could suggest new

ways of consumer engagement. Recognizing the Metaverse as the future of digital retail in fashion could direct companies toward targeted investments in immersive technologies. These theoretical and managerial implications offer a critical framework for academics, marketers, and business leaders seeking to understand and fully exploit emerging opportunities in the Metaverse context.

References

- Adams, C. A., & Larrinaga, C. (2019). Progress: engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal*, 32(8), 2367-2394.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, 11(4), 959-975.
- Bainbridge, W. S. (2007). The scientific research potential of virtual worlds. *science*, 317(5837), 472-476.
- Barrera, K. G., & Shah, D. (2023). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420.
- Barry, D. M., Ogawa, N., Dharmawansa, A., Kanematsu, H., Fukumura, Y., Shirai, T., Yajima, K., & Kobayashi, T. (2015). Evaluation for students' learning manner using eye blinking system in Metaverse. *Procedia computer science*, 60, 1195-1204.
- Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management*, 97, 104724. <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104724>
- Buhalis, D., Lin, M. S., & Leung, D. (2022). Metaverse as a driver for customer experience and value co-creation: implications for hospitality and tourism management and marketing. *International Journal of Contemporary Hospitality Management*, 35(2), 701-716.

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285-296.

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., Janssen, M., Kim, Y.-G., Kim, J., Koos, S., Kreps, D., Kshetri, N., Kumar, V., Ooi, K.-B., Papagiannidis, S., Pappas, I. O., Polyviou, A., Park, S.-M., Pandey, N., Queiroz, M. M., Raman, R., Rauschnabel, P. A., Shirish, A., Sigala, M., Spanaki, K., Wei-Han Tan, G., Tiwari, M. K., Viglia, G., & 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/https://doi.org/10.1016/j.ijinfomgt.2022.102542>

Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., & Dutot, V. (2023). Metaverse marketing: How the Metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, *40*(4), 750-776.

Emergen Research (2023). *Metaverse Market By Component (Hardware, Software, Services), By Application (Social Events & Trade Shows, Health Surgery), By Platform (Desktop, Mobile), By Offering, By Technology, By End-Use, and By Region Forecast to 2032*. <https://www.emergenresearch.com/industry-report/Metaverse-market>

Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience. *Journal of Business Research*, *100*, 547-560.

- Gursoy, D., Lu, L., Nunkoo, R., & Deng, D. (2023). Metaverse in services marketing: an overview and future research directions. *The Service Industries Journal*, 43(15-16), 1140-1172.
- 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. (2023). Shaping the Metaverse into reality: a holistic multidisciplinary understanding of opportunities, challenges, and avenues for future investigation. *Journal of Computer Information Systems*, 1-31.
- Maione, G., Cuccurullo, C., & Tommasetti, A. (2023). Biodiversity accounting: a bibliometric analysis for comprehensive literature mapping. *Sustainability Accounting, Management and Policy Journal*(ahead-of-print).
- Manetti, G., Bellucci, M., & Oliva, S. (2021). Unpacking dialogic accounting: a systematic literature review and research agenda. *Accounting, Auditing & Accountability Journal*, 34(9), 250-283.
- Müller, F. (2012). *Remembering in the Metaverse: preservation, evaluation, and perception* [University_of_Basel].
- Owens, D., Mitchell, A., Khazanchi, D., & Ziguers, I. (2011). An empirical investigation of virtual world projects and Metaverse technology capabilities. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 42(1), 74-101.
- Papagiannidis, S., Bourlakis, M., & Li, F. (2008). Making real money in virtual worlds: MMORPGs and emerging business opportunities, challenges and ethical implications in Metaverses. *Technological Forecasting and Social Change*, 75(5), 610-622.
- Parmentola, A., Petrillo, A., Tutore, I., & De Felice, F. (2022). Is blockchain able to enhance environmental sustainability? A systematic review and research agenda from the

- perspective of Sustainable Development Goals (SDGs). *Business Strategy and the Environment*, 31(1), 194-217.
- Polese, F., Troisi, O., Torre, C., & Maione, G. (2017). Performance evaluation and measurement in public organizations: a systematic literature review. *International Journal of Business Administration*, 8(1), 106-117.
- Prisco, G. (2009). A virtual world space agency. *Futures*, 41(8), 569-571.
- Simoni, M., Sorrentino, A., Leone, D., & Caporuscio, A. (2022). Boosting the pre-purchase experience through virtual reality. Insights from the cruise industry. *Journal of Hospitality and Tourism Technology*, 13(1), 140-156.
- Simoni, M., Sorrentino, A., & Venturini, L. (2023). Understanding the Potentiality of the Metaverse in the Redesign of the Tourist Experience: An Explorative Analysis in Italy. Conference on Managing Tourism Across Continents 2023,
- Stephenson, N. (1992). *Snow crash: A novel* (2003rd ed.). Spectra.
- Wedel, M., Bigné, E., & Zhang, J. (2020). Virtual and augmented reality: Advancing research in consumer marketing. *International Journal of Research in Marketing*, 37(3), 443-465.
- World Economic Forum. (2023). *This chart shows how big the Metaverse market could become*. available at: www.weforum.org/agenda/2023/02/chart-Metaverse-market-growthdigital-economy/

Interlude 1

The first study, “*Marketing in the Metaverse: A Comprehensive Bibliometric Literature Review*,” provided a systematic and quantitative mapping of the emerging field of Metaverse marketing. By employing bibliometric coupling and co-word analyses, it clarified how the academic discourse has evolved across technological, experiential, and strategic dimensions, and identified the main clusters structuring this research domain - from immersive customer experience and virtual branding to digital retail ecosystems. The bibliometric analysis highlighted both the novelty and fragmentation of the field: despite the increasing number of publications, contributions remain largely conceptual and dispersed across marketing, information systems, and communication journals. This finding revealed a critical gap between the conceptual potential of the Metaverse and the limited empirical understanding of its marketing applications. In particular, the analysis underscored the scarcity of studies grounded in real organizational contexts capable of illustrating how managers interpret and operationalize immersive technologies in their marketing strategies. Building on these insights, the second paper, “*Understanding the Potentialities of Metaverse for Marketers: Insights from Italy*,” was conceived as a natural continuation of this trajectory - moving from the mapping of the knowledge domain to the exploration of managerial perceptions and practices. The bibliometric review provided the theoretical scaffolding and the research agenda upon which the empirical investigation could be constructed, suggesting the need to examine the phenomenon through interpretive and context-sensitive lenses. The transition thus marks a methodological and epistemological shift: from a macro-level, data-driven overview of the literature to a micro-level, qualitative inquiry into how marketing professionals conceptualize and experiment with the Metaverse. The second study operationalizes this shift through a case-based qualitative design, engaging pioneers and innovators in the Italian market to elicit their interpretations, expectations, and early practices related to immersive environments provided by the Metaverse. In this way, the interlude symbolizes the first turning point in the dissertation’s progressive

focusing process. The bibliometric mapping establishes the boundaries and directions of the field, while the subsequent case study begins to fill the empirical void it exposes - grounding theoretical assumptions in managerial reality and setting the stage for the following, experience-centered investigations.

Paper 2: Understanding the potentialities of metaverse for marketers. Insights from Italy

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Abstract

The current study presents an empirical analysis of the metaverse, contributing to the initial literature on this topic. Specifically, the research examines the implications and potential of the metaverse for both consumers and firms by investigating its impact on marketing opportunities. The research aim is achieved through a qualitative analysis. A case study approach was used to explore the practical opportunities related to using the Metaverse servicescape as a marketing enabler. Main results reveal the metaverse as an evolution of technologies (metatech) and the evolution of the experience environment (metascape). It also enriches the existing literature by offering an in-depth qualitative study in a context where scholars have mostly applied conceptual methods. Moreover, it proposes theoretical and practical implications that advance knowledge of the subject and offer ideas for future research and managers.

Key words: Metaverse; Metascape, Metatech; Qualitative analysis; Alterside

1. Framing of the research.

The rapid development of immersive technologies and metaverse applied to marketing has created new environments where consumers can find novel experiences to learn, enjoy, and

escape, and firms may experiment with new ways to communicate their brand and achieve a more qualified audience (Batat, 2024; Ahn *et al.*, 2022). The concept of the metaverse is not new (Stephenson, 1992); however, in the last two years, both academic (Barrera & Shah, 2023; Buhalis *et al.*, 2023; Hajian *et al.*, 2024; Taylor, 2022) and entrepreneurial attention has grown tremendously on this issue. From a theoretical point of view, research on the metaverse has intensified in recent months by trying primarily to codify a definition. Despite the general lack of consensus on the precise scope or definition of the metaverse and how it will evolve (Dwivedi *et al.*, 2022), the term “metaverse”, a union of “meta” (beyond) and “verse” (short for “universe”), indicates a three-dimensional virtual world (Park & Kim, 2022): an immersive space within which individuals can move, share and interact through personalized avatars (Cunningham, 2014; Duan *et al.*, 2021). The compound of “meta and “universe” concepts has also been utilized by (Choi & Kim, 2017) who define the metaverse as a space created by merging virtual reality and augmented reality with the real world. Barrera and Shah (2023) define Metaverse “as a technology-mediated network of scalable and potentially interoperable extended reality environments merging the physical and virtual realities to provide experiences characterized by their level of immersiveness, environmental fidelity, and sociability.” This definition of metaverse as a blend of different realities is reinforced by Siyaevev and Jo (2021) and Ryskeldiev *et al.* (2018) who said that with the metaverse physical and digital objects co-exist and interact in live-time through mixed reality and by Buhalis *et al.* (2023) who specify that convergence of the physical with the digital in the metaverse experience will offer new opportunities to fascinate, involve, and keep consumers. This study attempts to extend the metaverse management literature by conducting a novel empirical study that considers the metaverse from different perspectives. Firstly, Metaverse is a holistic immersive technology named metatech; Secondly, Metaverse is an experiential space for consumers in terms of a new way to learn, escape, entertain and for companies as a marketing enabler for brand experience,

advertising, product placement, named metascapes. The metaverse has the potential to be a marketing enabler by supporting the creation of new forms of sponsorship, organic and paid advertising, product placement, and brand experiences that integrate with those already present in the physical world. Once the potential of the Metaverse as the next big communication channel has been identified, marketers should focus on successfully promoting products and services through it. The Metaverse platforms will present an ever-increasing number of immersive marketing tools designed to target specific demographic audiences as it establishes itself as a new 3D channel worthy of integration (Hollensen *et al.*, 2022). Through Metaverse marketing, brands can communicate their brand universe to young consumers in digital spaces, increasing brand desirability and merging the online experience with the offline characteristics of the purchase. This can include physically touching the product to verify its quality, which has been shown to drive willingness to purchase even in augmented environments (Serravalle *et al.*, 2022). However, selecting the right Metaverse platform and developing a marketing communication strategy without causing brand damage can be challenging due to the platform's developmental stage. Therefore, marketers should first identify their marketing objectives for entering the Metaverse and then choose the appropriate platform to promote their brands, products, or services. The goal of this study is to distinguish the concrete differences between the holistic experiences provided by current metaverse platforms, which will aid marketers in their decision-making process and assist scholars in defining their future research. According to Jooyoung Kim (2021), there will be a need to set an agenda for marketers and advertisers when the metaverse becomes massive populated. This is because the advertising models will differ from those of traditional mass media and will be more like the ads in video games. To comprehend the advertising models that will dominate the metaverse, it is crucial to first understand the motivations that drive users to enter it. These reasons are not solely economic, unlike those of advertisers. While the possibility of experiencing a virtual world of events and

socializing is attractive to most consumers, the primary motivation remains the enjoyment of gaming. Numerous companies have recently entered the Metaverse as advertisers, including Nike and Disney. Their goal is to maintain a presence in the virtual world of consumers' 'second live'. These companies are aligning their marketing and communication strategies with the characteristics of the metaverse. They are creating immersive brand experiences that promote their ideas and values, while fostering a sense of community that transcends boundaries.

2. Purpose of the paper.

We contribute to extant research by proposing an empirical study in an area where academics have mainly used theoretical approaches by providing a meaning of the metaverse and its current forms of use, as well as defining the trajectories that will characterize consumer experiences in the coming years. The results bring to light a metaverse that represents a “third dimension” where innovative technologies coexist, where the real merges with the virtual in the so-called “second life” and this produces interesting implications for companies and marketers. From a theoretical perspective, this study contributes to the marketing and management literature by integrating the characteristics of new technologies offered by the metaverse with the opportunities for marketing with empirical evidence which adds novelty to our research because literature can be compared with the point of view of entrepreneurs and experts. Managerial implications emerge that support the managers who want to understand what the development trajectories are and consequently how to take advantage of the metaverse's opportunities. This research extends the embryonic literature on metaverse by applying a two-step analysis, by revealing how the holistic technologies within the metaverse may create new opportunities for marketing.

3. Methodology.

To provide a clear definition of the metaverse from a practical perspective, this study follows an empirical-based approach that excludes subjective evaluations and aims to understand the marketing opportunities related to the usage of these immersive platforms by conducting an in-depth qualitative analysis. Several semi-structured interviews were conducted with the first Italian marketing agency in the metaverse named 'Alterside'. To achieve our research aim, we use the case study method as a research approach (Eisenhardt, 2020; Rashid *et al.*, 2019) to understand the meaning of the metaverse and how it will change the paradigms of the consumer experience and the advertising opportunities for companies. Regarding the choice of the case, we respected the criteria of the research purpose. Alterside is a marketing agency specializing in creating Virtual Reality, Augmented Reality and NFT experiences, services and content within the metaverse. The case study method is convenient when the form of the research question is “How?” (Yin, 2009). Because of the peculiarity of the case and the absence of a pre-existing theoretical framework, an exploratory research design was structured (Meredith, 1998; Yin, 2013); furthermore, we do not create propositions and hypotheses (Mills *et al.*, 2009). The exploratory nature of case studies can also reveal new facets of the phenomenon under analysis (Dubois & Gadde, 2014; Eisenhardt & Graebner, 2007). Through a qualitative research approach based on primary and secondary data, we used multiple sources of evidence for the triangulation of data (Yin, 2009), and we organized the case study analysis into two phases. We collected information from personal interviews and online documentation such as reports, statistical data, and specialized press articles. As a primary source of data, we conducted 10 interviews with the various actors involved in the company Alterside. Through a semi-structured questionnaire, we requested information on the main Alterside actors (the founder, the key account manager, the marketing manager, and the different project managers). The personal interviews comprised open-ended questions to collect the perceptions about the

definition and meaning of metaverse and the current and future opportunities for advertisers. Each conversation typically took 60 minutes. All interviews were audio-recorded, transcribed verbatim to facilitate the analysis, and anonymized. As secondary sources, several media publications, and official reports from January 2023 to December 2023 were also analyzed to understand the state of the art of the metaverse. The analysis practiced an iterative and inductive approach. Inductive theory based on qualitative data is appropriate in an understudied empirical environment in which there is relatively little prior work (Bansal *et al.*, 2018). The multiple data elements furnish a stronger demonstration and consistency of the key objectives of the case study. Although multiple sources of evidence (e.g., personal interviews and online documentation) are different and independent, their combination can be fundamental to scholars as complementary perspectives of the phenomenon may be produced. Therefore, personal interviews, official company data, media publications and other evidence were triangulated and analysed through a thematic analysis (Braun and Clarke, 2006).

4. Results.

In this paper, we try to enrich the marketing literature by talking about the metaverse, the metaverse has been framed as a new holistic consumption space where all the most innovative technologies (e.g. NFT, VR, AR, blockchain, cryptocurrencies) able to coexist to create a third dimension that adds to the physical and digital one. Indeed, the first interesting thing that emerged from our study is the holistic dimension of the metaverse, that brings all the emerging technologies together (AR and VR, NFT, blockchain, cryptocurrencies) to create what happens in reality in a virtual way. This phenomenon has been called the third dimension that will not replace the physical or digital life that you already live, but will add to it, creating more effectively usable opportunities in the metaverse and others more appropriate for real or digital life. According to Alterside, the metaverse is a new environment where some existing

technologies coexist creating a new dimension of fruition, in addition to the offline and online one, the experience of a virtual second life.

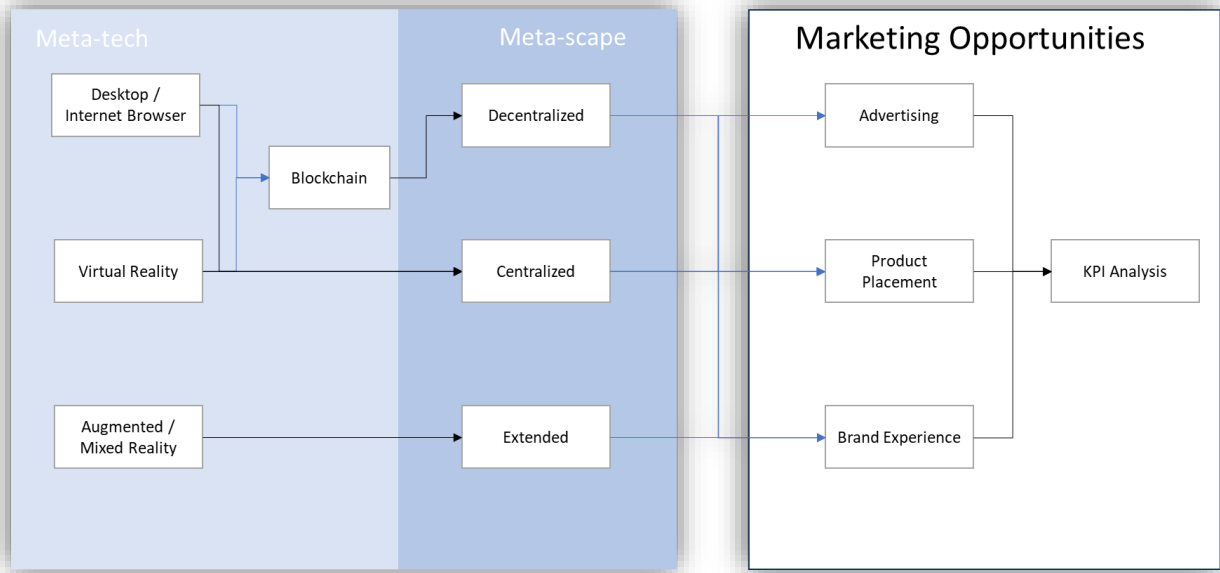


Fig. 1 – The opportunities of metaverse for marketers

As emerged from the results, going to the metaverse to buy a dress does not exclude that I will go shopping in stores, nor will I no longer go on e-commerce, the third dimension is halfway between the two. So, if today we are unconsciously used to living in these two dimensions online and offline, tomorrow we will live in three dimensions online and offline and in a hybrid one in between, which should unite what we do offline and what we do online, giving us a third way of interacting. An interesting, emerged result is related to the opportunities for advertisers. Indeed, what we imagine today is that advertising in the metaverse will be much more like what we experience offline today. The difference is that advertising in physical space has limits. As an entrepreneur interviewed explained to us, you can put a billboard on the wall of a building and it ends up there, in the metaverse, however, you can put a billboard that changes according to the user who looks at it. The interesting thing is that in the metaverse a billboard becomes interactive, if there is a call to action, the avatar can touch it and continue the experience

elsewhere, in another environment, for example, directly in a shop. Product placement will be used a lot as a form of advertising and the innovation will be that the user will be able to buy both the digital version of the avatar (the so-called digital twin) and the real one that arrives at home with the courier of that product and businesses they can measure the returns of that advertising because the behaviors are tracked by the data. This means that the metaverse opens a series of new opportunities for companies, still a bit skeptical today and waiting for the metaverse to become accessible. In fact, what will make these practices more concrete will be the diffusion of the metaverse experience among consumers and this will only happen when viewers spread in an accessible way.

5. Research limitations.

The paper contributes to the literature on the metaverse with an empirical exploration of the meaning and opportunities, by using a qualitative approach. Our study is a first attempt to explore the current state-of-art about the metaverse and for identifying some key aspects of its future implementation. Although this paper represents an important informative contribution for companies and academics, it should be emphasized that it is defocused on specific aspects that will certainly be the subject of a second research step. Future research may be conducted by interviewing firms that have already experienced service in the metaverse and, on the other hand, it could be also important to capture the consumers perceptions on the metaverse.

6. Managerial implications.

Managerial implications emerge that support the managers who want to understand what the metaverse is and what the development trajectories are and consequently how to take advantage of the metaverse's opportunities. Our study has practical and academic implications in the field of technology applied to marketing. Our qualitative investigation incorporates both customer and company perspectives, thus increasing the understanding of the subject and providing

meaningful contributions for marketers who want to investigate the mechanism of promotional strategies with reality-enhancing technologies (Hilken *et al.*, 2022). From the firm's point of view, the identification of the meaning and the future development of the metaverse within a marketing strategy should be useful. The third dimension offered by the metaverse allows understanding that they will not replace the current marketing activities but rather it will represent an extra option where place the most appropriate brand experiences. The element of second life, from a marketing point of view, offers opportunities to recreate everything that exists in real life, in virtual, thus increasing sales opportunities for the so-called digital twin. Finally, the surprising finding that metaverse may perceive and keep the biometric data has important practical implications. First, it makes it possible to monitor marketing actions also through perceived data, which is the most important in consumer purchasing behaviour. Furthermore, it gives the possibility of profiling consumers based on biometric variables and making advertising even less invasive than it is now in the two-dimensional internet.

7. Originality of the paper.

We contribute to extant research by proposing an empirical study in an area where academics have mainly used theoretical approaches by providing a meaning of the metaverse and its current forms of use, as well as defining the trajectories that will characterize consumer experiences in the coming years. The results bring to light a metaverse that represents a “third dimension” where innovative technologies coexist, where the real merges with the virtual in the so-called “second life” and this produces interesting implications for companies, and marketers.

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.

BANSAL, P., SMITH, W. K., & VAARA, E. (2018). New ways of seeing through qualitative research. *Academy of management journal*, 61(4), 1189-1195.

BARRERA, K. G., & SHAH, D. (2023). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420.

BATAT, W. (2024). Phygital customer experience in the metaverse: A study of consumer sensory perception of sight, touch, sound, scent, and taste. *Journal of Retailing and Consumer Services*, 78, 103786.

BRAUN, V., & CLARKE, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.

