What are the key factors influencing the adoption of the Metaverse in the Consulting Industry?

Master Thesis in Business Administration

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Abstract

Aim of the study. This Master's Thesis conducts an exploratory analysis to identify and analyze the key factors that influence the Metaverse adoption in the consulting industry.

Methodology. The study adopts a qualitative research approach comprising 18 semi-structured interviews. The participants selected include freelancers and consultants employed in IT and strategy consulting firms, all of whom are actively engaged in Metaverse applications.

Results. The adoption of the Metaverse within the consulting industry is influenced by four key factors, namely the perceived sense of urgency to adopt this disruptive technology, the possession of dynamic capabilities, the expected benefits derived from its implementation, and the presence of barriers hindering its adoption. Furthermore, notable variations have been observed, indicating that the Metaverse adoption within the consulting industry is contingent upon the size and expertise of the actors involved.

Implications. This study enhances the existing body of literature elucidating the crucial factors that influence the adoption of the Metaverse within the consulting industry through a comprehensive conceptual framework. It also explores the applicability of existing research to the Metaverse context while identifying those aspects exclusive to the Metaverse. From a practical perspective, the study provides valuable insights for strategic decision-making, competitive positioning, and resource allocation within the consulting industry. Additionally, it sheds light on the crucial role that consultants play in the Metaverse.

Limitations and future research. The study may be subject to confirmation bias and sample selection bias, potentially impacting the findings's reliability and validity. Furthermore, given the risk of misclassification of participants and the novelty of the topic, additional research is warranted. It is recommended that future investigations also include empirical testing of the developed model to enhance its robustness.

"Once your organization has selected its music, it needs to decide how each section of the orchestra will come together to deliver a memorable performance. Timing is essential. Companies face similar decisions when it comes to digital transformation. Which parts of the organization are needed to execute the strategic direction, and how will they work together to ensure harmony rather than dissonance?