BUHALIS, D., LEUNG, D., & LIN, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management*, 97, 104724. <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104724>

CHOI, H.-S., & KIM, S.-H. (2017). A content service deployment plan for metaverse museum exhibitions—Centering on the combination of beacons and HMDs. *International Journal of Information Management*, 37(1), 1519- 1527.

CUNNINGHAM, T. C. (2014). *Marching toward the metaverse: strategic communication through the new media*. CreateSpace Independent Publishing Platform.

DUAN, H., LI, J., FAN, S., LIN, Z., WU, X., & CAI, W. (2021). Metaverse for social good: A university campus prototype. *Proceedings of the 29th ACM international conference on multimedia*,

DUBOIS, A., & GADDE, L.-E. (2014). “Systematic combining”—A decade later. *Journal of Business Research*, 67(6), 1277-1284.

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., JANSSEN, M., KIM, Y.-G., KIM, J., KOOS, S., KREPS, D., KSHETRI, N., KUMAR, V., OOI, K.-B., PAPAGIANNIDIS, S., PAPPAS, I. O., POLYVIOU, A., PARK, S.-M., PANDEY, N., QUEIROZ, M. M., RAMAN, R., RAUSCHNABEL, P. A., SHIRISH, A., SIGALA, M., SPANAKI, K., WEI-HAN TAN, G., TIWARI, M. K., VIGLIA, G., & 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/https://doi.org/10.1016/j.ijinfomgt.2022.102542>

EISENHARDT, K. M. (2020). Theorizing from cases: A commentary. *Research methods in international business*, 221- 227.

EISENHARDT, K. M., & GRAEBNER, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.

HAJIAN, A., DANESHGAR, S., SADEGHI, K., OJHA, D., & KATIYAR, G. (2024). From theory to practice: Empirical perspectives on the metaverse's potential. *Technological Forecasting and Social Change*, 201, 123224.

HILKEN, T., KEELING, D. I., CHYLINSKI, M., DE RUYTER, K., GOLF PAPEZ, M., HELLER, J., MAHR, D., & ALIMAMY, S. (2022). Disrupting marketing realities: A research agenda for investigating the psychological mechanisms of next-generation experiences with reality-enhancing technologies. *Psychology & Marketing*, 39(8), 1660-1671.

HOLLENSSEN, S., KOTLER, P., & OPRESNIK, M. O. (2022). Metaverse—the new marketing universe. *Journal of Business Strategy*, (ahead-of-print). KIM, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141-144.

MEREDITH, J. (1998). Building operations management theory through case and field research. *Journal of operations management*, 16(4), 441-454.

MILLS, A. J., DUREPOS, G., & WIEBE, E. (2009). *Encyclopedia of case study research*. Sage publications.

PARK, S.-M., & KIM, Y.-G. (2022). A metaverse: Taxonomy, components, applications, and open challenges. *IEEE Access*, 10, 4209-4251.

RASHID, Y., RASHID, A., WARRAICH, M. A., SABIR, S. S., & WASEEM, A. (2019). Case study method: A stepby-step guide for business researchers. *International journal of qualitative methods*, 18, 1609406919862424.

RYSKELDIEV, B., OCHIAI, Y., COHEN, M., & HERDER, J. (2018). Distributed metaverse: creating decentralized blockchain-based model for peer-to-peer sharing of virtual spaces for mixed reality applications. *Proceedings of the 9th augmented human international conference*,

SERRAVALLE, F., VIASSONE, M., & DEL CHIAPPA, G. (2022). Sensory disclosure in an augmented environment: memory of touch and willingness to buy. *Italian Journal of Marketing*, 2022(4), 401-417.

SIYAEV, A., & JO, G.-S. (2021). Towards aircraft maintenance metaverse using speech interactions with virtual objects in mixed reality. *Sensors*, 21(6), 2066.

STEPHENSON, N. (1992). *Snow crash: A novel* (2003rd ed.). Spectra.

TAYLOR, C. R. (2022). Research on advertising in the metaverse: a call to action. In (Vol. 41, pp. 383-384): Taylor & Francis.

YIN, R. K. (2009). Case study research: Design and methods (Vol. 5). sage. YIN, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, 19(3), 321-332.

Interlude 2

The insights generated by the second study, “*Understanding the Potentialities of Metaverse for Marketers: Insights from Italy*”, provided a pivotal interpretive bridge between the conceptual mapping of the field and the experiential investigation that follows. By exploring how pioneering managers perceive and approach the Metaverse as a marketing tool, the study revealed that much of the managerial discourse converges around the notion of brand experience - understood as the immersive and symbolic space where identity, value, and interaction coalesce. This result was not merely descriptive, but interpretatively generative. It suggested that the Metaverse is not perceived by practitioners as a mere technological extension of existing digital channels, but rather as a socio-experiential environment capable of embodying brand meanings and mediating new forms of co-creation. Managers tended to frame the Metaverse as a brandscape - an interactive context in which presence, embodiment, and emotional resonance become central to the customer’s encounter with the brand. However, while this finding illuminated the potential of immersive branding, it also raised a crucial theoretical question: how do such experiences unfold across the broader customer journey, and how can they be understood beyond the boundaries of brand communication? To address this question, the third paper, “*Metaverse as Content or Container? Exploring the Future of Customer Experience in Tourism*,” expands the analytical lens from the firm’s strategic viewpoint to the structuring of the customer experience across its multiple phases. Tourism was selected as the empirical context precisely because it embodies one of the most complex and experience-intensive service domains, where emotional, symbolic, and relational components are deeply intertwined with brand meaning. Unlike transactional industries, the tourism experience is circular and multi-phased - articulated across the pre-experience, during-experience, and post-experience stages - offering an ideal structure for observing how immersive technologies reshape engagement, memory, and value creation over time. In this sense, the transition from Paper II to Paper III mirrors a theoretical and methodological

deepening: from understanding how managers imagine and frame the Metaverse as a brand experience tool, to examining how that imagined experience is interpreted, articulated, and translated into practice by tourism service providers within real experiential ecosystems. Paper III therefore sheds light on how industry actors conceptualize the Metaverse's role across the customer journey and how they position it as both content and container of experience. This shift marks the dissertation's movement from the managerial interpretation of opportunity to the experiential theorization of value. It situates the Metaverse not only as an environment for brands to express identity, but as a medium that structures experiential processes, where customer journeys and meaning-making dynamics are configured across physical and virtual boundaries. Through this passage, the research advances toward a more nuanced understanding of the Metaverse as both a content of interaction and a medium of experience, opening the conceptual space in which the third study develops its analytical contribution.

Paper 3: Metaverse as content or container? Exploring the future of customer experience in tourism

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Abstract

The Metaverse is emerging as a disruptive force capable of reshaping customer experiences, especially in experience-intensive sectors like tourism. Although scholarly literature has proposed conceptual models highlighting the immersive and hybrid capabilities of these technologies, little is known about how service providers perceive and interpret their potential. This study addresses this gap by exploring how tourism and hospitality actors envision the Metaverse's impact on customer experience, with particular attention to the circularity of the customer journey, defined as the continuous and recursive flow of engagement across interconnected digital and physical touchpoints. Adopting a qualitative approach, the research gathers insights from a diverse group of industry informants. The analysis is framed by two theoretical lenses: the Customer Journey Framework, which maps experiences across phases and interactions, and Consumption Value Theory, which interprets how various forms of value emerge in immersive contexts. Findings indicate that service providers partially validate academic expectations, viewing the Metaverse as immersive, inclusive, and capable of enriching customer interactions, while also reframing its potential through strategic, experiential, and operational considerations. By linking theoretical propositions with empirical evidence, this study contributes to debates on how immersive technologies shape value creation, experience design, and customer journey structures in digital ecosystems.

Keywords: Metaverse; Immersive Technologies; Customer Experience; Customer Journey

Introduction

In the last two decades, the customer experience (CX) has become a central concept in both academic and managerial discourses, particularly in service-based and experience-intensive sectors such as tourism (Aarabe *et al.*, 2025; Dang & Nguyen, 2023; Kim & So, 2022). A wide body of literature has examined how digital transformation is reshaping the customer journey across its multiple phases (pre, during, and post-consumption) highlighting the proliferation of hybrid, multichannel touchpoints and the co-creation of value throughout the process (Becker & Jaakkola, 2020; Hoyer *et al.*, 2020; Kranzbühler *et al.*, 2018; Lemon & Verhoef, 2016; Towers & Towers, 2021). This research has laid the foundation for understanding the dynamic, non-linear, and participatory nature of contemporary CX processes. Building on this background, a new stream of research has turned its attention to the Metaverse, a complex and still-evolving socio-technical system that enables persistent, immersive, and interactive digital environments (Appio *et al.*, 2021; Dwivedi *et al.*, 2022; Kim, 2021). Scholars suggest that the Metaverse may radically transform CXs by introducing virtual layers of engagement, enabling hybrid presence, and supporting co-creative practices that extend beyond physical constraints (Batat, 2024; Buhalis *et al.*, 2023; Koohang *et al.*, 2023). In the tourism sector, these possibilities are particularly relevant, as experiences are inherently intangible, emotionally charged, and often co-produced by multiple actors (Flavián *et al.*, 2021; Gretzel, 2022; Tom Dieck & Han, 2022). Despite these theoretical insights, the existing literature remains largely speculative and conceptual (Firmansyah & Umar, 2023; Hadi *et al.*, 2024; Kumar *et al.*, 2024). Scholars have proposed that the Metaverse could introduce new customer touchpoints, reshape value creation logics (Sheth *et al.*, 1991a), and support new forms of interaction. Still, little is known about how service providers interpret and make sense of these transformations. Empirical evidence is still scarce (Shukla *et al.*, 2024), especially regarding whether and how industry actors validate, reinterpret, or reject these conceptual claims. This limits the development of grounded frameworks that reflect both technological potential and contextual

constraints. One of the conceptual challenges that arises in this evolving context concerns the “circularity” of the CJ, understood as the non-linear and iterative nature of the journey, where pre, during, and post-experience stages are interconnected and continuously influence one another (Lemon & Verhoef, 2016). In the Metaverse, touchpoints enable users to revisit, expand, or overlap these stages, creating loops that blur the boundaries between anticipation, experience, and memory (Alexander, Blazquez, & Chrimes, 2025). This conceptualization of circularity aligns with recent calls to reconsider CX as a dynamic and recursive process (Lemon & Verhoef, 2016), particularly in environments where experiences persist across channels and avatars (Arya *et al.*, 2024; Flavián *et al.*, 2019). However, this notion remains undertheorized and rarely explored empirically. Furthermore, the academic community has begun to engage with several overlapping debates concerning the Metaverse and its implications for CX. These include: (a) the nature and meaning of immersion and value creation in virtual settings (Appio *et al.*, 2021); (b) the redefinition of roles among firms, consumers, and technological infrastructures (Koohang *et al.*, 2023); and (c) the potential transformation of sectoral logics, especially in tourism, where digital augmentation of place-based experiences raises new ethical and strategic questions (Gretzel, 2022). While these debates share common ground, they differ in focus and scope. What unites them is the lack of empirical evidence on how service providers interpret the practical and strategic implications of the Metaverse in designing and managing the CX.

This study contributes to these discussions by exploring the interpretive frames adopted by tourism and hospitality service providers regarding the Metaverse. Through qualitative data gathered from key informants across the tourism value chain, it examines how digital transformation is envisioned, what forms of value are prioritized, and how these innovations are expected to influence the continuity, intensity, and circularity of customer engagement. Accordingly, the study addresses the following research question:

How does the digital transformation proposed by the Metaverse affect the circularity of the customer experience journey?

We tackle this inquiry through the lenses of the customer journey (Lemon & Verhoef, 2016) by scrutinizing the stages and touchpoints that interconnect companies with customers to deliver successful experiences. Furthermore, the study analyzes the potential impact of the Metaverse as a conduit or repository of information and the values espoused by the CVT model proposed by Sheth *et al.* (1991b). In this context, the research also aims to address the research question: *How can the Metaverse influence consumer-perceived values in the consumption of customer experience?*

Together, these frameworks support a structured analysis of when, where, and why immersive technologies might generate value in the tourism customer journey. The remainder of the paper is structured as follows: the next section reviews the theoretical background; section 2 outlines the methodology; section 3 presents the findings; and section 4 discusses the study findings, implications, and future research. A synthesis of this study's contribution to ongoing academic debates is provided in Appendix 2.

1. Theoretical background

Although scholarly interest in the Metaverse has surged recently, the academic debate on its implications for CX remains nascent, fragmented, and largely conceptual. Most existing studies focus on defining the Metaverse (Buhalis *et al.*, 2023; Dwivedi *et al.*, 2022), forecasting its economic or societal impact (Appio *et al.*, 2021), or proposing speculative frameworks for its integration into marketing and business strategy (Koohang *et al.*, 2023). While these contributions offer valuable theoretical perspectives, they often lack empirical grounding and tend to generalize across sectors. In the field of tourism, where experiential value is a key driver of consumer behavior (Godovykh & Tasci, 2020), the transformative potential of immersive technologies such as Extended Realities (XR) and the Metaverse has been noted (Flavián *et al.*, 2019; Tussyadiah *et al.*, 2018), but mostly in terms of pre-travel marketing or virtual visits. Few

studies explore how the Metaverse might reconfigure the entire CJ, particularly from the viewpoint of service providers, those tasked with designing, delivering, and managing experiences. Even fewer studies adopt a qualitative, sector-specific lens to investigate how the Metaverse might function as a multi-touchpoint environment that shapes values, behaviors, and experiences across time.

This study addresses that gap by providing an empirically grounded, industry-informed perspective on how the Metaverse is perceived and potentially applied by key actors in the tourism ecosystem. In doing so, it contributes to the emerging debate on the integration of immersive technologies into CX design, and on how digital transformation is reconfiguring the meaning and structure of value creation in tourism services.

1.1. Immersive Technologies in the Customer Experience Management

Digital transformation and immersive technologies, or new realities such as Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR), are complex information systems that have revolutionized the management and marketing of businesses by representing the mainstream of the evolutionary process that has involved various sectors such as tourism, entertainment, culture, fashion, distribution, health, education, and more (Flavián *et al.*, 2019; Loureiro *et al.*, 2019). These technologies combine different hardware, software, and mobile computing with advanced visualization techniques (i.e., sensors, spatial mapping, and 3D holograms) that enhance the technical quality of images and videos, comfort, usability, and consequently, the immersiveness of experiences, and post-experience behaviors (Trunfio *et al.*, 2022). They interface the physical world with the virtual world, shifting consumer-business interactions into virtual spaces, with significant implications for experience design and the marketing of industrial and service companies (Han *et al.*, 2022). By redefining the continuum between physical and virtual space, immersive technologies have introduced new experiential typologies (virtual destination visits, virtual shopping experiences, etc.) and advanced forms of participation and interaction (e.g., gamification) that engage consumers and redefine

experiences and business models, creating entirely dematerialized forms of service companies (Kim, 2021). These technologies have introduced advanced forms of interaction (human-to-human, human-to-technology, technology-to-technology) by posing fundamental challenges to academia and businesses, calling for a rethinking of established paradigms through “provocative thinking, transformative insights, and tangible outcomes” (Accenture, 2020, p. 11). Metaverse can be framed as a complex and multidimensional phenomenon of digital transformation that, although difficult to define, affects businesses and consumers in multiple ways (Appio *et al.*, 2021). At the business level, it affects individual skills, processes, and routines; at the consumer level, it shapes consumers’ choices underlying the consumer journey (Lemon & Verhoef, 2016). CX design represents one of the areas in which immersive technologies such as Metaverse have experienced exponential development, involving various industries such as tourism, entertainment, culture, fashion, distribution, and more (Flavián *et al.*, 2019; Loureiro *et al.*, 2019). Reshaping the CJ and experiences in virtual spaces is one of the most challenging areas for scientific research, which needs to investigate multi-experiential, sensory, and emotional spaces through new and multidisciplinary lenses. Recent studies (Han *et al.*, 2022; Tom Dieck & Han, 2022) have analyzed the ability of immersive technologies such as the Metaverse to become standalone experiences by providing holistic value (Sheth *et al.*, 1991b) in terms of entertainment (e.g. gamification), escapism (e.g., visiting remote tourist destinations or theme parks), but also emotional value experiences like promotion and commercialization (e.g., retail), epistemic value (e.g., heritage valorization), functional value by providing accessibility, and inclusivity (VR for people with disabilities). While the Metaverse is gaining significance, there is a scarcity of research investigating its influence on CXs, with most studies confined to industry publications. Numerous scholars have highlighted the necessity to examine CXs, especially in the context of rapid technological innovations and evolving value dynamics (Alexander, Blazquez, & Chrimes, 2025; Farah *et al.*, 2019; Han *et*

al., 2022; Kirk *et al.*, 2015; Tom Dieck & Han, 2022). However, managing these experiences and their collaborative creation involving multiple stakeholders in the age of immersive technologies remains a subject of debate and ambiguity. A fundamental challenge arises from the constant evolution of experiences, driven by shifting customer expectations and transformative technological progress. Consequently, the path ahead and the aspirations in this domain remain uncertain, impeding a comprehensive comprehension and the potential utilization of Metaverse as an immersive technology.

1.2. The Metaverse is a blend of realities

The Metaverse is presently more of a conceptual evolution than an established business reality, and its definition remains ambiguous and lacks consensus. Theoretical inquiry into the Metaverse has recently intensified, with a predominant focus on establishing a coherent definition. Despite the absence of a unified perspective, the term “Metaverse” signifies a parallel digital realm that exists alongside the physical world. This virtual space enables individuals to navigate, share, and interact with one another through the use of personalized avatars (Bosworth & Clegg, 2021). It refers to a 3D virtual space emphasizing interpersonal relationships (Koo *et al.*, 2023). Buhalis *et al.* (2023) strengthen the definition by clarifying that the Metaverse will blend physical and digital realms into a seamless experience. In this work, the Metaverse is examined following the suggestion by Barrera and Shah (2023) and Dwivedi *et al.* (2022), who affirm that “the Metaverse has the potential to extend the physical world using augmented and virtual reality technologies allowing users to seamlessly interact within real and simulated environments using avatars and holograms” and Buhalis and Karatay (2022) who affirm that “using MR, Metaverse combines technologies through ambient intelligence to bridge digital and physical universes, enabling users to amalgamate resources and holistic experiences”. In other words, the Metaverse capitalizes on merging real-world and Extended Reality (XR) technologies, facilitating multisensory interactions with digital objects, virtual

environments and individuals (Alexander, Blazquez, Chrimes, *et al.*, 2025; Hadi *et al.*, 2024). This definition of the Metaverse seems to be confirmed by the new investment in the field. Looking at the new devices marketed by the most significant players in the market (Apple, Meta, and Microsoft), we can easily understand how they work, trying to mix virtuality with the tangible physical. These new devices aim to provide consumers with new experiences related to virtual environments (strongly correlated to the standard concept of Metaverse) and improve the physical space with holograms and details able to augment the experiential possibilities offered to consumers. This convergence between reality and virtuality creates potential avenues for any market to leverage the Metaverse in an optimal manner, and it is starting to be considered in tourist academic debate. To demonstrate the effect of digital technologies on CX, it is essential to consider some of its key technological advancements (Hoyer *et al.*, 2020). The internet has introduced new communication, interaction, and transactions avenues through a novel medium and platform. E-commerce has enabled consumers to obtain products without visiting physical stores, creating a new sales channel and marketplace. Mobile platforms have consolidated information into a single device, facilitating multiple commercial applications. With its tools for sharing text, images, and videos, social media has fostered consumer social networks and encouraged user-generated content (Appio *et al.*, 2021). However, by embedding digital data into physical, tangible products, the digital revolution will enter a new phase in the next 20 years (Hoyer *et al.*, 2020; Schmitt, 2019). Immersive technologies such as the Metaverse, in addition to other digital innovations that are transforming processes (i.e., internet of things, artificial intelligence, etc.), a whole new concept of CX will develop, redefining how consumers relate to businesses and society in general and how they perceive objects within it. (Hoyer *et al.*, 2020). In the tourism literature, Buhalis and Karatay (2022) emphasize that Metaverse will integrate the digital and physical realms to create a unified experience, thereby offering novel avenues for engaging, attracting, and retaining

consumers. The utilization of Metaverse and the XR technologies can, therefore, impact the tourist field and all the steps of the CJ associated with it (Buhalis *et al.*, 2023; Flavián *et al.*, 2019). This experience is hedonic and encompasses different activities, as outlined by Godovykh and Tasci (2020), by including information search, the provision of imagination, accommodation, transportation, food, entertainment, and related services. In line with this, the Metaverse has the potential to significantly influence the tourist's emotional, cognitive, and sensory responses throughout these activities (Buhalis *et al.*, 2023; Flavián *et al.*, 2021). The tourism and hospitality sectors have embraced the Metaverse because it promotes a sense of presence and social interaction by allowing travellers to inspire travel activities and services across multiple geographic locations, transcending physical boundaries (Gössling & Schweiggart, 2022). A recent study by Tom Dieck and Han (2022) analyzed the role of XR technologies in customer experience management by developing an original theoretical framework that combines Pine and Gilmore's four realms of the experience economy with the dimensions of the CEM framework proposed by Homburg *et al.* (2017). This framework highlights various applications of immersive technologies in business and retail contexts and opens new avenues for exploring their integration across the entire customer lifecycle

1.3 Theoretical speculations

To structure the analysis of how the Metaverse may transform consumer behavior and experience design, this study draws on two established theoretical frameworks: the *Customer Journey* model (Lemon & Verhoef, 2016) and the *Consumption Value Theory* (Sheth *et al.*, 1991b). These frameworks serve complementary purposes. The CJ model provides a processual view of how consumers interact with firms across multiple phases (pre-experience, experience, post-experience) through various touchpoints (Towers & Towers, 2021), a perspective especially suited to tourism, where services unfold over time and space. CVT, by contrast, offers a motivational lens that explains consumer engagement with services and technologies based

on five value dimensions: functional, emotional, epistemic, social, and conditional. Framing the Metaverse through these lenses allows us to explore both how the structure and flow of CXs may evolve (Batat, 2024), and why consumers and providers might perceive value in immersive transformations. At the micro-level, where individual behaviors are shaped, the Metaverse could influence consumer expectations, decision-making, and memory-making processes. As digital transformation reshapes interaction logics, it challenges firms to rethink how, where, and when value is co-created along the journey (Appio *et al.*, 2021). Scholars have speculated that Metaverse technologies could enhance the pre-experience phase by enabling travellers to preview destinations, creating more immersive and tangible expectations (Buhalis *et al.*, 2023; Koohang *et al.*, 2023). For firms, this may translate into more engaging and differentiated promotional strategies based on immersive simulations (Desai *et al.*, 2014; Wei *et al.*, 2019). During the experience phase, the Metaverse may act either as an augmentation layer, enriching on-site visits with real-time content, or as an autonomous experiential product consumed remotely (Alexander, Blazquez, & Chrimes, 2025; Tom Dieck & Han, 2022). In the post-experience phase, virtual environments can extend engagement and brand interaction, allowing customers to revisit their journey, share memories, or maintain persistent contact with service ecosystems (Buhalis *et al.*, 2022; Kim, 2021). Such propositions are aligned with broader transformations in consumption patterns, where the dematerialization of value, the shift from ownership to access, and the desire for fast, personalized, and experiential services are redefining consumer priorities (Chen, 2009; Venturini & Columbano, 2024). As immersive experiences become more prevalent, tourism firms must design hybrid processes that integrate physical and virtual spaces, enabling circular and continuous forms of interaction across touchpoints. While these dynamics have been theorized in recent literature, they have rarely been investigated empirically (Alexander, Blazquez, & Chrimes, 2025; Firmansyah & Umar, 2023; Kumar *et al.*, 2024; Shukla *et al.*, 2024), especially from the perspective of service

providers. This study contributes to bridging that gap by exploring how professionals operating in the tourism and hospitality sector interpret the role of the Metaverse in reshaping CX. It particularly investigates whether providers recognize the potential of immersive technologies to create value at different stages of the CJ, and whether they envision circular, non-linear trajectories of engagement. In doing so, the study aims to empirically test and contextualize existing conceptual claims regarding Metaverse-enabled experiences.

2. Methodology

Our research employed an interpretive approach to develop grounded theory (Charmaz, 2006) following the one suggested by Gioia *et al.* (2013). This methodology integrates conventional data analysis techniques (Locke, 2002) with an iterative process of theory development through constant comparison (Glaser & Strauss, 1967) and systematic combining with the context of the research and the extant theory (Bardhi *et al.*, 2012; Dubois & Gadde, 2002; Magnani & Gioia, 2023). A qualitative analysis was employed to gain insight into the potential applications of the Metaverse in the context of tourism experiences. with a focus on “how – and sometimes why – participants construct meanings and actions in specific situations” (Charmaz, 2006, p. 17). The context of the tourism experience has been chosen because it represents intricate and pleasurable services wherein technology assumes a pivotal role along the CJ. In this regard, the Metaverse might transform specific real-world encounters into virtual yet increasingly authentic experiences, enhancing the appeal and marketability of consumer services. The intricate nature of this hedonistic journey, encompassing diverse activities from both organizational and experiential perspectives, offers a valuable advantage for exploring the potential offerings of the Metaverse, which could revolutionize the procurement and utilization of tourist services.

2.1. Data Collection

Adhering to the theoretical framework of the CJ a total of 35 players, involved in the principal phases of the leisure experience (pre-, during, and post-experience) have been interviewed with the aim of identifying critical opportunities for enhancing the tourism experience through the integration of the Metaverse. The choice to involve expert informants from different sectors of the tourism industry was guided by the need to access experiential and domain-specific knowledge (Creswell & Clark, 2017; Maestas, 2015), which is particularly valuable when exploring emerging and poorly structured phenomena (Bernard, 2017; Patton, 2002; Rouse *et al.*, 2025). The leisure experience is a significant lens through which to investigate this phenomenon, as the three steps of the journey (pre, during, and post) are clearly delineated, and the potential benefits of the Metaverse can be investigated in each. To comprehensively encompass all facets of the tourist experience across various stages of the CJ, the 35 individuals interviewed have been selected as follows: 10 hotel managers, 5 tour operators, 5 museum managers, 5 from online travel agencies (OTA), 5 restaurant managers, and 5 tourist guides (see Table 1). The sample was constructed using a purposeful sampling approach (Suri, 2011). This strategy is especially suited for selecting information-rich cases and expert participants who can articulate substantive industry insights (Von Soest, 2023). Respondents were selected from each category to analyze potential opportunities related to every stage of the CJ. Semi-structured interviews were employed to extract in-depth information (McCracken, 1988) regarding participants' understanding of the Metaverse and its technologies. Additionally, the interviews sought insights into their perceptions of these technologies' potential and practical applications within the tourism market (Bellenger *et al.*, 2011). To encourage reflection and imaginative engagement with the topic, the interview design incorporated elements of qualitative scenario development (Van Notten *et al.*, 2003), prompting participants to reason about possible future applications and implications of the Metaverse in tourism contexts. The

interviews have been structured into two distinct sections. In a first moment, we asked the informants to give us their definition of the Metaverse and share their thoughts. Subsequently, we provided a more precise definition, based on the ones provided by Barrera and Shah (2023) and Dwivedi *et al.* (2022), to understand better the opportunities they see using the Metaverse. This approach ensured that all participants understood the topic while allowing their perspectives and ideas to emerge during the interview. The interview protocol was inspired by Spradley's (2016) "grand tour" question approach: we began with broad, open-ended prompts ("Can you describe what the Metaverse means to you? In which manner do you think it can impact the tourist sector?"), and then moved to more focused questions, following up with probes and mini-tour or example questions (e.g. "How do you perceive the usage of the Metaverse related to your job role in the tourist field? What about the other roles in the market?"). Overall, this "grand tour → focused probes → scenario prompts" protocol provided both breadth and depth in each interview. The duration of each interview was approximately one hour, resulting in a total of 35 hours of data collection. Interviews were conducted in Italian, audio-recorded, transcribed verbatim, translated in English and anonymized.

Table 1 – The sample of the key informants

Sample of the Key Informants			
Group	Number of Informants	Figure / Role	Objectives
Hospitality:	10	Hotel Managers	<i>Understand the relevance of the Metaverse to boost the pre-experience stage.</i>
	5	Restaurant Managers	
Travel Management and Organization:	5	Online Travel Agents	<i>Understand the significance of the Metaverse as a new touchpoint for the tourist experience.</i>
	5	Tour Operators	
Cultural Services:	5	Museum Managers	<i>Understand the potentiality of the Metaverse as a post-experience touchpoint.</i>
	5	Tourist Guides	
	Tot. 35		

Source: our elaboration

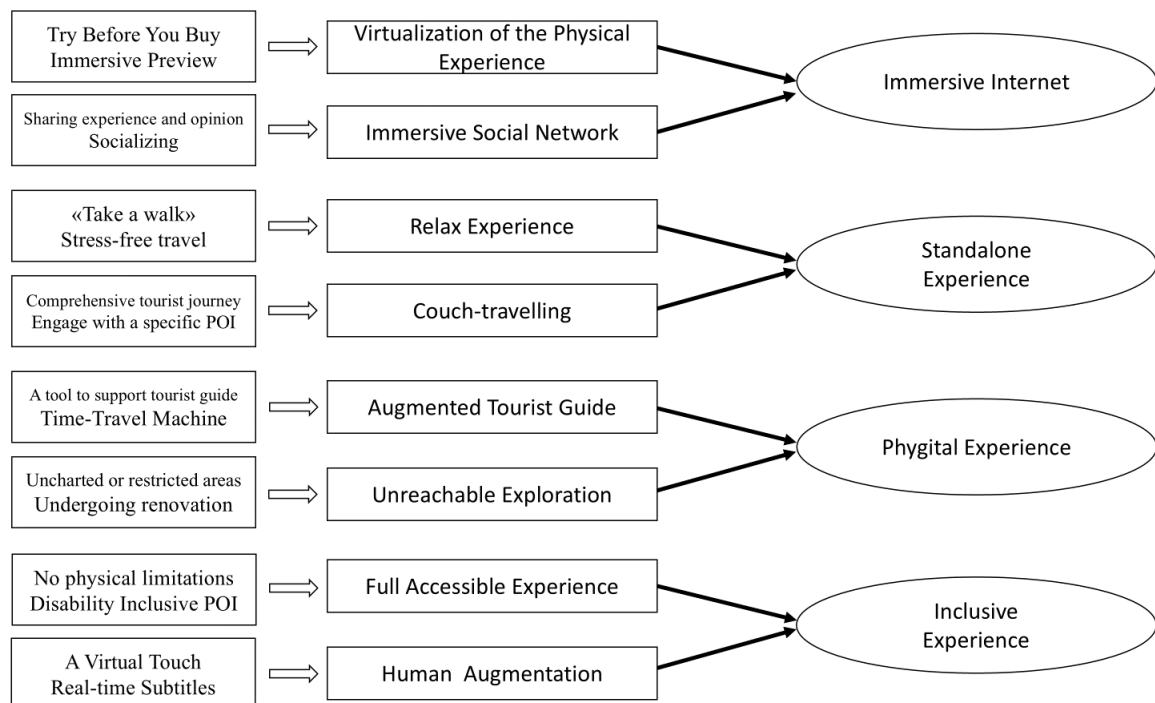
2.2. Data Analysis

Transcripts were analyzed following the methodology proposed by Gioia *et al.* (2013) by coding data into themes and categories. As Magnani and Gioia (2023) proposed, the selected methodological approach entails implementing both inductive and deductive coding procedures. Based on the standard prescriptions for grounded-theory building, as described by Charmaz (2006) and Locke (2002), the coding process involved using sentences or paragraphs as coding units. Initially, each textual expression was labeled with either the language used in the text or simple descriptive phrases (Corbin & Strauss, 1990). This process allowed for identifying and categorizing patterns and themes within the data (Fischer & Otnes, 2006). In the next phase of the grounded-theory-building process two researchers independently analyzed the data, conducting a first round of coding by grouping multiple textual expressions into first-order codes (Van Maanen, 1979). These codes represent initial categories from the data analysis based on the informant's perception. Specifically, the coding of the first-order codes was generated following an inductive process based solely on the data obtained from the interviews,

thus allowing the voices of the key informants to be heard. Subsequently, according to Magnani and Gioia (2023) the second-order codes and aggregate dimensions were coded abductively (Magnani, 2021) following a systematic combining approach (Dubois & Gadde, 2002). The approach put forth by Dubois and Gadde (2002) seeks to accomplish abductive coding through a process of matching and alignment between various elements: theoretical frameworks, the interviews being analyzed, pre-existing theory, and the empirical domain of reference, which the authors identify as the context that defines the boundaries of the research in question. In this case, that context is understood to be the tourism sector and the frameworks are understood to be the CJ by Lemon and Verhoef (2016) and the CVT by Sheth *et al.* (1991b). The second-order themes were constructed abductively by matching the codes obtained inductively from the interviews with the definitions of the values provided by the CVT framework and elements already present in different kinds of literature that could explain the groupings made on the first-order codes. In particular, the coding process in this step was conducted by analyzing the interview results following the attributes and applications of the five consumption values presented by the CVT theoretical framework. Indeed, an approach was employed in the coding reasoning that sought to elucidate the interrelationship between the emerging groups and the functional, emotional, conditional, social, and epistemological value presented by Sheth *et al.* (1991b). To illustrate our abductive reasoning more concretely, consider the following example: first-order codes such as “no physical limitations” and “disability inclusive POI”, which derive from the interviews, were grouped into the second-order theme “Full Accessible Experience”. This theme was then aligned with the functional value from the CVT model (Sheth *et al.*, 1991b), the tourism context and extant literature (e.g. Rubio-Escuderos *et al.*, 2021; Scheyvens & Biddulph, 2018). This process exemplifies the iterative movement between empirical data and theoretical framing that characterizes abductive logic in qualitative research. Lastly, aggregate dimensions were abductively derived by grouping second-order codes in a manner

that aligned with the CJ framework, and pre-existing theoretical elements. In particular, the objective was to utilize the CJ framework delineated by Lemon and Verhoef (2016) to integrate the aggregate dimensions into the various steps of the tourist experience. The data structure is presented in Figure 1, summarizing the second-order themes and aggregate dimensions used to build our model (Corley & Gioia, 2004), as argued in the paper’s discussion section, which integrates the theoretical frameworks used during the systematic combining approach (Dubois & Gadde, 2002).

Fig. 1 – The process of codification



Source: Our elaboration

3. Findings

The findings of the encoding process yield four distinct aggregate dimensions that underscore the significance of the Metaverse throughout various stages of the CJ (Lemon & Verhoef, 2016), thereby engendering novel immersive touchpoints and unlocking the potential for innovative consumer experiences. These dimensions shed light on the multifaceted roles that the Metaverse assumes in shaping and enriching the overall CX. The following findings empirically explore and contrast the speculative opportunities outlined in Theoretical Background section,

particularly those theorized regarding the Metaverse's potential impact across the CJ. We aim to examine whether and how these provider insights confirm, expand, or challenge those conceptual propositions.

3.1. Metaverse as an "Immersive Internet Experience"

The outcomes of the interviews have shed significant light on how Metaverse holds the potential to establish the foundation for an entirely new era of the internet (Floridi, 2022). This metamorphosis does not intend to supplant the conventional digital realm but to merge with it, ushering in immersive and experiential dimensions that augment the existing online landscape (Weinberger, 2022). A prevailing sentiment emerged among the interviewees, painting the Metaverse as a distinct category within the internet domain. A noteworthy perspective was articulated by a tour guide who likened the Metaverse to "*a virtual recreation of the internet*", a concept that intriguingly unravels fresh avenues of potential Metaverse-linked functionalities. Following the theoretical framework of the CJ, the analysis of the interview data illuminated the prominence of these findings across the pre-experience and post-experience phases, which are profoundly influential within the tourism sector. In the contemporary travel landscape, the role of the internet in these phases cannot be overstated. The evolution of online platforms has further fortified the intertwined nature of these phases. Word-of-mouth communication has largely transitioned to the digital realm in this digital age (Liu *et al.*, 2024). Recommendations are often drawn from online reviews, and social media platforms serve as influential sources of inspiration during decision-making (Haq *et al.*, 2024). Consequently, one of the most resonant outcomes from the interviews underscores the Metaverse's capacity to revolutionize existing online activities. It is envisioned as a novel mode of engagement that enhances and expands the scope of familiar online interactions (Buhalis & Sinarta, 2019). The Metaverse, in this regard, is viewed as a medium to recalibrate and enliven customary practices, transforming them into interactive and immersive experiences that seamlessly integrate with individuals' real-world

encounters (Cheng *et al.*, 2022). In essence, the Metaverse emerges not as a replacement but as a dynamic complement, introducing a new dimension to the internet that profoundly influences how individuals navigate, interact, and experience digital content (Buhalis *et al.*, 2022; Kim, 2021). This paradigm shift speaks to the transformative potential of the Metaverse, reflecting a broader trend in digital evolution toward heightened engagement and multisensory participation. Two second-order themes emerge from the interviews: Metaverse as a form of “Virtualization of the physical experience” and as a type of “Immersive social network”.

Table 2 - Metaverse as a “Immersive Internet Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Virtualization of the physical experience</p>	<p>Try before you buy</p> <p><i>(Tourist Guide) “Another interesting aspect could be the selection of hotels during the pre-experience, which means before the trip. Similarly, for cruise ships, you would have to choose them, and then you could virtually step inside, see the size of the dining hall, observe the cuisine, and explore how the kitchens are set up. I could provide you with an immersive and interactive preview of what you will physically experience later. Do I believe this would greatly enhance the purchasing process? Absolutely Yes!”</i></p> <p><i>(Online Travel Agent) “So, instead of simply experiencing it online from home with their computer, they create a kind of immersive storytelling based on “I’m going to Bologna, buying an experience of pizza with Mortadella, and then actually going to Bologna to attend a cooking class”.</i></p> <p>Immersive preview</p> <p><i>(Tour Operator) “.. interacting virtually with a little trailer of the experience consumers have paid for”</i></p> <p><i>(Online Travel Agent) “One could integrate a taste of the experience with a kind of immersive preview of the product they have already purchased and are about to try”.</i></p>
<p>Immersive social network</p>	<p>“Sharing experience and opinions”</p> <p><i>(Hotel Manager) “Imagine if I were to own a hotel, and there’s an avatar that has experienced staying at the hotel, either virtually or in person. This avatar becomes a fan of my hotel and as a result, writes reviews, discusses the hotel, and I could even request them to leave a review”.</i></p> <p><i>(Restaurant Manager) “In the Metaverse, the way I envision it, I see myself going to places where I can find avatars who are experts in specific territories because they have been there. They can tell me about or guide me on their experiences in particular hotels or destinations. They can offer advice on how to fully embrace my journey. This is how I perceive it. For instance, I might come across what could be called a “travel café”, dedicated to European destinations. There, I could find avatars like who share their photos and experiences within the Metaverse. These avatars would serve as virtual guides,</i></p>

	<p><i>sharing firsthand insights and recommendations about the destinations they've explored</i>".</p> <p>Socialization</p> <p><i>(Museum Manager) "I arrange the fair, or I set up a business dinner involving representatives from various nationalities. Everyone gathers with their avatars, dressed as they please, and engage in friendly dialogues within this virtual space"</i>.</p> <p><i>(Hotel Manager) "I think the Metaverse will be the next step in the evolution of social networks. By this, I mean that platforms like Facebook are likely transforming into the Metaverse. Take, for instance, Facebook's recent rebranding to Meta. This change suggests that the Metaverse will probably be built by expanding upon the social features we see on platforms like Facebook. In the Metaverse, I might be able to engage in various activities. To give you a simple example, on Facebook, we receive birthday reminders. In the Metaverse, I could actually attend someone's birthday party using my avatar, allowing me to personally congratulate them on their special day"</i>.</p>
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3.1.1 Virtualization of the Physical Experience

The theme *Virtualization of the Physical Experience* emerged as a strong insight from the interviews (see Table 2), reflecting how the Metaverse can enhance the pre-purchase phase of the tourist journey by providing immersive and interactive previews of destinations (Simoni *et al.*, 2022). Informants highlighted that the Metaverse allows travellers to explore, visualize, and even "feel" a destination before making any booking decision. As one OTA agent emphasized: *"The Metaverse allows customers to interact virtually with a little trailer of the experience they have paid for"*.

Similarly, a tour operator remarked on the ability to generate excitement and desire through immersive previews:

"The Metaverse gives people the chance to preview the vacation dream before booking the flight".

These findings point to a shift from static, informational browsing to emotionally engaging exploration, where digital touchpoints are designed to trigger anticipation and curiosity. In the context of OTAs and digital travel platforms, the Metaverse is perceived as a new promotional medium, capable of merging storytelling, interactive features, and virtual environments to create an enhanced decision-making process. By providing these virtual experiences, the

Metaverse enhances emotional value (Sheth *et al.*, 1991b), making the planning stage more interactive and memorable. This approach aligns with the CJ framework (Lemon & Verhoef, 2016), as it extends the pre-experience phase from a simple search to an emotionally charged moment of engagement.

3.1.2 Immersive Social Networks

The second theme, *Immersive Social Networks*, focuses on the Metaverse's potential to reshape post-experience interactions by creating a three-dimensional, immersive extension of traditional social media platforms. Informants frequently referred to the Metaverse as “*a virtual universe where people can share their experiences and opinions*”, suggesting that it could become the next evolution of online communities (see Table 2).

An OTA manager drew a direct comparison to existing platforms:

“I see the same things that are currently being done in terms of content marketing on social networks being done in the Metaverse. [...] Platforms like Facebook, Instagram, and even WhatsApp might no longer make sense, as they could eventually disappear”.

Informants envisioned personal avatars and profiles functioning as immersive hubs where users share memories, photos, and videos but also interactive 360-degree experiences of their trips.

A museum manager illustrated this idea:

“A tourist could, for example, record the experience they lived physically or virtually using their VR headset and relive it on their profile in the Metaverse”.

This concept aligns with the role of social media as a space for self-expression and peer validation (Boyd & Ellison, 2007), but the Metaverse elevates this by adding embodiment and co-presence (Ying *et al.*, 2022), enabling users to relive and share experiences with a higher degree of realism. Moreover, informants emphasized the potential of post-experience touchpoints, such as immersive replays or virtual souvenirs, that can evoke vivid memories and emotional recall, thus enhancing satisfaction and loyalty. From a theoretical perspective, the Metaverse strengthens social value (Sheth *et al.*, 1991b) by transforming user-generated content into interactive narratives to share and relive.

3.2 Metaverse as a “Standalone Experience”

In the evolving landscape of digital innovation, the notion of the Metaverse has arisen as a transformative concept that holds immense potential, particularly in the tourism industry (Buhalis *et al.*, 2023; Gursoy *et al.*, 2022; Koo *et al.*, 2023; Tsai, 2022). Interviews conducted within the tourism ecosystem have provided valuable insights into how stakeholders perceive the Metaverse’s integration within the traveller’s journey. One of the standout observations centers around the Metaverse’s capacity to fashion self-contained experiences (Resta & Dicuonzo, 2024). These experiences offer travellers the unique opportunity to immerse themselves in destinations or points of interest without leaving their abodes (Guttentag, 2010). The Metaverse’s allure lies in its ability to transcend geographic constraints and temporal limitations. Through the Metaverse, a tourist can, for instance, wander through the historical streets of a European city or even participate in cultural events that might be halfway across the globe. This dimension can be related to a video game that can reproduce a complete tourist destination, an amusement park, or a museum visit (digital twin) in which the virtual version of the consumer (avatar) can participate without replacing an actual physical experience but representing an alternative (de Almeida & Boavida-Portugal, 2025; Deng *et al.*, 2024). This concept ushers in a paradigm shift, wherein physical presence is no longer the sole gateway to experiential richness. Instead, the Metaverse presents an enticing avenue to virtually traverse various destinations and experiences, enhancing accessibility, diversity, and enrichment. Critically aligning with the theoretical framework of the CJ, informants underscore the pivotal role of the Metaverse within the “consumption experience” phase (see Table 3). This phase encompasses the transformation of information and inspiration into tangible experiences. The Metaverse, in this context, emerges as a dynamic vessel that effectively bridges the gap between envisioning and embodying. It becomes a realm where a traveller’s imagination melds seamlessly with digital reality, giving rise to a hybridized authentic and innovative encounter (Buhalis & Karatay, 2022; Neuhofer *et al.*, 2014). Notably, the Metaverse’s potential as an

alternative to physical experiences is not rooted in mere substitution; instead, it flourishes as a nuanced augmentation. It offers travellers a multifaceted vantage point from which to engage with the world. This perspective reframes the conventional dichotomy between the physical and the virtual. The Metaverse does not intend to supplant the irreplaceable essence of a direct encounter with a destination; instead, it positions itself as a parallel avenue of exploration that supplements, diversifies, and amplifies the traveller’s journey (Tussyadiah *et al.*, 2018). The interview insights underscore a collective recognition of Metaverse’s transformative potential within the tourism industry. The capacity to create standalone, immersive experiences, coupled with the seamless integration within the consumption experience phase, heralds the emergence of a novel approach to travel. This approach encapsulates the essence of exploration while embracing the limitless horizons the Metaverse offers. As technology continues to reshape the contours of human interaction with the world, the Metaverse emerges as a harmonious partner in curating enriching and accessible travel encounters (Guttentag, 2010).

Table 3 - Metaverse as a “Standalone Experience”: Selected Evidence

Second order themes	First-order codes and exemplary evidence
<p>Relax experience</p>	<p>“Take a walk”</p> <p><i>(Hotel Manager) “I might feel the need, not just after a stressful workday, to say, “You know what, I want to unwind for a moment”. I might want to take a leisurely stroll along the Venice lagoon. So, I put on my VR glasses, enter the Metaverse, and visualize wandering through Venice. This helps relax my mind”.</i></p> <p><i>(Online Travel Agent) “You can trek through the Amazon rainforest one moment and then find yourself wandering the serene landscapes of New Zealand the next. The Metaverse allows for a fusion of relaxation and adventure that’s customizable to the user’s preferences”</i></p> <p>Stress-free travel</p> <p><i>(Tour Operator) “...a tourist comes to Naples, and it is scorching hot. There are endless lines to enter museums and visit places of interest. Endless queues to eat a pizza. Building an experience in the Metaverse would prevent this from happening”</i></p> <p><i>(Museum Manager) “Imagine how many people, for instance, need to travel to attend a trade fair like BIT in Milan or ITB in Berlin, or even events like E3 or CES. Many of them have to take flights, trains, or rent cars to reach these venues. If these events were held within the Metaverse, all of these individuals would not have to deal with the hassle of travel”</i></p>

Couch-travelling	<p>Comprehensive tourist journeys</p> <p><i>(Online Travel Agent) “Imagine being a tourist who, thanks to the Metaverse, can fully visit Rome right from the comfort of their home”</i></p> <p><i>(Hotel Manager) “This concept might hold significance, particularly when considering a resort or any entity with a specific theme. In these scenarios, I can envision a scenario where, let us say, a hotel room within that themed resort or cruise might also have its pricing structure integrated within the Metaverse. This approach could signify the cutting-edge - offering the entire experience for sale within the Metaverse”</i></p> <p>Engage with a specific point of interest (POI)</p> <p><i>(Hotel Manager) “For instance, what could be an event, or even a concert if we want to use an illustrative example, but even more so for tourism, what comes to my mind are trade shows. Trade shows are events that can now be attended from the comfort of your home couch, without necessarily having to travel around the world to participate”</i></p> <p><i>(Museum Manager) “A tourist dons their VR headset, enter the Metaverse and finds themselves standing in a virtual replica of the Louvre. They can explore the museum at their own pace, wandering through virtual halls filled with masterpieces like the Mona Lisa and the Venus de Milo”</i></p>
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3.2.1 Relax Experience

The second-order theme *Relax Experience* emphasizes how the Metaverse can offer both emotional relief and digital well-being, reinforcing the notion that relaxation is a significant motivator for travel (Huang & Hsu, 2009). Informants described the Metaverse as a stress-free, immersive escape, with one guide noting:

“Looking at the Metaverse from this perspective, it is like stepping into a world where I am offered exactly what I am looking for, and this, in turn, means less frustration”.

Participants highlighted simple but meaningful applications, such as taking a virtual walk through the streets of Paris or Amsterdam to unwind at the end of the day:

“I could just go home and take a walk along the canals of Amsterdam or Paris’s streets; it would be relaxing and fun”.

This perspective aligns with the trend of digital micro-tourism (Wu *et al.*, 2024), where short, easily accessible experiences offer relaxation and emotional satisfaction. Informants also discussed the potential of the Metaverse to enable stress-free travel, reducing the challenges associated with traditional trips, such as navigating crowded tourist sites or dealing with long queues (Bec *et al.*, 2021). By enabling individuals to virtually explore serene environments or

cultural attractions, the Metaverse transforms tourism from a purely physical activity into an experience that is not only emotionally restorative but also instrumental in fulfilling specific needs from the comfort of home. It generates functional value (Sheth *et al.*, 1991b) because it serves a practical purpose: it allows users to achieve the core goal of tourism, exploration, learning, or relaxation, without the logistical constraints of travel. The convenience of on-demand access, combined with immersive and realistic simulations, makes the Metaverse a highly efficient tool that reduces time, effort, and cost while still delivering the essence of the tourism experience. This finding underscores how the Metaverse can extend tourism beyond conventional settings, offering a hybrid form of leisure that integrates exploration, wellness, and digital engagement.

3.2.2 Couch-Travelling

The *Couch-Travelling* paradigm emerged as an extension of the concept of immersive virtual tourism, enabling travellers to enjoy comprehensive tourism experiences directly from their living rooms. Informants emphasized that the Metaverse could replicate entire vacations, ranging from iconic landmarks to cruises and resort-like environments, offering cultural, sensory, and leisure activities (see Table 3). A notable characteristic of this concept is modularity. Rather than experiencing a full journey, travellers can selectively engage with specific destinations or events that appeal to them. An OTA representative highlighted this flexibility:

“Through the Metaverse, tourists don’t have to commit to an entire journey. They can pick exactly what they want, whether it’s a single museum, a famous landmark, or even a concert”

This approach aligns with trends in personalized tourism and reflects a shift from rigid itineraries to flexible, interest-driven exploration. Informants emphasized that this form of virtual travel is not purely for entertainment; it offers cultural enrichment, immersive storytelling, and interactive engagement that can supplement or even complement physical travel. From a theoretical standpoint, Couch-Travelling connects with functional value (Sheth

et al., 1991b), as it provides both convenience and meaningful engagement. Informants perceived it as an accessible way to broaden horizons, especially for those constrained by time, finances, or mobility. This highlights the Metaverse's role as an enabler of hybrid tourism, combining real-world aspirations with virtual, immersive experiences.

3.3. Metaverse as a “Phygital Experience”

The insights from the interviews underscore a powerful paradigm: that of the Metaverse as an integral facet of the on-site experience (Batat, 2024). The Metaverse, acting as an extension of the physical realm, can amplify and diversify visitor engagement. In practical terms, this could encompass diverse scenarios – envision exploring a historical site while receiving real-time historical context through AR overlays or attending a cultural event and engaging with virtual galleries and interactive exhibits (Buhalis & Karatay, 2022; Tom Dieck & Jung, 2017). Such experiences blur the lines between the physical and digital, weaving an intricate tapestry of engagement that deepens the narrative and resonates with the modern-day traveller (Debono, 2021; Yovcheva *et al.*, 2013). A salient facet of this perspective lies in recognizing the Metaverse's role as a catalyst for enhancing customer satisfaction and enriching the overall experience. Integrating Metaverse elements introduces a layer of depth that transcends the static confines of physical attractions. This synergy, where the digital and the physical fuse harmoniously, generates immersive and dynamic interactions serving as an enabler for emotional engagement and lasting impact (Tussyadiah *et al.*, 2018). An inherent advantage of integrating the Metaverse lies in its capacity to foster innovation in design and interaction. By being unburdened by physical constraints, the Metaverse offers limitless creative possibilities, enabling the construction of novel touchpoints that resonate with the technologically inclined traveller (Neuhofer *et al.*, 2014). This approach reactivates established structures while cultivating experiential hybridizations that transcend conventional visitor pathways. In the evolving landscape of tourism, the integration of the Metaverse within the on-site experience is

more than a technological enhancement; it is a paradigm-shifting proposition. It reflects the contemporary traveller’s desire for holistic and multisensory engagement, encapsulating the essence of phygital experiences (Ballina *et al.*, 2019; Belghiti *et al.*, 2017). As tourists seek more nuanced and immersive connections, the Metaverse emerges as a pivotal conduit for orchestrating dynamic and memorable encounters. This approach redefines the contours of hospitality and engagement, placing technology not as an entity in isolation but as an integral enabler in curating experiences that resonate deeply with the modern-day explorer.

The interviews allow us to identify two further relevant themes: Metaverse as an “Augmented Tourist Guide” and as a form of “Unreachable Exploration”.

Table 4 - Metaverse as a “Phygital Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Augmented Tourist Guide</p>	<p>A tool to support tour guides</p> <p><i>(Tourist Guide) “Imagine I am guiding a group of travellers through a historic city, say, Rome. Now, thanks to the Metaverse, I am wearing augmented reality glasses that display additional information about the landmarks we are visiting. As we approach the Colosseum, for instance, the glasses provide historical facts, architectural details, and even immersive 3D visualizations. This turns a traditional tour into an engaging multimedia experience”</i></p> <p><i>(Hotel Manager) “..the implementation of the Metaverse with Augmented Reality, as we mentioned earlier, can be intriguing. It serves as a valuable addition to the work of a tour guide. It provides support in their explanations and offers a tool to enhance the visual understanding of the topics being discussed. By incorporating virtual elements, tourists can have a better visualization of certain concepts that would otherwise be left to their imagination”</i></p> <p>Time-travel Machine</p> <p><i>(Tourist Guide) “I think about a Colosseum; you can think of a Pompeii, a Herculaneum, and even a Vesuvius. And I believe that it should be on-site. So, we are not talking about their home, but we are always talking about them having to get there. On-site, they can experience and integrate a reality that allows them to see how the inhabitants of Pompeii lived during that time. They can experience how the inhabitants of Rome lived during that time and a whole series of things, walking live-time during their visit alongside a gladiator, walking alongside a Patrician, and so on, or even seeing and maybe touching the lava after the eruption of Vesuvius? I think this would be a top experience!”</i></p> <p><i>(Tourist Guide) “For example, in my opinion, on-site, in the actual location, could be very interesting. For instance, I think about Naples, a place that has experienced various cultural dominations, each distinct from the other, leaving their marks from different eras. For a city like this, it would be fascinating, in my opinion, to utilize the Metaverse to create experiences from different historical periods, offering consumers the opportunity to walk physically through the streets and witness how</i></p>

	<i>the place has changed over the centuries, using devices that seamlessly blend virtual elements with the physical reality. This, in my opinion, would be an interesting thing to do”</i>
Unreachable Exploration	<p>Uncharted or restricted areas</p> <p><i>(Tourist Guide) “What comes to mind, for example, exactly, in the case of Pompeii, is accessing areas that are currently inaccessible. I am not sure if something like this is possible, but in Pompeii, there are areas that remain unexcavated and still lie beneath the ashes. Of course, for some of these areas, they already know what lies underneath because they have created 3D renders and used special cameras to explore them from within. So, they have a structural representation of these areas, and it would be fascinating, for instance, to virtually enter these spaces with your group, which may not be excavated for another thirty years, perhaps”</i></p> <p><i>(Hotel Manager) “It would be very intriguing to develop inaccessible pathways in some way. This could open up new and unique experiences for people within the Metaverse, allowing them to explore and interact with places and objects that might be challenging or impossible to access in the physical world”</i></p> <p>Undergoing renovations</p> <p><i>(Museum Manager) “Imagine a historic cathedral undergoing extensive restoration, such as Notre-Dame in Paris after the fire. While parts of the cathedral were inaccessible, the site could have set up a “Metaverse Hub”. Here, tourists at the physical location could access a dedicated area equipped with VR stations and experience all together the parts that physically were inaccessible”</i></p> <p><i>(Tour Operator) “In recent years, for example, many tourist hotspots around the world have begun renovations. the possibility of using immersive technologies to be able to observe the beauty of building facades from the outside, for example, could be very relevant. At the same time the Metaverse, could be a great way to allow tourists who have come to visit the site, to visit in real time those internal parts of the structure that are inaccessible due to works, or the entire point of interest if it is completely inaccessible...”</i></p>

3.3.1 Augmented Tourist Guide

The *Augmented Tourist Guide* theme highlights how the Metaverse and its associated technologies can enhance traditional tour-guiding practices, enriching the experiential consumption phase of the CJ (Lemon & Verhoef, 2016). Informants emphasized the value of MR devices for creating immersive, real-time experiences that add depth to physical tours (see Table 4). As one museum manager noted, the Metaverse can be used “*as an integration of the work that a guide does*”, complementing and amplifying traditional storytelling.

The concept of augmented guiding emerged as a central idea, involving the use of AR headsets or smart glasses to provide tourists with real-time visual overlays, historical reconstructions,

and interactive content. This technology enables guides to offer multimedia-rich tours that go beyond conventional narratives, as highlighted in earlier literature (Buhalis & Karatay, 2022; Fenu & Pittarello, 2018). Through these tools, visitors can visualize past eras, explore architectural evolutions, or interact with cultural heritage in ways that were previously unattainable.

A distinctive insight from the interviews is the time-travel dimension of the Metaverse. Informants perceived it as a means to transcend temporal boundaries and bring history to life.

As a hotel manager stated:

“In my opinion, one possible motivation for the emergence of the Metaverse is the ability to experience things that are otherwise impossible to experience, like travelling back 2,000 years to see how the Romans lived”.

Such experiences not only enrich the cultural value of tourism but also create memorable and educational encounters, aligning with visitors’ desire for immersive storytelling. OTA representatives also envisioned the Metaverse as a tool for exploring how cities and landmarks have evolved over time, offering a new form of interactive heritage tourism.

Beyond real-time guiding, the Metaverse can serve as a resource hub for guides, enabling access to archives, interactive maps, and customizable digital assets. This facilitates personalized tours, tailored to participants’ interests and backgrounds, further elevating the value of the experience. Collectively, these findings highlight the Metaverse’s potential to redefine the role of tour guides and transform on-site visits into hybrid, multimedia-rich events that blend education, entertainment, and immersion.

3.3.2 Unreachable Exploration

The *Unreachable Exploration* theme reflects informants’ belief that the Metaverse can grant access to tourism experiences that are otherwise inaccessible due to physical restrictions, safety concerns, or ongoing restorations. Informants repeatedly emphasized that the Metaverse could provide a virtual gateway to hidden or restricted areas of high cultural and historical value (see Table 4).

Two distinct scenarios were highlighted.

The first involves uncharted or restricted sites, such as underground archaeological areas or sealed chambers within historical monuments. A tourist agency manager stated:

“Coupling the Metaverse with the world of tourism could open Pandora’s box of possibilities, where even the interior of ancient pyramids becomes accessible to all, transcending the barriers of time and space”.

Through AR and VR, visitors can virtually explore these hidden treasures, gaining unique insights without compromising safety or preservation efforts. The second scenario pertains to temporarily inaccessible sites, locations undergoing renovations or preservation work. Informants stressed that, despite physical limitations, the Metaverse could provide continuous access to these sites, ensuring that their cultural and historical narratives remain available to tourists. This aligns with the idea of creating immersive touchpoints that allow visitors to engage with a destination even during its transitional phases. These insights position the Metaverse as an enabler of phygital experiences, where physical and digital interactions converge (Ballina *et al.*, 2019). By blending these domains, tourism is redefined as a continuous exploration that transcends temporal and spatial constraints, enriching the overall value of the visitor experience.

3.4. Metaverse as an “Inclusive Experience”

The utilization of the Metaverse as a tool to provide more inclusive tourist experiences for individuals with both motor and non-motor disabilities emerges as a significant facet of this research’s findings.

The incorporation of the Metaverse within this context not only redefines the notion of accessible tourism but also signifies a monumental stride toward fostering a more equal and diverse global travel community (Buhalis & Darcy, 2011). The Metaverse offers a revolutionary avenue to enhance inclusivity in tourism by transcending the limitations of the physical world. Through immersive virtual environments, individuals with motor and non-motor disabilities

can participate in experiences that might otherwise be challenging or inaccessible. For instance, virtual tours of historical sites, museums, or natural landmarks can be meticulously designed to accommodate various disabilities, enabling individuals to explore and engage at their own pace and comfort (Gillovic & McIntosh, 2020). Furthermore, the Metaverse’s interactive nature allows for adaptive interfaces that cater to diverse needs, such as voice commands, gestures, or specialized controllers (Raisamo *et al.*, 2019; Stephanidis & Salvendy, 2024).

Two last themes emerge from our empirical investigation: the Metaverse as an enabler of a “Full Accessible Experience” and as a way for “Human Augmentation”.

Table 5 - Metaverse as a “Inclusive Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Full Accessible Experience</p>	<p>No physical Limitations</p> <p><i>(Hotel Manager) “..think for example of a person with mobility impairment, would have to go through a journey, take transportation, physically move from one point of interest to another; it could be exhausting. If real destinations or points of interest were quietly accessible through the Metaverse these people could safely visit them without having any kind of physical limitations”</i></p> <p><i>(Tour Operator) “I am imagining destinations that are very inconvenient to reach even for people without disabilities. The use of the Metaverse could be incredibly relevant for those people who, for example, cannot move at all or have severe difficulties in doing so. They would be incredibly helped in being able to visit these destinations that would otherwise be impractical for them”</i></p> <p>Disability inclusive POI</p> <p><i>(Tourist Guide) “In my opinion, it would be a revolutionary concept for certain sites that are truly difficult to access, especially for those who cannot walk or have mobility issues. This, I believe, could be one of the most compelling aspects to implement on-site, allowing individuals with disabilities to experience places that were previously inaccessible for them”</i></p> <p><i>(Museum Manager) “The one that I personally find most interesting of all, to be honest, is the possibility of granting access to places for individuals with motor or physical disabilities. Often, these places might be inaccessible to them due to the site’s structure or inherent limitations”</i></p>
<p>Human Augmentation</p>	<p>A Virtual Touch</p> <p><i>(Museum Manager) “to allow touching things, maybe recreated in a Metaverse, that you could not even touch in a museum or archaeological sites”</i></p> <p><i>(Tourist Guide) “I realize that it is very intriguing how individuals with motor disabilities or; let us say, someone who is deaf, or even a visually impaired person, who may not be able to physically touch objects in certain locations, could be enabled to interact with 3D representations and virtually feel these objects within the Metaverse”</i></p> <p>Real-time Subtitles</p>

	<p><i>“I am visualizing an opportunity, for example in my work as a tour guide, of being able to reach new targets. Let me explain: it is difficult for people with different disabilities to follow a guided tour, for several reasons. The immersive technologies behind the Metaverse and its ability to be in real time, would allow me to be able to offer even those people with hearing disabilities, for example, to follow my explanations in a way that would have been impossible before. They would read what I say in real time while visiting the place wearing their own devices”. (Tourist Guide)</i></p> <p><i>(Online Travel Agent) “I am trying to imagine possibilities inherent to those people with non-motor disabilities as well, for example for deaf people it could be very useful. It would offer them the opportunity to be able to participate in guided tours that are not necessarily given by someone who speaks sign language. They could follow the guide by taking advantage of augmented reality devices that would give them the ability to visualize what the guide is saying by showing them subtitles in real time. Kind of like what happens when we watch a movie on Netflix in a foreign language”</i></p>
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3.4.1 Full Accessible Experiences

The *Full Accessible Experiences* theme emerged from informants’ insights on how the Metaverse can significantly enhance tourism accessibility for individuals with motor disabilities, a view supported in the literature (Rubio-Escuderos *et al.*, 2021). The Metaverse offers functional value (Sheth *et al.*, 1991b) by creating fully immersive, virtual travel experiences that transcend physical limitations.

A restaurant manager summarized this potential clearly:

“If you cannot walk or have motor problems, this would probably be one of the most interesting things to apply”.

Informants described two key dimensions (see Table 5). First, the Metaverse enables individuals with mobility issues to engage in No Physical Limitations travel, strolling through ancient streets, exploring sites, or wandering in nature, all without physical barriers. This virtual capability opens inclusive pathways to destinations previously inaccessible.

Second, the concept of Disability-Inclusive Points of Interest was raised. Here, virtual overlays or guided simulations allow users to experience hidden or restricted segments of physical structures, like cathedral spires or archaeological chambers, through immersive digital touchpoints during an on-site visit. This hybrid approach enriches the visitor experience,

ensuring full engagement with cultural and historical narratives even when physical access is restricted.

These innovations significantly influence the experience phase of the CJ by blending accessibility and immersion. They align with the emerging trend of inclusive tourism (Scheyvens & Biddulph, 2018), enhancing cultural equity and visitor autonomy.

3.4.2 Human Augmentation

The *Human Augmentation* theme reflects informants' perspectives that the Metaverse can enhance tourism experiences for individuals with non-motor disabilities, particularly sensory impairments, through immersive haptic and AR technologies (Raisamo *et al.*, 2019).

A key highlight was the use of haptic devices to deliver a Virtual Touch experience for visually impaired users. As informants described (see Table 5), these devices would allow users to “feel” textures, spatial contours, or structural shapes within virtual environments, turning visual architecture into tactile sensation and deepening sensory engagement with heritage and landscapes.

Another use case involved AR-assisted accessibility for the hearing impaired. Informants described scenarios where AR could provide real-time subtitles or live translation during tours, ensuring that hearing-impaired tourists receive full interpretive content. This feature helps bridge communication barriers and enriches their experience significantly.

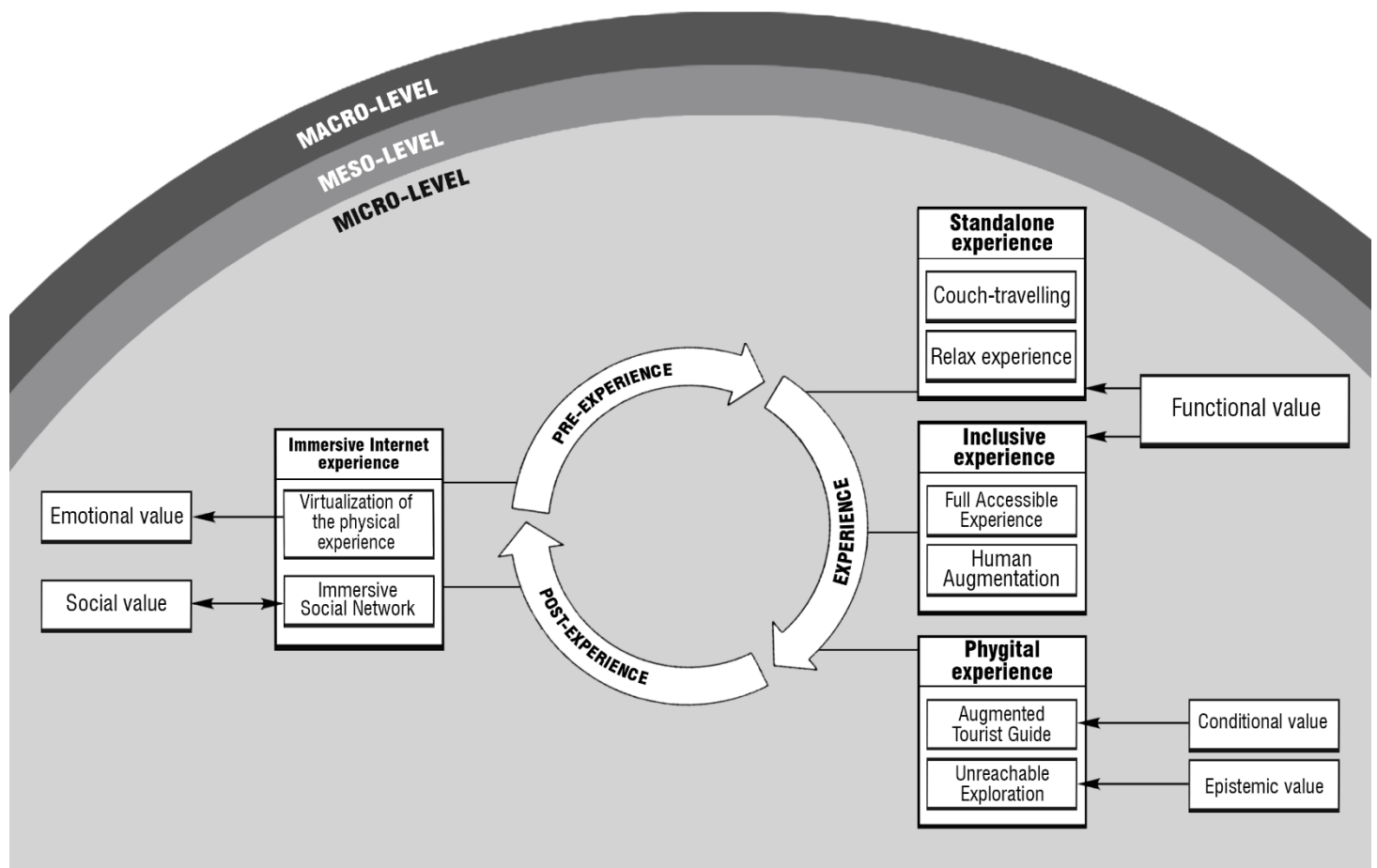
Combined, these developments enhance sensory and communicative inclusion in tourism. They move the industry beyond basic accessibility adjustments toward genuine sensory augmentation and participation. Informants saw this as transformative, describing environments where visual, audible, and tactile elements are seamlessly integrated to cater to diverse needs.

4. Discussions and insights

This study offers a grounded theoretical model that illustrates how the Metaverse is reshaping the traditional CJ (Lemon & Verhoef, 2016) by introducing immersive and hybrid touchpoints across its pre-experience, experience, and post-experience stages (Figure 2). The model

underscores that the Metaverse is not simply an extension of digital tools but a transformative layer that integrates with physical interactions, creating a seamless continuum between anticipation, consumption, and memory-sharing (Hoyer *et al.*, 2020). To better interpret the mechanisms driving this transformation, our framework incorporates insights from the CVT proposed by Sheth *et al.* (1991b). This theoretical perspective allows us to explain how consumers derive functional, emotional, social, conditional, and epistemic value from Metaverse-based tourism experiences. These value dimensions intersect with the CJ stages, shaping both the adoption motivations and the behavioral patterns observed in the tourism context. Our model therefore combines the structural flow of the CJ with the motivational drivers identified by CVT, highlighting how each touchpoint in the journey, from virtual previews to augmented on-site experiences and immersive post-journey sharing, generates distinct types of consumer value. This dual perspective provides a richer understanding of how the Metaverse contributes to customer engagement, decision-making, and loyalty throughout the tourism experience.

Fig. 2 – The application domains of Metaverse



Source: Our elaboration

4.1. Metaverse in the pre- and post-experience stages

The pre-experience stage of the CJ is traditionally associated with information search, evaluation, and anticipation (Lemon & Verhoef, 2016). Our model highlights that the Metaverse can dramatically enhance this stage by offering immersive digital twins of destinations and attractions (Deng *et al.*, 2024). Through interactive previews and exploratory environments, consumers can experience the “look and feel” of a destination before committing, thus fostering a deeper emotional connection and reducing uncertainty (Buhalis *et al.*, 2023). In this context, the Metaverse does not replace traditional booking websites or social media platforms, but complements them by providing a new layer of experiential touchpoints (Buhalis *et al.*, 2022). Planning a trip becomes an exploratory and creative act, where consumers are no longer passive observers but active participants in a virtual pre-journey. This shift suggests that pre-experience

touchpoints are evolving from informational tools to experiential enablers, capable of stimulating both anticipation and inspiration. In the post-experience stage, the Metaverse redefines how memories and experiences are shared, relived, and reinterpreted. Whereas traditional post-journey activities, such as posting photos or writing reviews, are primarily static, the Metaverse allows users to recreate or revisit their journeys in immersive environments, generating a new form of interactive storytelling. This innovation aligns with the CJ logic, as it strengthens the feedback loop between post-journey reflection and future anticipation. By blurring the boundaries between sharing and reliving, the Metaverse turns post-experience touchpoints into collaborative spaces where travellers, friends, and other users can co-experience past journeys, thereby reinforcing word-of-mouth communication and destination loyalty. This represents a structural extension of the CJ, where the post-experience stage is not merely about reflecting on the past but actively reshaping and enhancing it in real time.

4.2. Metaverse during the Experience Stage

Within the experience stage of the CJ, the grounded theory analysis reveals that the Metaverse does not merely replicate tourism experiences but actively reshapes and enhances them through new immersive and inclusive touchpoints (Alexander, Blazquez, & Chrimes, 2025; Hoyer *et al.*, 2020). The categories emerging from our coding process can be grouped into three interconnected experiential dimensions:

1. Standalone Experiences,
2. Phygital Experiences,
3. Inclusive Experiences.

Standalone Experiences represent fully virtual journeys that allow travellers to explore destinations or attractions without physical displacement. These experiences create immersive digital simulations of cultural landmarks, natural sites, or historical environments, enabling

users to interact and navigate as if physically present. This is particularly relevant for remote or cost-conscious travellers and aligns with prior research emphasizing the potential of digital twins and virtual reality to transform cultural tourism (Buhalis & Karatay, 2022; Tussyadiah *et al.*, 2018).

Phygital Experiences, by contrast, involve the integration of digital layers onto real-world visits, offering a multi-layered narrative that enhances perception and engagement (Ballina *et al.*, 2019; Batat, 2024). Through AR or MR devices, visitors can access interactive reconstructions, historical overlays, and educational storytelling on-site, thereby enriching both the hedonic and cognitive aspects of tourism experiences. These hybrid encounters resonate with the notion of co-created value, where consumers and digital environments collaborate to produce personalized, meaningful content (Buhalis & Karatay, 2022; Neuhofer *et al.*, 2014).

The Inclusive Experience dimension emerged as a particularly distinctive finding of our study. Here, the Metaverse is recognized as an enabler of accessibility, providing virtual and augmented pathways for individuals with mobility or sensory impairments. For instance, haptic feedback devices can offer tactile exploration to visually impaired users, while AR subtitles and translations can enhance the experience for hearing-impaired travellers. This resonates with the growing literature on inclusive tourism and accessibility (Buhalis & Darcy, 2011; Gillovic & McIntosh, 2020), positioning the Metaverse as a tool that democratizes access and redefines the experiential phase as universally participatory. Taken together, these three dimensions illustrate how the Metaverse expands the temporal and spatial boundaries of the experience stage (Hoyer *et al.*, 2020), shifting it from a location-based activity to a dynamic, customizable, and inclusive environment. As highlighted in our grounded theory model, physical and virtual experiences are not substitutes but coexisting layers of value creation, reinforcing consumer engagement and satisfaction at the core moment of the CJ.

4.3. CVT and Metaverse in the tourist experience

The proposed theoretical model integrates values from the CVT proposed by Sheth *et al.* (1991b) with emerging findings from qualitative analysis to elucidate the way the Metaverse exerts an influence on consumer behavior within the context of the tourism industry. The values set forth in the CVT can elucidate how the Metaverse, functioning as both experiential content and a technological platform, influences consumer decision-making. This theoretical model elucidates the motivational factors underlying the adoption of the Metaverse in tourism, which encompass emotional, social, functional, conditional, and epistemic factors that collectively determine consumer behavior in relation to the use of XR technologies. The initial theme, “Virtualization of the physical experience” may be regarded not merely as a digital experience but also as a promotional instrument that generates emotional value by influencing consumption decisions regarding the selection of a destination or experience, whether physical or virtual. The Metaverse can thus serve as a conduit for fostering anticipation and enthusiasm, prompting consumers to seek out such experiences in a more immersive manner. The capacity to virtually visualize and experience a destination can enhance interest in the actual experience, reinforcing the emotional connection and purchase intention. The social value of the Metaverse as an immersive social network gives rise to a two-way dynamic: the need for belonging and social connection can drive consumers to interact within the Metaverse, while social interactions within this environment reinforce the use of the platform. This reciprocal process highlights the pivotal function of the Metaverse as a social aggregator, thereby enhancing consumer loyalty to that virtual domain. The functional value of the Metaverse is derived from the themes that fall under the aggregate dimension of “standalone experience”, which encompasses both “couch-travelling” and “relax experience”. Metaverse is perceived as a tool that enables consumers to access utilitarian experiences at a low cost in terms of time and effort, thereby encouraging the adoption of choices based on functional criteria. Similarly, the aggregate dimension of “inclusive experience”, which includes the themes “Full accessible experience”

and “Human augmentation”, demonstrates how the Metaverse, by providing solutions to overcome physical and motor barriers, increases the perception of functional value for consumers with disabilities, potentially enhancing their propensity to use it. The theme of “augmented tourist guide”, associated with conditional value, demonstrates how the adoption of the Metaverse is subject to significant conditioning by the prevailing experiential context, such as that of a guided tour. In this case, the Metaverse functions as an extension that enhances the physical experience, influencing the consumer’s decision to integrate it as a complementary and enhancing tool. Finally, the item “unreachable exploration” can be related to epistemic value in that the Metaverse allows for the exploration of otherwise inaccessible places, stimulating the consumer’s intellectual curiosity. This epistemological dimension is a significant factor influencing the adoption of the Metaverse, as it has the potential to satisfy the consumer’s need to gain knowledge and have innovative experiences.

4.4. Theoretical implications

This study makes a multifaceted contribution to literature at the intersection of CX, digital transformation, and tourism, by empirically investigating how the Metaverse reshapes the CJ from the perspective of tourism service providers. In particular, the study advances theoretical understanding in three directions: (1) by clarifying the Metaverse’s influence on the structure and temporality of the CJ; (2) by extending the application of the CVT to immersive technologies in the tourism sector; and (3) by shedding light on the reconfiguration of customer-business interaction in digital hybrid environments. Specifically, the findings provide empirical support to the theoretical assumption that the CJ is not a fixed or linear process, but a flexible and dynamic system of touchpoints that can be reshaped by technological innovation (Lemon & Verhoef, 2016). Our model demonstrates that the Metaverse reconfigures the journey across all its phases (pre-experience, experience, and post-experience) by introducing immersive, virtual, and hybrid touchpoints that go beyond traditional interactions (Alexander, Blazquez, &

Chrimes, 2025; Buhalis *et al.*, 2022; Hoyer *et al.*, 2020). More in depth, the Metaverse acts as firstly as an immersive preview tool in the pre-experience phase, allowing potential tourists to engage with virtual reconstructions of destinations, thereby enhancing expectations and emotional engagement before purchase (Buhalis *et al.*, 2023; Flavián *et al.*, 2021; Ying *et al.*, 2022). Second, as a self-contained virtual destination in the experience phase, offering experiences that may replicate or augment real-world travel in a multisensory format (Batat, 2024; Buhalis & Karatay, 2022; Deng *et al.*, 2024). Lastly, it acts as a social and mnemonic platform in the post-experience phase, where users can relive, narrate, and share their experiences in immersive social environments (Floridi, 2022). Through these dynamics, the study confirms and extends the conceptualization of the CJ in digitally transformed contexts, emphasizing circularity, fluidity, and co-created value. Secondly, by mapping the emergent empirical dimensions to the five value categories of the CVT (Sheth *et al.*, 1991b), our study demonstrates how immersive experiences in the Metaverse generate value in novel ways: for example the functional value found in “standalone experiences” that provide accessible, low-effort alternatives to physical travel (e.g., “couch-travelling”), and in inclusive services for disabled users; or the emotional value embedded in the pre-experience phase through “immersive previews”, which trigger excitement and reduce uncertainty about the upcoming trip. This alignment not only supports the validity of the CVT in a new technological context but also expands its explanatory power to encompass digitally mediated experiences where value is co-created across physical and virtual layers. Finally, the study contributes to the broader debate on how digital transformation, specifically through Metaverse technologies, alters the relationship between consumers and service providers (Appio *et al.*, 2021; Dwivedi *et al.*, 2022; Gretzel, 2022). The findings reveal that consumers in the Metaverse are no longer passive recipients of experiences, but active participants and co-designers (Buhalis *et al.*, 2022). The Metaverse enables them to simulate, personalize, and even re-stage experiences in ways

that transcend spatial and temporal limitations. This redefinition supports and extends the argument by Hoyer *et al.* (2020) and Appio *et al.* (2021) that digital transformation is not merely a technological shift, but a reconfiguration of business models, interaction paradigms, and experiential logic. The contribution of this study lies in showing how these transformations manifest concretely in the tourism sector, offering a grounded, sector-specific illustration of the theoretical claims made in prior conceptual work.

4.5. Managerial implications

Managerially, the results of our study have important implications for managers and entrepreneurs. First, considered a technological concept that facilitates virtualization and on-site virtual integration, it has the potential to provide a more immersive and engaging experience for the visitor. This can improve the desire to buy and remember the brand, which can confer long-term benefits on tourism businesses. Furthermore, the capacity to provide from-home experiences can expand the reach of tourism businesses to a more diverse customer base. Second, it makes it possible to monitor marketing users' behaviors through biometric data by profiling consumers based on emotions and making advertising even less invasive than it is now on the two-dimensional internet. Lastly, the results of our study have important implications for businesses and organizations that cater to audiences with disabilities. Indeed, the ability of the Metaverse to facilitate accessible virtual experiences for people with different disabilities offers businesses a unique opportunity to engage with a previously underserved market. By providing virtual experiences designed to be inclusive, companies can attract customers with disabilities and build a reputation for being inclusive and socially responsible. Indeed, from a business perspective, incorporating the Metaverse and ensuring disability inclusivity can lead to market expansion. Tourism businesses tap into a larger customer base by catering to this previously underserved segment, potentially increasing revenue and growth prospects. This requires collaborative partnerships between technology developers, tourism

stakeholders, and disability advocacy groups. Such partnerships foster knowledge exchange and drive innovations that enhance disability inclusivity in the tourism sector. Overall, our findings suggest that the Metaverse has the potential to create new opportunities for both tourists and businesses. However, the market still needs to be fully ready, and strong regulations will be required to ensure that the potential benefits are realized and that any negative impacts are minimized.

4.6. Social Implications

The integration of the Metaverse in tourism has profound social implications, particularly in terms of disability inclusivity. By leveraging immersive technologies, the Metaverse has the potential to break down physical barriers and provide accessible virtual experiences for individuals with disabilities. This means that people who may face challenges in traditional tourism settings can now engage in virtual travel and exploration. This inclusivity in the Metaverse promotes social equality by offering equal opportunities for individuals with disabilities to participate in immersive tourism experiences. It sends a strong message of inclusivity and demonstrates a commitment to social responsibility within the tourism industry. By prioritizing disability inclusivity, tourism businesses showcase their dedication to promoting diversity and fostering a more inclusive society.

Adopting the Metaverse in tourism also empowers individuals with disabilities, granting them the freedom to engage in virtual tourism experiences independently. It provides a sense of autonomy and allows customization of experiences based on their preferences and abilities.

4.7. Conclusion

This study explores how immersive technologies, specifically the Metaverse, are interpreted by tourism and hospitality providers as tools for enhancing and reconfiguring the CX. It investigates perceptions, expectations, and imagined uses of the Metaverse by those who will ultimately shape its real-world implementation. Through this lens, the study adopts an

exploratory approach that contributes to clarifying how immersive technologies are anticipated to influence the circularity of the CJ. In particular, the Metaverse is conceptualized both as content, by delivering immersive experiences that augment customer touchpoints, and as a container, serving as a digital ecosystem in which multiple service interactions and value exchanges take place simultaneously. This dual role highlights the Metaverse's capacity to be both the experiential product and the infrastructural environment that enables co-creation, persistence, and hybridization of the CJ. The findings confirm several conceptual propositions, such as the emergence of hybrid touchpoints, the extension of post-experience engagement, and the creation of epistemic, emotional, and functional value, while adding nuance through provider perspectives on inclusivity, operational feasibility, and contextual adaptation. The study thus bridges speculative literature with applied insights, offering a grounded view of how the Metaverse could impact CX design. In doing so, this research contributes to ongoing debates on digital transformation in tourism, value co-creation in immersive contexts, and the design of continuous, participatory service journeys. The notion of circularity, central to this contribution, emerges not only as a metaphor but as a concrete outcome of recursive, hybrid, and persistent interactions facilitated by immersive technologies. Despite the rich insights obtained, some limitations should be considered. First, the sample consists exclusively of Italian informants, which may limit the generalizability of the findings across other cultural and organizational contexts. Although Italy represents a key tourism market, future studies should extend the investigation to international stakeholders, enabling a comparative understanding of how the Metaverse is perceived globally.

Second, this research focused primarily on opportunities and value creation, without systematically addressing the barriers and risks associated with implementation. Future research could explore technological, organizational, or cultural impediments that might hinder the full realization of immersive technologies. Insights from providers already point to potential

mismatches between innovation visions and operational readiness, an area ripe for further investigation. Third, the implications of Metaverse adoption for sustainability, ethics, and social inclusion warrant deeper inquiry. How might immersive platforms reinforce or mitigate inequalities in tourism access? What is the environmental cost of these technologies? Further studies could examine these dimensions with attention to inclusive design, particularly for individuals with disabilities or marginalized cultural groups. Overall, this study does not aim to conclude the debate, but to open up new research trajectories by empirically anchoring the imagined futures of immersive technologies in the voices of those shaping them on the ground.

References

- Aarabe, M., Ben Khizzou, N., Alla, L., & Benjelloun, A. (2025). Customer Experience Management in the Tourism Sector: Insights from a Bibliometric and Thematic Analysis. *Tourism and Hospitality*, 6(2), 103.
- Accenture. (2020). *Try it. Trust it. Buy it. Opening the door to the next wave of digital commerce*. Available at <https://www.accenture.com/content/dam/accenture/final/a-com-migration/pdf/pdf-134/accenture-immersive-experience-digital-report.pdf#zoom=40>
- 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.
- Alexander, B., Blazquez, M., Chrimes, C., & Boardman, R. (2025). The role of immersive spaces on the customer experience: An exploration of fashion metaverses. *Psychology & Marketing*, 42(2), 539-553.
- Appio, F. P., Frattini, F., Petruzzelli, A. M., & Neirotti, P. (2021). Digital transformation and innovation management: A synthesis of existing research and an agenda for future studies. *Journal of Product Innovation Management*, 38(1), 4-20.
- 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.
- Ballina, F. J., Valdes, L., & Del Valle, E. (2019). The Phygital experience in the smart tourism destination. *International Journal of Tourism Cities*, 5(4), 656-671.
- Bardhi, F., Eckhardt, G. M., & Arnould, E. J. (2012). Liquid relationship to possessions. *Journal of consumer research*, 39(3), 510-529.

- Barrera, K. G., & Shah, D. (2023). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420.
- Batat, W. (2024). Phygital customer experience in the metaverse: A study of consumer sensory perception of sight, touch, sound, scent, and taste. *Journal of Retailing and Consumer Services*, 78, 103786.
- Bec, A., Moyle, B., Schaffer, V., & Timms, K. (2021). Virtual reality and mixed reality for second chance tourism. *Tourism Management*, 83, 104256.
- Becker, L., & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630-648.
- Belghiti, S., Ochs, A., Lemoine, J.-F., & Badot, O. (2017). The phygital shopping experience: An attempt at conceptualization and empirical investigation. Academy of marketing science world marketing congress,
- Bellenger, D. N., Bernhardt, K. L., & Goldstucker, J. L. (2011). *Qualitative research in marketing*. Marketing Classics Press.
- Bernard, H. R. (2017). *Research methods in anthropology: Qualitative and quantitative approaches*. Bloomsbury Publishing PLC.
- Bosworth, A., & Clegg, N. (2021). *Building the Metaverse Responsibly*.
<https://about.fb.com/news/2021/09/building-the-metaverse-responsibly/>
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of computer-mediated Communication*, 13(1), 210-230.
- Buhalis, D., & Darcy, S. (2011). Accessible tourism: Concepts and issues.
- Buhalis, D., & Karatay, N. (2022, 2022//). Mixed Reality (MR) for Generation Z in Cultural Heritage Tourism Towards Metaverse. Information and Communication Technologies in Tourism 2022, Cham.

- Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management*, 97, 104724. <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104724>
- Buhalis, D., Lin, M. S., & Leung, D. (2022). Metaverse as a driver for customer experience and value co-creation: implications for hospitality and tourism management and marketing. *International Journal of Contemporary Hospitality Management*, 35(2), 701-716.
- Buhalis, D., & Sinarta, Y. (2019). Real-time co-creation and nowness service: lessons from tourism and hospitality. *Journal of Travel & Tourism Marketing*, 36(5), 563-582.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. sage.
- Chen, Y. (2009). Possession and access: Consumer desires and value perceptions regarding contemporary art collection and exhibit visits. *Journal of consumer research*, 35(6), 925-940.
- Cheng, R., Wu, N., Chen, S., & Han, B. (2022). Will metaverse be nextg internet? vision, hype, and reality. *IEEE network*, 36(5), 197-204.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative sociology*, 13(1), 3-21.
- Corley, K. G., & Gioia, D. A. (2004). Identity ambiguity and change in the wake of a corporate spin-off. *Administrative science quarterly*, 49(2), 173-208.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
- Dang, T., & Nguyen, M. (2023). Systematic review and research agenda for the tourism and hospitality sector: co-creation of customer value in the digital age. *Future Business Journal*, 9(1), 94.

- de Almeida, D. S., & Boavida-Portugal, I. (2025). Digital twins in tourism: a systematic literature review. *arXiv preprint arXiv:2502.00002*.
- Debono, S. (2021). Thinking phygital: A museological framework of predictive futures. *Museum International*, 73(3-4), 156-167.
- Deng, B., Wong, I. A., & Lian, Q. L. (2024). From metaverse experience to physical travel: the role of the digital twin in metaverse design. *Tourism Review*, 79(5), 1076-1087.
- Desai, P. R., Desai, P. N., Ajmera, K. D., & Mehta, K. (2014). A review paper on oculus rift-a virtual reality headset. *arXiv preprint arXiv:1408.1173*.
- Dubois, A., & Gadde, L.-E. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55(7), 553-560.
- 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., Janssen, M., Kim, Y.-G., Kim, J., Koos, S., Kreps, D., Kshetri, N., Kumar, V., Ooi, K.-B., Papagiannidis, S., Pappas, I. O., Polyviou, A., Park, S.-M., Pandey, N., Queiroz, M. M., Raman, R., Rauschnabel, P. A., Shirish, A., Sigala, M., Spanaki, K., Wei-Han Tan, G., Tiwari, M. K., Viglia, G., & 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/https://doi.org/10.1016/j.ijinfomgt.2022.102542>
- Farah, M. F., Ramadan, Z. B., & Harb, D. H. (2019). The examination of virtual reality at the intersection of consumer experience, shopping journey and physical retailing. *Journal of Retailing and Consumer Services*, 48, 136-143.

- Fenu, C., & Pittarello, F. (2018). Svevo tour: The design and the experimentation of an augmented reality application for engaging visitors of a literary museum. *International Journal of Human-Computer Studies*, 114, 20-35.
- Firmansyah, E. A., & Umar, U. H. (2023). Metaverse in business research: a systematic literature review. *Cogent Business & Management*, 10(2), 2222499.
- Fischer, E., & Otnes, C. C. (2006). Breaking new ground: Developing grounded theories in marketing and consumer behavior. *Handbook of qualitative research methods in marketing*, 19-30.
- Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience. *Journal of Business Research*, 100, 547-560.
- Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2021). Impacts of technological embodiment through virtual reality on potential guests' emotions and engagement. *Journal of Hospitality Marketing & Management*, 30(1), 1-20.
<https://doi.org/10.1080/19368623.2020.1770146>
- Floridi, L. (2022). Metaverse: a matter of experience. *Philosophy & Technology*, 35(3), 73.
- Gillovic, B., & McIntosh, A. (2020). Accessibility and inclusive tourism development: Current state and future agenda. *Sustainability (Switzerland)*, 12(22), 9722.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16(1), 15-31.
- Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology the journal of the British sociological association*, 12(1), 27-49.

- Godovykh, M., & Tasci, A. D. (2020). Customer experience in tourism: A review of definitions, components, and measurements. *Tourism Management Perspectives*, 35, 100694.
- Gössling, S., & Schweiggart, N. (2022). Two years of COVID-19 and tourism: What we learned, and what we should have learned. *Journal of Sustainable Tourism*, 30(4), 915-931.
- Gretzel, U. (2022). The Smart DMO: A new step in the digital transformation of destination management organizations. *European Journal of Tourism Research*, 30, 3002-3002.
- Gursoy, D., Malodia, S., & Dhir, A. (2022). The metaverse in the hospitality and tourism industry: An overview of current trends and future research directions. *Journal of Hospitality Marketing & Management*, 31(5), 527-534.
- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management*, 31(5), 637-651.
- 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.
- Han, D.-I. D., Bergs, Y., & Moorhouse, N. (2022). Virtual reality consumer experience escapes: preparing for the metaverse. *Virtual Reality*, 26(4), 1443-1458.
- Haq, M. D. u., Tseng, T.-H., Cheng, H.-L., & Chiu, C.-M. (2024). An empirical analysis of eWOM valence effects: Integrating stimulus-organism-response, trust transfer theory, and theory of planned behavior perspectives. *Journal of Retailing and Consumer Services*, 81, 104026.
- Homburg, C., Jozić, D., & Kuehnl, C. (2017). Customer experience management: toward implementing an evolving marketing concept. *Journal of the Academy of Marketing Science*, 45, 377-401.

- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71.
- Kim, H., & So, K. K. F. (2022). Two decades of customer experience research in hospitality and tourism: A bibliometric analysis and thematic content analysis. *International Journal of Hospitality Management*, 100, 103082.
- Kim, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141-144.
- Kirk, C. P., Swain, S. D., & Gaskin, J. E. (2015). I'm proud of it: Consumer technology appropriation and psychological ownership. *Journal of Marketing Theory and Practice*, 23(2), 166-184.
- Koo, C., Kwon, J., Chung, N., & Kim, J. (2023). Metaverse tourism: conceptual framework and research propositions. *Current Issues in Tourism*, 26(20), 3268-3274.
- 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. (2023). Shaping the metaverse into reality: a holistic multidisciplinary understanding of opportunities, challenges, and avenues for future investigation. *Journal of Computer Information Systems*, 1-31.
- Kranzbühler, A. M., Kleijnen, M. H., Morgan, R. E., & Teerling, M. (2018). The multilevel nature of customer experience research: an integrative review and research agenda. *International Journal of Management Reviews*, 20(2), 433-456.
- Kumar, S. S., Mohammed, A., Rasheed, H., Sundararajan, S., & Pal, S. K. (2024). Metaverse as a platform for entrepreneurs and startups: exploring opportunities and challenges. *International Journal of Marketing & Financial Management*, Volume 12.

- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69-96.
- Liu, X., Ren, P., Lv, X., & Li, S. (2024). Service experience and customers' eWOM behavior on social media platforms: The role of platform symmetry. *International Journal of Hospitality Management*, 119, 103735.
- Locke, K. (2002). The grounded theory approach to qualitative research.
- Loureiro, S. M. C., Guerreiro, J., Eloy, S., Langaro, D., & Panchapakesan, P. (2019). Understanding the use of Virtual Reality in Marketing: A text mining-based review. *Journal of Business Research*, 100, 514-530.
- Maestas, C. (2015). Expert surveys as a measurement tool: Challenges and new frontiers.
- Magnani, G., & Gioia, D. (2023). Using the Gioia Methodology in international business and entrepreneurship research. *International Business Review*, 32(2), 102097.
- Magnani, L. (2021). Abduction as "Leading Away" Aristotle, Peirce, and the Importance of Eco-Cognitive Openness and Situatedness. In *Abduction in cognition and action: Logical reasoning, scientific inquiry, and social practice* (pp. 77-105). Springer.
- McCracken, G. (1988). *The Long Interview*. SAGE Publications.
- Myers, M. D. (2019). Qualitative research in business and management. *Qualitative research in business and management*, 1-364.
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2014). A typology of technology-enhanced tourism experiences. *International Journal of Tourism Research*, 16(4), 340-350.
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, 1(3), 261-283.
- Raisamo, R., Rakkolainen, I., Majaranta, P., Salminen, K., Rantala, J., & Farooq, A. (2019). Human augmentation: Past, present and future. *International Journal of Human-Computer Studies*, 131, 131-143.

- Resta, G., & Dicuonzo, F. (2024). Towards a Digital Shift in Museum Visiting Experience. Drafting the Research Agenda Between Academic Research and Practice of Museum Management. *Architecture and Design for Industry 4.0*, 609-648.
- Rouse, E., Reinecke, J., Ravasi, D., Langley, A., Grimes, M., & Gruber, M. (2025). Making a theoretical contribution with qualitative research. *Academy of management journal*, 68(2), 257-266.
- Rubio-Escuderos, L., García-Andreu, H., Michopoulou, E., & Buhalis, D. (2021). Perspectives on experiences of tourists with disabilities: implications for their daily lives and for the tourist industry. *Tourism Recreation Research*, 1-15.
- Scheyvens, R., & Biddulph, R. (2018). Inclusive tourism development. *Tourism Geographies*, 20(4), 589-609.
- Schmitt, B. (2019). From atoms to bits and back: A research curation on digital technology and agenda for future research. *Journal of consumer research*, 46(4), 825-832.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991a). Consumption values and market choice. *Cincinnati, OH: South Western Publishing*.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991b). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- Shukla, A., Mishra, A., Rana, N. P., & Banerjee, S. (2024). The future of metaverse adoption: A behavioral reasoning perspective with a text-mining approach. *Journal of Consumer Behaviour*, 23(5), 2217-2233.
- Simoni, M., Sorrentino, A., Leone, D., & Caporuscio, A. (2022). Boosting the pre-purchase experience through virtual reality. Insights from the cruise industry. *Journal of Hospitality and Tourism Technology*, 13(1), 140-156.
- Spradley, J. P. (2016). *The ethnographic interview*. Waveland Press.

- Stephanidis, C., & Salvendy, G. (2024). *Interaction Techniques and Technologies in Human-Computer Interaction*. CRC Press.
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative research journal*, 11(2), 63-75.
- Tom Dieck, M. C., & Han, D.-i. D. (2022). The role of immersive technology in Customer Experience Management. *Journal of Marketing Theory and Practice*, 30(1), 108-119.
- Tom Dieck, M. C., & Jung, T. H. (2017). Value of augmented reality at cultural heritage sites: A stakeholder approach. *Journal of destination marketing & management*, 6(2), 110-117.
- Towers, A., & Towers, N. (2021). Framing the customer journey: touch point categories and decision-making process stages. *International Journal of Retail & Distribution Management*, 50(3), 317-341.
- Trunfio, M., Lucia, M. D., Campana, S., & Magnelli, A. (2022). Innovating the cultural heritage museum service model through virtual reality and augmented reality: The effects on the overall visitor experience and satisfaction. *Journal of Heritage Tourism*, 17(1), 1-19.
- Tsai, S.-p. (2022). Investigating metaverse marketing for travel and tourism. *Journal of Vacation Marketing*, 13567667221145715.
- Tussyadiah, I. P., Wang, D., Jung, T. H., & Tom Dieck, M. C. (2018). Virtual reality, presence, and attitude change: Empirical evidence from tourism. *Tourism Management*, 66, 140-154.
- Van Maanen, J. (1979). The fact of fiction in organizational ethnography. *Administrative science quarterly*, 24(4), 539-550.
- Van Notten, P. W., Rotmans, J., Van Asselt, M. B., & Rothman, D. S. (2003). An updated scenario typology. *Futures*, 35(5), 423-443.

- Venturini, A., & Columbano, M. (2024). 'Fashioning' the metaverse: A qualitative study on consumers' value and perceptions of digital fashion in virtual worlds. *Journal of Global Fashion Marketing*, 15(1), 6-22.
- Von Soest, C. (2023). Why do we speak to experts? Reviving the strength of the expert interview method. *Perspectives on Politics*, 21(1), 277-287.
- Wei, W., Qi, R., & Zhang, L. (2019). Effects of virtual reality on theme park visitors' experience and behaviors: A presence perspective. *Tourism Management*, 71, 282-293.
- Weinberger, M. (2022). What is metaverse?—A definition based on qualitative meta-synthesis. *Future Internet*, 14(11), 310.
- Wu, W., Xu, C., Zhao, M., Li, X., & Law, R. (2024). Digital tourism and smart development: State-of-the-art review. *Sustainability (Switzerland)*, 16(23), 10382.
- Ying, T., Tang, J., Ye, S., Tan, X., & Wei, W. (2022). Virtual reality in destination marketing: telepresence, social presence, and tourists' visit intentions. *Journal of Travel Research*, 61(8), 1738-1756.
- Yovcheva, Z., Buhalis, D., & Gatzidis, C. (2013). Engineering augmented tourism experiences. *Information and Communication Technologies in Tourism 2013: Proceedings of the International Conference in Innsbruck, Austria, January 22-25, 2013*.

Appendix 1

Table - Metaverse as a “Immersive Internet Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Virtualization of the physical experience</p>	<p>Try before you buy</p> <p><i>(Tour Operator) “I believe that the metaverse can be an incredible tool for the pre-purchase phase, should a tourist destination, accommodation facility or museum, for example, make an investment in the metaverse they could recreate what they offer physically in a virtual way. By doing so they would give the tourist the opportunity to virtually experience in an immersive and verisimilar way what they are selling before he can purchase it.”</i></p> <p><i>(Hotel Manager) “It would be a great way to promote a tourist destination. Imagine the tourist could experience part of a city virtually in the metaverse, he might be more convinced in going to visit it in real life!”</i></p> <p>Immersive preview</p> <p><i>(Tourist Guide) “I can imagine, for example, for a company that offers tourism experiences of various kinds it could be a very useful tool: they could give the tourist access after the purchase to a virtual experience of what they have purchased and act as a preview of what they are going to physically experience”</i></p> <p><i>(Hotel Manager) “It could be interesting to virtually recreate a hotel and give the customer the opportunity to experience in advance the room they have purchased immersively in the metaverse”</i></p>
<p>Immersive social network</p>	<p>“Sharing experience and opinions”</p> <p><i>(Tourist Guide) “... just as happens online today, tourists could use the metaverse to share what they have experienced by showing their experiences with more immersive “posts”. For example, I imagine in their “virtual home” the possibility of seeing the places they visited inserted as decorative elements of the virtual environment and, why not, have their guests experience them”</i></p> <p><i>(Restaurant Manager) “Potentially it could be like social networks, Trip Advisor or like any other blog present online. The user, in the metaverse, could have a sort of “binder” of all the experiences they have had and share with others their opinions, suggestions and comments about them”</i></p> <p>Socialization</p> <p><i>(Online Travel Agent) “I envision the metaverse as the evolution of instant messaging, video calling, I don’t know, social networking in general. A place where I can talk to a friend online in a place that simulates reality and is not relegated to a webcam”</i></p> <p><i>(Tourist Guide) “I think the metaverse can change a lot the way we socialize and get information online. We will be able to chat with people from all over the world just by entering some virtual world. From the comfort of home, we could meet people from other cultures live, and find out what is happening on their side of the world”</i></p>

Table - Metaverse as a “Standalone Experience”: Selected Evidence

Second order themes	First-order codes and exemplary evidence
<p>Relax experience</p>	<p>“Take a walk”</p> <p><i>(Online Travel Agent) “Honestly, I would see it very useful for all those tourists who have already visited a specific destination, enjoyed it, and taking advantage of metaverse technologies might decide to spend some time virtually walking the streets of that city”</i></p> <p><i>(Restaurant Manager) “I, for example, love to stroll along the seashore when I am on summer vacation.... I could easily simulate doing it virtually if there was the possibility of doing it in the metaverse, even when it is winter”</i></p> <p>Stress-free travel</p> <p><i>(Restaurant Manager) “I think for visiting certain attractions it could be very relevant for tourists, I am talking for example about art installations or museum buildings, standing in line, under the sun, can be a great stress for visitors. Being able to enter a virtual environment without having to wait so long could definitely be a great benefit”</i></p> <p><i>(Tourist Guide) “Traveling is one of the greatest pleasures in life, but it is not without stress, the lines at airports and to visit points of interest, the luggage to pack and carry... if you could travel in the metaverse it would not be the same, but it would certainly be more comfortable”</i></p>
<p>Couch-traveling</p>	<p>Comprehensive tourist journeys</p> <p><i>(Tourist Guide) “There are many tourists who love to travel and who due to issues related to lack of time, or commitments of daily life, for example, cannot travel as they would like. The metaverse could be a new means for tourists to be able to visit destinations for which they have curiosity, despite having inability to undertake a trip”</i></p> <p><i>(Online Travel Agent) “If companies started investing massively in the metaverse with the aim of virtually creating the most touristy cities, people would probably start visiting them by purchasing experiences that are conveniently usable from their homes, for what is experiential virtually”</i></p> <p>Engage with a specific point of interest (POI)</p> <p><i>(Tour Operator) “I can imagine recreating a museum virtually in the metaverse, I’ve seen someone who has done that... I think, there, that would be an interesting application of the metaverse, recreating specific tourist attractions for tourists to visit immersively”</i></p> <p><i>(Restaurant Manager) “You know, taking a trip is not just visiting a city, it’s the complex of different experiences, different attractions that grouped together make up the travel experience. That said, I think it would help for certain attractions such as theme parks, exhibitions, and particular events, to recreate themselves even virtually in the metaverse, they could benefit by increasing their audience!”</i></p>

Table - Metaverse as a “Phygital Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Augmented Tourist</p> <p>Guide</p>	<p>A tool to support tour guides</p> <p><i>(Hotel Manager) “I think one of the greatest benefits of applying these technologies could be the tour guides and, consequently, the tourists who are their clients. Putting myself in the shoes of a guide, I think the metaverse could be of great help to me”</i></p> <p><i>(Tourist Guide) “I try to visualize my work implemented by these immersive technologies...I think it could help me, for example Augmented Reality, to visualize elements that are physically no longer present in the environment for historical evolution or, perhaps, details that are difficult to see with the naked eye but important to my explanations”</i></p> <p>Time-travel Machine</p> <p><i>(Museum Manager) “... I could consider the folkways, over time they have changed completely and if you could use the metaverse to give visitors an understanding of how people acted in certain contexts in centuries past?”</i></p> <p><i>(Tourist Guide) “There are so many tourist destinations that have had a historical evolution that has transformed their essence even merely aesthetically, being able to use the metaverse to go back in time could be a nice experience to offer tourists to be able to make them feel this change over time”</i></p>
<p>Unreachable</p> <p>Exploration</p>	<p>Uncharted or restricted areas</p> <p><i>(Tour Operator) “I’m thinking of those attractions that have areas that are inaccessible for hundreds of reasons or reserved and not accessible for tourists, I’m talking for example about medieval castles or very old structures, it would be a worthwhile investment to make to offer a complete experience of that destination for the tourist who could enjoy it through the metaverse”</i></p> <p><i>(Online Travel Agent) “...take for example those situations such as archaeological excavations or new discoveries, usually even the parts that are not accessible in these contexts are known to technicians and with new technologies perhaps they could be recreated virtually and experienced immersively with the metaverse”</i></p> <p>Undergoing renovations</p> <p><i>(Tour Operator) “In recent years it has happened more and more often that attractions, even very relevant to visitors to a particular tourist destination, were closed or partially inexperienced due to construction work, well in that case the metaverse could have improved the state of the disappointed tourist for not being able to make the visit!”</i></p> <p><i>(Museum Manager) “It happens, at times, that some areas, even the most important ones, have to be closed for renovation, perhaps one application of the metaverse could be to replace the physical experience of those areas that are impossible to visit during that time period, with an immersive, virtual experience in the metaverse”</i></p>

Table - Metaverse as a “Inclusive Experience”: Selected Evidence

Second order themes	First order codes and exemplary evidence
<p>Full Accessible Experience</p>	<p>No physical Limitations</p> <p><i>(Tour Operator) “... even for those tourists who have motor difficulties, thinking about it, it could have benefits, I am thinking for example of the elderly or people who have motor disabilities, they could move in a virtual recreation of the attraction or destination comfortably in the metaverse”</i></p> <p><i>(Tour Operator) “There are various tourist destinations that are difficult to visit for those tourists who have motor problems of different kinds and severity, probably the metaverse could help these kinds of tourists by giving them the opportunity to reduce their objective impediments”</i></p> <p>Disability inclusive POI</p> <p><i>(Tour Operator) “Many churches or cathedrals have steeples, towers or simply roofs that could be visited, for people with mobility disabilities it is literally impossible to visit them, climbing hundreds of steps to get there. Many of these structures are not equipped, due to their antiquity or structure, to offer possibilities for this type of tourism, one could think of the metaverse as a solution”</i></p> <p><i>(Restaurant Manager) “I can think of those situations where access is very complicated even for people without any impairment, I’ll take you examples of tunnels, quarries, underground cities. Perhaps using the metaverse to recreate those dynamics could give those people with mobility impairments a chance to have a tourist experience they would otherwise never have”</i></p>
<p>Human Augmentation</p>	<p>A Virtual Touch</p> <p><i>(Tourist Guide) “Sometimes when we are working with people who have different disabilities, maybe these types of gloves could be helpful for those tourists with visual impairments. Their perception of reality is closely related to touch, I think of works of art, statues, it is not at all allowed to give them a way to touch them, maybe then they could have a better perception of the materials, or why not the details of the work, while being in recreations in the metaverse”</i></p> <p><i>(Museum Manager) “Having the tactile sensation in the metaverse? Very intriguing! It would make the tourist experience, especially for those attractions for which touching present works is not allowed, such as museums, completely different, augmented by a previously unallowed perception”</i></p> <p>Real-time Subtitles</p> <p><i>(Museum Manager) “An audio guide is a very convenient tool-you put the headphones in your ears, put it in your pocket, and off you go. It is not so convenient when the tourist coming to visit has hearing problems. Maybe being able to give them an Augmented Reality device that can make them read explanations of the works in the museum might be a good upgrade!”</i></p> <p><i>(Tourist Guide) “In the tourism industry, it is increasingly common to find groups of different cultures and nationalities, even the most disparate ones. Usually, the tourist chooses the language of the visit most familiar to him, but his knowledge of that language is not necessarily such that he can understand everything that is explained. Perhaps if the Metaverse technologies could be used to offer a live translation service, I don’t know,</i></p>

	<i>augmenting the foreign tourist's viewing with subtitles in his or her own language... I would find it very useful"</i>
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Appendix 2

	What we know (Conceptual Literature)	What we don't know (Empirical Gaps)	What this study adds (Our Contribution)
Metaverse Capabilities	Immersive, multisensory, persistent, hybrid experiences	How providers perceive these capabilities and their relevance to CX	Confirms that providers value immersion, inclusion, and phygital integration
Customer Experience Effects	Potential to enhance pre-, during-, post-journey phases	Which phases are most impacted and how	Shows that value creation is phase-specific and tied to five value dimensions
Value Creation Mechanisms	Theoretical application of CVT and CJ in virtual settings	Empirical evidence of these mechanisms in practice	Empirically maps CVT values across CJ phases via real use cases
Sector-Specific Relevance	Tourism is experience-intensive and innovation-driven	How sector-specific actors imagine or apply Metaverse solutions	Provides grounded insights from tourism operators and managers

Interlude 3

Among the key findings emerging from the second paper, “*Understanding the Potentialities of Metaverse for Marketers: Insights from Italy*,” the notion of product placement surfaced as a particularly significant insight. While initially framed as a familiar marketing practice adapted to new virtual settings, managerial reflections revealed that, within the Metaverse, product placement transcends its traditional communicative function. It becomes a form of experiential integration, where branded content is no longer superimposed on the environment but embedded within the user’s interactive flow, shaping perception, engagement, and even economic behavior. This conceptual shift invited a deeper exploration of how immersive environments transform the mechanisms of value creation and monetization - an inquiry that directly motivated the design of the subsequent study. To investigate these dynamics, the research turned to Free-to-Play (F2P) gaming ecosystems as the empirical and theoretical ground for analysis. This choice was not merely opportunistic but theoretically substantiated. F2P games - such as *Fortnite* or *Roblox* - represent the most advanced and mature form of metaversal environments currently available. They combine the key features identified in previous studies - persistence, embodiment, sociality, and co-creation - within a fully operational economic architecture. These platforms are, in essence, proto-metaverses where millions of users perform daily acts of consumption, identity construction, and social interaction in real time. Within these ecosystems, brands are no longer external advertisers but endogenous actors of the experience: they design virtual goods, host live events, and co-create content that blurs the boundaries between play, commerce, and culture. Analyzing F2P games thus provides a unique window into the intersection of experiential and economic logics that define the emerging Metaverse. Their freemium structure, based on accessibility and optional monetization, transforms consumption into an ongoing participatory process rather than a discrete transaction. Players invest time, attention, and identity within these virtual worlds, generating hybrid forms of value that merge symbolic engagement with micro-economic

behavior. In this context, product placement evolves into a distributed retail mechanism, where exposure, interaction, and purchase occur simultaneously through avatar customization, virtual events, and in-game storytelling. Consequently, the fourth paper, “*Monetizing in Free-to-Play Games: A Retail Mix Perspective*”, builds upon the conceptual seeds identified in the managerial insights of Paper II and extends them into a strategic and economic theorization of the Metaverse. By examining F2P games as living laboratories of virtual consumption, it reframes traditional marketing variables through the lens of immersion and interactivity, proposing the Virtual Retail Mix as a novel framework to understand how product, price, place, promotion, people, and presentation are redefined in persistent, participatory, and gamified environments. This transition consolidates the dissertation’s cumulative trajectory: from the identification of the managerial opportunities of the Metaverse to the systematic exploration of its experiential mechanisms and finally its economic architectures of value creation. Through the study of F2P ecosystems, the research demonstrates that the Metaverse is not only a symbolic or experiential innovation but also a transformative economic paradigm - one in which play, identity, and commerce converge into an integrated system of interactive retailing and co-creation.

Paper 4: Monetizing in Free-to-Play Games: A Retail Mix Perspective

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Keywords

Free-to-Play (F2P) Games; In-Game Retailing; Virtual Retail Mix; Freemium

1. Introduction

“When consumers have free time, we compete with Fortnite more than HBO”, stated Netflix in 2019 on a letter to shareholders, signaling the shift in how entertainment, engagement, and consumption are increasingly converging in digital environments. The gaming industry is worth \$396 billion, way more than cinema and music combined, and gathers 3 billion enthusiasts worldwide that regularly dedicate time and efforts to live virtual experiences (Statista, 2024). From a leisure and entertaining activity, gaming has evolved across the decades to a cultural and commercial phenomenon, not just shaping how people spend their free time but also how they interact and, ultimately, how and what they shop. Gaming as a platform for commerce is a recent development of the industry that follows the evolution of business models within the gaming industry itself. Traditionally, revenues are generated by selling full-priced games to players interested in completing them before switching to a more recent title. Nowadays things are rapidly changing: the emergence of virtual economies, in game currencies, and digital marketplaces within free-to-play (freemium/F2P) games has laid the foundation for a new wave of gaming deeply interconnected to retailing, setting a new and common frontier for both industries. In freemium games revenues are mainly generated by selling additional services of materials to “enhance” users’ game experience (Gu *et al.*, 2018; Hussain *et al.*, 2023), the major

challenge consists of attracting free users and ultimately converting them into paying customers (Beltagui *et al.*, 2019; Gu *et al.*, 2018). In-game shopping generated revenues for \$710 billion in 2024 (Statista, 2024), with strategies and patterns close to the realm of Retailing and its well-established retail mix. Brands of any kind are increasingly embedding themselves within these virtual realms not to miss the in-game shopping opportunities, going way beyond advertising and mere product placement, yet engaging with retailing-like dynamics offering in-game digital goods that often corresponds to their physical counterparts (i.e., a pair of Ray-Ban sunglasses for a Meta avatar; Adidas Stan Smith sneakers for a Fortnite player; a BMW car to race in Rocket League and more) in proper digital shops, adopting ad-hoc price and assortment management strategies. These initiatives exemplify the seamless integration of retail within gaming environments, blurring the lines between play and purchase. This paper explores the ascent of in-game retailing, charting its progression from freemium models to premium strategies, from a retailing mix perspective and towards a tentative Virtual Retail Mix model.

2. Purpose

The aim of this study is to examine the monetization strategies adopted by free-to-play (F2P) gaming platforms through the lens of the retail mix, exploring how these dynamics shape consumer behaviour within digital game environments. Building on an established theoretical framework in the field of retailing (Levy & Weitz, 2009), the research adopts an abductive approach to investigate how the levers of the retail mix are reinterpreted and operationalized in F2P ecosystems. F2P platforms represent a distinctive business model in the broader landscape of digital consumption: they offer full and free access to gaming content while monetizing through optional mechanisms of engagement and in-game purchases (REF). Despite increasing academic interest in gaming and virtual economies/experiences, there remains a lack of systematic investigation into the retail strategies that underpin these models, especially when in-game stores and shops also offer branded contents and/or digital products available for

purchase. To address this gap, this study employs a dual qualitative methodology, combining semi-structured interviews to F2P gamers with a netnographic analysis of cross-platform F2P gaming environments and user interactions. More than just describing current practices, the research aspires to build a conceptual framework that extends the traditional retail mix into the domain of interactive/immersive digital spaces. The study seeks to develop a model - tentatively referred to as the Virtual Retail Mix - that captures the specific features of value creation, distribution, and consumer engagement in virtual retail environments in-game. This model aims to bridge theoretical insights from retail studies with empirical observations of F2P game dynamics, offering a new lens for understanding how retail logics are evolving within the gamified, immersive, and participatory infrastructures of digital F2P gaming. Ultimately, the study contributes to the academic discourse on digital retail by foregrounding the commercial architectures of F2P games and their capacity to sustain monetization through hybrid strategies of play and purchase, drawing both from eCommerce literature, as well as digital goods purchasing/ownership. The findings aim to inform both scholarly debate and managerial practice, supporting the development of more effective and sustainable strategies in the fastgrowing market of digital gaming.

3. Conceptual framework

We draw from Atasoy and Morewedge's (2018) psychological ownership theory, which explains why digital goods are often valued less than their physical counterparts. In the context of gaming, this presents a paradox: although in-game digital goods (such as skins, weapons, or avatars' accessories) are central to user experience and often expensive, they remain intangible. We propose a conceptual framework in which the value perception of digital goods in videogames is shaped by retail mix elements that enhance psychological ownership. While traditional retail mix components - such as price, product assortment, communication mix, etc. - are designed for physical retail, they can be reinterpreted in the digital context. For example,

product assortment in games can refer to the variety and uniqueness of in-game items, which may strengthen identity expression and foster ownership. Communication mix becomes essential in creating narratives and emotional connections around digital items, while price strategies can signal exclusivity and value. Store design and display, translated into the user interface and in-game marketplaces, influence how tangible and controllable digital items feel. By leveraging these adapted retail mix dimensions to trigger psychological ownership, game developers can counteract the typical undervaluation of digital goods and drive stronger purchase intentions.

4. Methodology

Due to the exploratory aim of the research topic, the present study adopts a qualitative approach (Swedberg, 2020), combining semi structured interviews and netnographic analysis (Kozinets, 2002), to gain an in-depth understanding of the dynamics of interest. The data collection process was executed in two stages. Firstly, 40 semi structured interviews with video gamers who engage in gaming on a regular basis were conducted online in Italian – the interviewees’ native language -, recorded, transcribed and translated in English to facilitate detailed analysis. The sample of video gamers was meticulously selected using a purposeful sampling technique (Suri, 2011) based on their expertise in F2P video games. To enhance the representativeness of the sample, a snowball sampling approach (Parker *et al.*, 2019) was employed, ensuring an adequate number of respondents were included in the study. The interview protocol was developed based on a phenomenological approach (Thompson *et al.*, 1989) with the aim of analyzing their gaming and purchase experience using these video games. Moreover, an immersive netnography analysis was undertaken, encompassing direct observation of “non-human actors, interface functions and other environmental factors” (Kozinets, 2022) that can be crucial to understand the virtual experiences provided by these online games. This phase enabled data triangulation (Myers, 2019) from interviews with evidence collected directly in

digital contexts, thereby reinforcing the validity of the results by comparing subjective statements with observed practices. Following grounded theory pillars (Charmaz, 2006, Corbin and Strauss, 1990), data have been analyzed according to the method proposed by Magnani and Gioia (2023) by using the systematic combining approach (Dubois and Gadde, 2002) - an iterative approach that constantly integrates theory and empirical data – during the generation of the codes. Following abductive interpretation, the collected data were coded thematically, with the support of qualitative analysis tools, to identify emergent patterns traceable to retail marketing mix (Blut *et al.*, 2018).

5. Preliminary Findings

The qualitative analysis, following a deductive approach based on the retail marketing mix framework (Blut *et al.*, 2018), revealed that F2P platforms implement advanced strategies to maximize monetization and player engagement. Following the retail mix structure, preliminary findings are presented per each lever:

Product assortment and branding

The data collected demonstrate that F2P games exhibit dynamic assortment, offering a wide variety of digital content, including skins, cosmetic items, and exclusive experiences. The analysis indicates that the perception of quality is not contingent on functional features (utilitarian), but rather on the personalization and uniqueness of products (hedonic); similarly, impulse buying behaviour prevails when deciding whether buying or not premium contents in a free environment. In-game stores manage assortment strategically: depth and width are carefully managed not to overload gamers with choice, also proposing events and/or limited editions, leveraging upon immediacy and exclusiveness. Results also suggest that branding in free-to-play (F2P) platforms develops on two levels: the game brand itself and the presence of

external brands. The sale of digital products related to fashion, sports, and entertainment brands strengthens the platform's identity and creates a sense of exclusivity among players.

Pricing, promotions, and incentives

Observations show that the pricing model in F2P games is based on a combination of real currency and virtual tokens. Interview analysis revealed that this structure affects the perception of spending, making it less immediate and incentivizing repeat purchases and impulse buying behaviours. Emerging data demonstrate that mechanisms such as battle passes, experience points, subscriptions, and exclusive rewards for “paying” customers help strengthen loyalty, creating cycles of engagement that drive spending to maintain competitive or aesthetic advantages.

Communication and distribution

The analysis revealed that communication is based on persuasive strategies, with strong use of influencers, online communities, and push notifications to stimulate purchases through scarcity techniques and limited time offers. Finally, the results demonstrated that in F2P games, distribution is entirely digital, emphasizing immediate transaction management and cross-platform availability. This development serves to expand the usability and reach of the business model.

6. Contributions

This study contributes to the academic discourse on digital retail and consumer behavior by offering a systematic analysis of monetization strategies within free-to-play (F2P) gaming platforms through the established lens of the retail mix. While prior research has explored virtual economies and gaming consumption patterns, this paper introduces a novel conceptual framework - the Virtual Retail Mix - which extends traditional retail logic to immersive and interactive digital environments. By leveraging grounded theory and abductive reasoning, the

study develops a model that captures how retail levers such as assortment, pricing, branding, and promotion are reinterpreted within in-game contexts to foster engagement, stimulate purchasing, and enhance perceived ownership of digital goods. On a theoretical level, the research bridges a gap between retailing literature and game studies, integrating insights from psychological ownership theory to explain value attribution in intangible environments. On a practical level, the findings provide actionable guidance for developers, brand managers, and digital marketers seeking to design more effective and sustainable monetization strategies within gamified ecosystems. In doing so, the paper lays the groundwork for future inquiry into hybrid commerce models that blend entertainment, identity construction, and retail logic in virtual spaces.

7. Practical implications

The findings offer valuable insights for game developers and brand managers aiming to enhance monetization strategies within F2P environments. By understanding how retail levers can be adapted to virtual contexts, businesses can design more engaging in-game stores, optimize pricing and assortment strategies, and strengthen user loyalty through perceived value and ownership. The proposed Virtual Retail Mix provides a strategic tool to navigate the convergence of gaming and retail, supporting more effective and sustainable commercial practices in digital ecosystems.

8. Research limitations and outlook

This study is exploratory in nature and relies exclusively on qualitative methods, namely semi-structured interviews and netnographic analysis, focusing on the consumer perspective. While this approach offers rich, in-depth insights into user experiences and behaviors, it does not capture the strategic intentions or challenges faced by game developers and brands engaging in in-game retailing. Future research should incorporate the perspectives of industry stakeholders

- such as game studios and companies experimenting with virtual commerce - to triangulate findings and validate the proposed Virtual Retail Mix model from a managerial standpoint.

References

Atasoy, O., & Morewedge, C. K. (2018). Digital goods are valued less than physical goods. *Journal of consumer research*, 44(6), 1343-1357.

Beltagui, A., Schmidt, T., Candi, M., & Roberts, D. L. (2019). Overcoming the monetization challenge in freemium online games. *Industrial management & data systems*, 119(6), 1339-1356.

Blut, M., Teller, C. & Floh, A. (2018). Testing retail marketing-mix effects on patronage: A meta-analysis. *Journal of Retailing*, 94, 113–135.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Corbin, J. M. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13, 3–21.

Dubois, A. & Gadde, L.-E. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55, 553–560.

Gu, X., Kannan, P. K., & Ma, L. (2018). Selling the premium in freemium. *Journal of Marketing*, 82(6), 10-27.

Hussain, A., Abid, M. F., Shamim, A., Ting, D. H., & Toha, M. A. (2023). Videogames-as-a-service: how does in-game value co-creation enhance premium gaming co-creation experience for players?. *Journal of Retailing and Consumer Services*, 70, 103128.

Hussain, A., Ting, D. H., & Marder, B. (2024). Why premium in freemium: a hedonic shopping motivation model in virtual game retailing. *Information Technology & People*.

Kozinets, R. V. (2002). The field behind the screen: Using netnography for marketing research in online communities. *Journal of Marketing Research*, 39, 61–72.

Kozinets, R. V. (2022). Immersive netnography: A novel method for service experience research in virtual reality, augmented reality and metaverse contexts. *Journal of Service Management*, 34, 100–125.

Levy, M., Weitz, B. A., & Grewal, D. (2019). *Retailing management*, 10th. edit. ed.

Magnani, G. & Gioia, D. (2023). Using the Gioia methodology in international business and entrepreneurship research. *International Business Review*, 32, 102097.

Myers, M. D. (2019). *Qualitative research in business and management*.

Parker, C., Scott, S. & Geddes, A. (2019). *Snowball sampling*. SAGE Research Methods Foundations.

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11, 63–75.

Swedberg, R. (2020). Exploratory research. In *The production of knowledge: Enhancing progress in social science* (Vol. 2, pp. 17–41).

Thompson, C. J., Locander, W. B. & Pollio, H. R. (1989). Putting consumer experience back into consumer research: The philosophy and method of existential-phenomenology. *Journal of Consumer Research*, 16, 133–146.

Part III - General Discussion

This chapter aims to offer a unified discussion of the results that emerged from the four studies that make up the thesis, bringing together the empirical evidence and theoretical contributions produced during the research process into a coherent vision. Unlike the previous chapters, in which each paper was analyzed as an autonomous entity, the aim here is not to retrace the sequence, but to bring the results into dialogue with each other, highlighting how, taken together, they contribute to an integrated theory of metaverse marketing.

This section therefore serves a theoretical recompositing function, aimed at showing the internal coherence of the research and the progressive convergence of the studies towards the same interpretation of the phenomenon: the Metaverse as an experiential, relational, and strategic ecosystem in which the logic of value and interaction between actors is redefined. What unites the four works is not their methodological complementarity, but their common theoretical tension to explain how technology becomes an environment of meaning, and how immersive experience becomes the main device for co-creating value in contemporary marketing.

The studies as a whole highlight a common thread running through the entire project: the transition from a technological conception of the Metaverse to a socio-technical and cognitive vision, where virtual reality is no longer a context external to consumption but an environment in which consumption itself is constructed. In this sense, the thesis does not merely explore an emerging phenomenon, but contributes to a theoretical redefinition of the discipline, suggesting that marketing in the immersive era must be understood as the science of experiential design and phygital relationships.

The following chapter develops this perspective in three directions. First, it offers an integrated discussion of the results (section 3.1), in which the evidence from the various studies is read as parts of a single interpretative framework on the role of the Metaverse in marketing and

consumption processes. Second, it articulates the theoretical contributions that derive from this synthesis (Section 3.2), highlighting the implications for the literature on value, customer experience, and service- ties. Finally, it reflects on the managerial implications, limitations, and future research prospects (Sections. 3.3-3.4), placing the thesis within the international academic debate on the future of marketing.

In this perspective, the concluding chapter takes on not only a summarizing but also a theoretical and generative value, as it aims to demonstrate that the knowledge produced is not the sum of the individual articles, but the result of a process of integration and conceptual abstraction that allows us to propose a theory of immersive marketing based on solid and consistent empirical evidence.

3.1 Integrated discussion of the results

The joint analysis of the empirical results allows us to interpret the Metaverse as a socio-technical and phygital ecosystem of value creation, in which the technological, experiential, and strategic dimensions of marketing converge in a single relational architecture. The evidence gathered in the various studies shows that immersive experiences generate new models of interaction between individuals and businesses, based on participation, sensoriality, and the shared construction of meaning (Buhalis *et al.*, 2023; Dwivedi *et al.*, 2022; Park & Kim, 2022). In this context, physical and virtual reality intertwine fluidly, giving rise to a new form of digital presence in which the marketing relationship becomes a lived and co-produced experience (Arya *et al.*, 2024; Batat, 2024).

Experience is at the heart of this transformation. Empirical findings confirm that immersion, presence, and participation are the main vectors through which value takes shape in the Metaverse (Hilken *et al.*, 2022; Hoyer *et al.*, 2020). Immersive technologies expand the consumer's ability to act within the environment, personalize their interaction, and co-create symbolic meanings with the brand (Alimamy & Jung, 2024; Buhalis *et al.*, 2022; Flavián *et al.*,

2021). The consumer experience thus becomes the very place where value manifests itself, taking the form of an experiential infrastructure that integrates the cognitive, emotional, and physical dimensions of consumption into a narrative continuum (Becker & Jaakkola, 2020; Lemon & Verhoef, 2016).

The customer journey within these spaces has a circular and iterative structure, in which the phases of anticipation, interaction, and memory coexist within a single environment (Alexander *et al.*, 2025; Gleim *et al.*, 2025). Individuals move through interconnected experiences that evolve over time and digital space, generating an experiential continuity that makes the relationship with the brand persistent and immersive (Dwivedi & Hasan, 2025). In this sense, the Metaverse acts as a relational framework capable of accommodating repeated and situated interactions, transforming the consumer relationship into a process of continuous participation (Dwivedi *et al.*, 2023).

Evidence also shows that the value produced in these contexts is primarily relational, symbolic, and participatory. The co-creation of value emerges from the interaction between human and technological actors, in a system in which each participant contributes to the collective experience through their own skills and representations (Leonardi, 2012; Orlikowski, 2007). Empirical analysis suggests the existence of a form of value specific to immersive environments, definable as value-in-immersion, generated by presence and embodied experience, which combines functional utility, sensory gratification, and social meaning (Heller *et al.*, 2019; Ramadan & Ramadan, 2025; Sheth *et al.*, 1991). This type of value amplifies the assumptions of Service-Dominant Logic (Lusch & Nambisan, 2015; Vargo & Lusch, 2008), showing that co-creation also occurs through sensory immersion and experiential participation.

The Metaverse acts as a space where communication, experience, and strategy converge. Advertising, brand experience, and product placement activities are integrated into a single

three-dimensional narrative process (Hollensen *et al.*, 2022; Kim, 2021). Users experience communication as an experience and participation as a value, generating a new form of loyalty based on narrative consistency and symbolic identification (Arya *et al.*, 2024; Jenkins & Deuze, 2008; Rane *et al.*, 2023a). Brands transformed into a relational platform, and engagement becomes an expression of co-construction of identity (Hilken *et al.*, 2022; Hoyer *et al.*, 2020; Yoon *et al.*, 2025).

The economic-strategic dimension of the results highlights an evolution in the very concept of marketing mix. In immersive contexts, traditional levers are redefined as experiential and relational levers: the product coincides with the proposed experience, the price with the perception of value, the promotion with interactive participation, and the distribution space with the shared digital environment (Alexander *et al.*, 2025; Barrera & Shah, 2023).

Marketing thus takes the form of a design process aimed at building experiential worlds, in line with the logic of the experience economy (Pine & Gilmore, 1998) and with the phygital approach that integrates physical presence and digital simulation (Belghiti *et al.*, 2017; Debono, 2021). The competitiveness of companies is therefore linked to their ability to create coherent and culturally meaningful immersive spaces (Aloqaily *et al.*, 2022; Buhalis *et al.*, 2023; Habil *et al.*, 2024).

From a systemic point of view, the Metaverse can be interpreted as a self-organised relational environment, in which value creation is achieved through collaboration between human, algorithmic and infrastructural actors (Abrahamsson & Stenalm, 2018; Buhalis *et al.*, 2022; Nambisan *et al.*, 2017; Nieborg & Poell, 2018). This ecosystem manifests a network logic in which technology becomes a cognitive and symbolic agent, capable of mediating relationships and co-producing meaning (Orús *et al.*, 2021; Ramadan & Ramadan, 2025). In this perspective, marketing takes on the function of experiential orchestration, aimed at creating contexts conducive to participation and co-creation (Hazan *et al.*, 2022; Kumar, 2024).

Overall, the integration of the results outlines the Metaverse as a space that generates experiential value and as a paradigm of immersive marketing oriented towards the co-creation of shared worlds. Technology is not simply an enabler, but a constituent part of the experience; the company does not design products, but conditions for interaction; and the consumer does not buy but participates. In this convergence between the physical and digital worlds marketing establishes itself as the science of phygital relationships and the design of meaningful experiences (Gandhi *et al.*, 2024; Gursoy *et al.*, 2023; Warden *et al.*, 2024).

3.2 Theoretical implications

The theoretical elaboration that stems from the integration of empirical results allows us to propose a significant advance in the field of marketing, redefining the relationship between technology, experience, and value.

The set of studies developed during the research contributes to building a unified theoretical framework of immersive marketing, which extends the classic models of customer experience, service-dominant logic, and retail management towards a socio-technical and phygital perspective. This theoretical advancement does not lie in the introduction of new isolated concepts, but in the systemic recomposition of existing theories within a transformed epistemic context: that of the Metaverse as a relational and cognitive infrastructure.

On a theoretical level, the research expands the boundaries of Customer Experience Theory (Hoyer *et al.*, 2020; Lemon & Verhoef, 2016; Pine & Gilmore, 1998) by introducing a model of immersive experience in which perception, memory, and presence coexist in an experiential continuum. The Metaverse allows us to empirically observe a form of experience that is no longer articulated in temporal phases, but in sensory and symbolic configurations. In this context, value does not derive from the sum of moments of contact with the brand, but from the intensity and continuity of the experiential relationship. The thesis proposes to interpret this configuration as a circular phygital experience, in which the distinction between physical and

virtual reality dissolves into a single space of meaning, confirming and expanding on the insights of Pine and Gilmore (1998) on the experience economy and Buhalis *et al.* (2023) on the continuity between digital presence and bodily involvement. This perspective extends customer experience theory to include the embodied dimension (Barsalou, 2008), in which value is formed through sensory participation and the user's active presence in the environment.

The thesis also contributes to the evolution of Service-Dominant Logic (Vargo & Lusch, 2004; Lusch & Nambisan, 2015), highlighting the need to consider technology not as a simple resource, but as a co-creative actor. The evidence gathered shows that the co-creation of value in immersive contexts takes on a socio-material nature (Orlikowski, 2007; Leonardi, 2012), in which platforms, algorithms, and virtual environments act as cognitive and symbolic mediators. The research introduces the concept of value-in-immersion, which expands the notion of value-in-use to include the phenomenological dimension of the immersive experience. Value is no longer linked to utility or efficiency, but to the intensity of participation and the ability to generate shared meanings through sensory interaction. In this sense, the Metaverse represents a theoretical laboratory in which service logic expands towards a Phygital Service Logic, in which value creation is the result of the simultaneous integration of human, technological, and environmental resources.

A further theoretical contribution comes from the reconfiguration of the Retail Mix in an immersive key. Conceptual analysis and the evidence gathered suggest that the classic levers of the marketing mix (Levy & Grewal, 2023) are transformed into tools for experiential and symbolic design. In the proposed Virtual Retail Mix, the product coincides with the experience, the price with the perception of value, the promotion with interactive storytelling, the distribution space with the virtual environment, and people with digital communities. This reinterpretation positions retail as a device of meaning, capable of connecting economic, cultural, and relational dimensions (Alexander *et al.*, 2025; Gleim *et al.*, 2025; Warden *et al.*,

2024). The proposed perspective allows monetization to be interpreted not as an exchange, but as a process of symbolic participation, in which value emerges from the experiential relationship and the narrative coherence of the brand's. Retail, from a place of transaction, thus becomes an environment for co-constructing identity and a strategic node in the experiential value network.

The integration of these theoretical trajectories allows us to formulate a framework for the Metaverse Marketing Ecosystem, which describes the Metaverse as a dynamic co-creation system in which value, experience, and technology are co-determined. This ecosystem incorporates the principles of service-dominant logic, but applies them in an experiential and immersive way, placing customer experience at the center of value processes and technology as a mediator of meaning. In this perspective, marketing is redefined as a discipline of socio-technical orchestration, combining environment design, relationship management, and identity construction. The overall theoretical contribution of the thesis therefore consists in articulating a new interpretative paradigm, Immersive Marketing Theory, which integrates the fundamentals of experiential marketing, service logic, and sociomateriality, offering a conceptual framework for understanding how companies and individuals co-produce value in phygital and multisensory environments.

3.3 Managerial implications

The managerial implications that emerge from the research highlight how the Metaverse is progressively changing the strategic and relational assumptions of contemporary marketing. Empirical evidence shows that companies operating in this field are not limited to experimenting with new technologies, but are participating in the construction of a new competitive paradigm based on experiential interaction and joint value creation. The Metaverse is a complex managerial environment in which innovation concerns not only products or

communication channels, but also the very logic with which organizations conceive their presence, identity, and relationship with stakeholders.

The first implication concerns the redefinition of brand presence. Visibility in the Metaverse no longer depends on the amount of exposure or the frequency of messages, but on the ability of the brand's to build an immersive presence consistent with its values and recognizable as a meaningful experience (Alexander *et al.*, 2025; Batat, 2024). Companies are called upon to translate brand identity into narrative and sensory environments, where visual, spatial, and symbolic language work together to generate trust and belonging (Ball, 2022). The brand becomes an experiential subject, designed not to communicate but to inhabit the metaverse space (Barrera & Shah, 2023; Dwivedi & Hasan, 2025). The construction of coherent, accessible, and culturally resonant worlds therefore emerges as a key competence for immersive marketing, as it allows the digital presence to be transformed into a meaningful and lasting relationship.

The second implication concerns the management of participatory engagement. Relationships in the Metaverse are based on continuous interaction processes, in which the user is not a spectator but a co-author of the experience (Alimamy & Jung, 2024; Dwivedi *et al.*, 2023). This implies a rethinking of the way companies design customer experience: from the administration of isolated touchpoints to the orchestration of relationship ecosystems. Experience design becomes a narrative process, in which the company provides the tools, environments, and codes with which the consumer can co-construct meanings and values. Engagement, in this perspective, is transformed into relational continuity: a relationship that lives in interaction and memory and is nourished by mutual recognition between company and user. This dynamic requires new organizational and creative skills: the ability to tell immersive stories, manage interactive communities, understand the mechanisms of symbolic identification, and design experiences consistent with brand values.

The third implication concerns the economic value of immersive experience. The Virtual Retail Mix model shows that monetization in the Metaverse is based on the company's ability to transform the experience into relational value. Economic value depends not only on purchasing behavior, but also on the degree of participation, emotional intensity, and the ability to generate advocacy and loyalty. Companies that succeed in building coherent narrative and sensory experiences in the Metaverse obtain indirect but more lasting economic returns, deriving from the symbolic and relational capitalization of the experiences lived (Jafar & Ahmad, 2024; Rane *et al.*, 2023a). The price dimension shifts towards the perception of value and belonging, while promotion becomes a form of experiential storytelling that allows the user to act within the brand narrative. In this perspective, the Metaverse allows for the emergence of a new economy of participation, in which value is measured in terms of engagement and meaning rather than immediate conversion.

A fourth implication, which cuts across the previous ones, concerns the construction of an inclusive and accessible metaverse ecosystem. The evidence gathered suggests that the full realization of the Metaverse's potential depends on its ability to be an open and participatory space, capable of engaging users with different cultural backgrounds, digital skills, and access possibilities (Al-Kfairy *et al.*, 2025; Buhalis *et al.*, 2023). Inclusivity is not only an ethical goal but also a strategic condition for the sustainability of immersive marketing. Companies that integrate accessibility principles - from universal interface design to equitable representation in avatar experiences - expand not only their user base but also the cultural and social legitimacy of their digital presence. An inclusive Metaverse environment allows for greater diversity of viewpoints, reinforces the authenticity of brand storytelling, and fosters the building of more stable and collaborative communities. From this perspective, inclusion becomes a competitive and reputational lever, but also a principle of social responsibility: an element of governance that guides phygital design towards collective well-being and participation.

The focus on inclusivity is also linked to the broader issue of ethical and data governance. Immersive environments involve the management of sensitive, visual, and biometric information that requires transparency and protection (Oláh & Nica, 2022; Sorrentino & López-Guzmán, 2025). Organizations must develop data ethics skills and build internal policies capable of ensuring user trust, integrating principles of security, privacy, and control over the use of personal information. At the same time, institutions and policymakers are called upon to define a regulatory framework capable of balancing innovation and protection, promoting a responsible and sustainable digital ecosystem. Collaboration between businesses, regulatory bodies, and user communities is crucial for developing shared standards that preserve the social value of the Metaverse as a space for inclusion rather than exclusion.

Finally, empirical evidence suggests that the Metaverse can be interpreted as a laboratory for cultural and social innovation for marketing. Immersive environments offer a privileged context for experimenting with new forms of participation, representation, and interaction between businesses and individuals. Inclusion, creativity, and transparency become interdependent dimensions of the same value logic, prompting businesses to consider their actions not only in terms of economic performance but also in terms of their contribution to the construction of shared meanings. From this perspective, immersive marketing is not a technological extension of existing practices, but an ethical and cultural revision of the discipline, in which the company acts as an architect of accessible, sensitive, and collective experiences.

3.4 Limitations and future research directions

Any research project that sets out to investigate emerging phenomena such as the Metaverse must contend with the complexity and partiality that accompany the observation of constantly evolving contexts. The limitations of this thesis stem not only from methodological or empirical constraints, but above all from the dynamic and socio-technical nature of the subject under study. The Metaverse, understood as an ecosystem of interaction and value, is a reality under construction: the meanings it takes on, the technologies that support it, and the practices that inhabit it are constantly changing. In this perspective, the limitations of the research should be interpreted as epistemic boundaries that delimit what is currently observable and theoretically formulable, but at the same time define the space for future investigations.

A first limitation concerns the temporal contingency of the phenomenon. The period in which the research was conducted coincided with a phase of expansion and experimentation of the Metaverse, followed by moments of redefinition of technological priorities and changes in media language. This implies that some evidence reflects conditions and narratives specific to a historical moment in which the concept of the Metaverse was still in the process of stabilization. However, this contingency does not reduce the validity of the research but rather emphasizes its exploratory function: the results do not claim to describe an established phenomenon, but rather to interpret an institutionalization process that is still ongoing, contributing to guiding its theoretical understanding.

A second limitation is linked to the qualitative and interpretative nature of the research design, which prioritizes the depth of meaning over the generalizability of the results. The methodological choices adopted - case study, grounded theory, and immersive netnography - made it possible to capture the symbolic and relational dimension of the phenomenon, but do not allow the results to be extended to all configurations of the Metaverse or to different industrial sectors. In this sense, the contribution of the thesis lies more in terms of transferability

(Lincoln & Guba, 1985) than replicability, offering a theoretical framework that can be tested, refined, and adapted in future contexts.

A further limitation concerns the heterogeneity and rapid technological evolution of the environments analyzed. The Metaverse is not a unitary system but a set of platforms, languages, and technical standards that develop with different proprietary logics (Floridi, 2022; Ghosh *et al.*, 2024; Rane *et al.*, 2023b). The fragmentation of infrastructures and the lack of interoperability make it difficult to observe linear processes of adoption or maturity. This highlights the need for longitudinal and comparative studies capable of investigating over time how immersive marketing practices evolve as technological affordances, business models, and consumer behaviors change.

From a theoretical point of view, the thesis opens up more questions than it closes. In particular, the proposed socio-technical and phygital perspective suggests the need for further research aimed at quantifying and empirically validating the mechanisms of experiential value creation that have emerged qualitatively. Future studies could use experimental and quantitative approaches to explore the role of perceptual and sensory variables - such as presence, embodiment, and co-presence - in influencing brand evaluation and purchase propensity. Similarly, the concept of value-in-immersion, proposed as an extension of service logic, can be translated into operational models and measurement metrics capable of linking the experiential dimension with organizational performance indicators.

A promising line of research also concerns the comparative and intercultural dimension of the Metaverse. The modes of participation, representation, and perception of immersive experience vary significantly across cultures, generations, and economic systems. Exploring these differences would allow us to understand how the logics of co-creation and inclusion manifest themselves in different contexts, and to what extent the promise of the Metaverse as a universal

space for interaction can be translated into truly global practices. This type of investigation will require multi-method approaches, capable of integrating interpretative sensitivity with quantitative and computational analysis tools.

Finally, a further perspective concerns the social and environmental responsibility of immersive marketing. Inclusion and accessibility, discussed as managerial implications, can be extended as theoretical and regulatory dimensions. Future research will need to ask how the principles of sustainability, equity, and digital well-being can be incorporated into Metaverse marketing models. In this direction, the intersection of ethics, technology, and consumption represents fertile ground for the development of a theory of sustainable value, in which experiential innovation is accompanied by collective responsibility.

References

- Abrahamsson, A.-L., & Stenalm, J. (2018). Metaverse: Co-creating value in a galaxy not so far away? *Interactive Marketing, 51*, 57-71.
- Al-Kfairy, M., Alrabae, S., Alfandi, O., Mohamed, A. T., & Khaddaj, S. (2025). Navigating ethical dimensions in the metaverse: Challenges, frameworks, and solutions. *IEEE Access*.
- 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.
- Alimamy, S., & Jung, T. (2024). The AR cloud: Navigating metaverse augmentation technologies for enhanced co-creation of value within services. *Journal of Service Research, 10946705241265753*.
- Aloqaily, M., Bouachir, O., Karray, F., Al Ridhawi, I., & El Saddik, A. (2022). Integrating digital twin and advanced intelligent technologies to realize the metaverse. *IEEE Consumer Electronics Magazine, 12*(6), 47-55.

- 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.
- Ball, M. (2022). *The metaverse: and how it will revolutionize everything*. Liveright Publishing.
- Barrera, K. G., & Shah, D. (2023). Marketing in the Metaverse: Conceptual understanding, framework, and research agenda. *Journal of Business Research*, 155, 113420.
- Barsalou, L. W. (2008). Grounded cognition. *Annu. Rev. Psychol.*, 59(1), 617-645.
- Batat, W. (2024). Phygital customer experience in the metaverse: A study of consumer sensory perception of sight, touch, sound, scent, and taste. *Journal of Retailing and Consumer Services*, 78, 103786.
- Becker, L., & Jaakkola, E. (2020). Customer experience: fundamental premises and implications for research. *Journal of the Academy of Marketing Science*, 48(4), 630-648.
- Belghiti, S., Ochs, A., Lemoine, J.-F., & Badot, O. (2017). The phygital shopping experience: An attempt at conceptualization and empirical investigation. Academy of marketing science world marketing congress,
- Buhalis, D., Leung, D., & Lin, M. (2023). Metaverse as a disruptive technology revolutionising tourism management and marketing. *Tourism Management*, 97, 104724. <https://doi.org/https://doi.org/10.1016/j.tourman.2023.104724>
- Buhalis, D., Lin, M. S., & Leung, D. (2022). Metaverse as a driver for customer experience and value co-creation: implications for hospitality and tourism management and marketing. *International Journal of Contemporary Hospitality Management*, 35(2), 701-716.
- Debono, S. (2021). Thinking phygital: A museological framework of predictive futures. *Museum International*, 73(3-4), 156-167.

- Dwivedi, R., & Hasan, N. (2025). Enhancing Brand Awareness and Loyalty Through Gamification in the Metaverse. In *Addressing Practical Problems Through the Metaverse and Game-Inspired Mechanics* (pp. 259-288). IGI Global Scientific Publishing.
- 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., Janssen, M., Kim, Y.-G., Kim, J., Koos, S., Kreps, D., Kshetri, N., Kumar, V., Ooi, K.-B., Papagiannidis, S., Pappas, I. O., Polyviou, A., Park, S.-M., Pandey, N., Queiroz, M. M., Raman, R., Rauschnabel, P. A., Shirish, A., Sigala, M., Spanaki, K., Wei-Han Tan, G., Tiwari, M. K., Viglia, G., & 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/https://doi.org/10.1016/j.ijinfomgt.2022.102542>
- Dwivedi, Y. K., Hughes, L., Wang, Y., Alalwan, A. A., Ahn, S. J., Balakrishnan, J., Barta, S., Belk, R., Buhalis, D., & Dutot, V. (2023). Metaverse marketing: How the metaverse will shape the future of consumer research and practice. *Psychology & Marketing*, *40*(4), 750-776.
- Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2021). Impacts of technological embodiment through virtual reality on potential guests' emotions and engagement. *Journal of Hospitality Marketing & Management*, *30*(1), 1-20. <https://doi.org/10.1080/19368623.2020.1770146>
- Floridi, L. (2022). Metaverse: a matter of experience. *Philosophy & Technology*, *35*(3), 73.

- Gandhi, M., Gaur, A., Kar, A. K., & Dwivedi, Y. K. (2024). Crafting user experiences in the metaverse: A design science study. *Technological Forecasting and Social Change*, 209, 123759.
- Ghosh, A., Hassija, V., Chamola, V., & El Saddik, A. (2024). A Survey on Decentralized Metaverse using Blockchain and Web 3.0 technologies, Applications, and more. *IEEE Access*.
- Gleim, M. R., McCullough, H., Gabler, C., Ferrell, L., & Ferrell, O. (2025). Examining the customer experience in the metaverse retail revolution. *Journal of Business Research*, 186, 115045.
- Gursoy, D., Lu, L., Nunkoo, R., & Deng, D. (2023). Metaverse in services marketing: an overview and future research directions. *The Service Industries Journal*, 43(15-16), 1140-1172.
- Habil, S. G. M., El-Deeb, S., & El-Bassiouny, N. (2024). The metaverse era: leveraging augmented reality in the creation of novel customer experience. *Management & Sustainability: An Arab Review*, 3(1), 1-15.
- Hazan, E., Kelly, G., Khan, H., Spillecke, D., & Yee, L. (2022). Marketing in the metaverse: An opportunity for innovation and experimentation. *The McKinsey Quarterly*.
- Heller, J., Chylinski, M., de Ruyter, K., Mahr, D., & Keeling, D. I. (2019). Let me imagine that for you: Transforming the retail frontline through augmenting customer mental imagery ability. *Journal of retailing*, 95(2), 94-114.
- Hilken, T., Keeling, D. I., Chylinski, M., de Ruyter, K., Golf Papez, M., Heller, J., Mahr, D., & Alimamy, S. (2022). Disrupting marketing realities: A research agenda for investigating the psychological mechanisms of next - generation experiences with reality - enhancing technologies. *Psychology & Marketing*, 39(8), 1660-1671.

- Hollensen, S., Kotler, P., & Opresnik, M. O. (2022). Metaverse—the new marketing universe. *Journal of Business Strategy*, 44(3), 119-125.
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. *Journal of interactive marketing*, 51(1), 57-71.
- Jafar, R. M. S., & Ahmad, W. (2024). Tourist loyalty in the metaverse: the role of immersive tourism experience and cognitive perceptions. *Tourism Review*, 79(2), 321-336.
- Jenkins, H., & Deuze, M. (2008). Convergence culture. In (Vol. 14, pp. 5-12): Sage Publications Sage UK: London, England.
- Kim, J. (2021). Advertising in the metaverse: Research agenda. *Journal of Interactive Advertising*, 21(3), 141-144.
- Kumar, H. (2024). Virtual worlds, real opportunities: A review of marketing in the metaverse. *Acta Psychologica*, 250, 104517.
- Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69-96.
- Leonardi, P. M. (2012). Materiality, sociomateriality, and socio-technical systems: What do these terms mean? How are they different? Do we need them. *Materiality and organizing: Social interaction in a technological world*, 25(10), 1093.
- Levy, M., & Grewal, D. (2023). *Retail management*. McGraw-Hill.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. sage.
- Lusch, R. F., & Nambisan, S. (2015). Service innovation. *Mis Quarterly*, 39(1), 155-176.
- Nambisan, S., Lyytinen, K., Majchrzak, A., & Song, M. (2017). Digital innovation management. *Mis Quarterly*, 41(1), 223-238.
- Nieborg, D. B., & Poell, T. (2018). The platformization of cultural production: Theorizing the contingent cultural commodity. *New media & society*, 20(11), 4275-4292.

- Oláh, J., & Nica, E. (2022). Biometric Sensor Technologies, Virtual Marketplace Dynamics Data, and Computer Vision and Deep Learning Algorithms in the Metaverse Interactive Environment. *Journal of Self-Governance & Management Economics*, 10(3).
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization studies*, 28(9), 1435-1448.
- Orús, C., Ibáñez-Sánchez, S., & Flavián, C. (2021). Enhancing the customer experience with virtual and augmented reality: The impact of content and device type. *International Journal of Hospitality Management*, 98, 103019.
- Park, S.-M., & Kim, Y.-G. (2022). A metaverse: Taxonomy, components, applications, and open challenges. *IEEE Access*, 10, 4209-4251.
- Pine, B. J., & Gilmore, J. H. (1998). *Welcome to the experience economy* (Vol. 76). Harvard Business Review Press Cambridge, MA, USA.
- Ramadan, Z., & Ramadan, J. (2025). AI avatars and co-creation in the metaverse. *Consumer Behavior in Tourism and Hospitality*, 20(1), 131-147.
- Rane, N., Choudhary, S., & Rane, J. (2023a). Metaverse for enhancing customer loyalty: effective strategies to improve customer relationship, service, engagement, satisfaction, and experience. *Service, Engagement, Satisfaction, and Experience* (November 1, 2023).
- Rane, N., Choudhary, S., & Rane, J. (2023b). Metaverse marketing strategies: enhancing customer experience and analysing consumer behaviour through leading-edge Metaverse technologies, platforms, and models. *Platforms, and Models* (November 3, 2023).
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Consumption values and market choice. *Cincinnati, OH: South Western Publishing*.

- Sorrentino, G., & López-Guzmán, J. (2025). Rethinking privacy for avatars: biometric and inferred data in the metaverse. *Frontiers in Virtual Reality*, 6, 1520655.
- Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Warden, C. A., Chen, J. F., & Yen, W.-H. (2024). Metaverse Servicescape: Emotional Response to Virtual Retail Design. *International Journal of Human–Computer Interaction*, 1-14.
- 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.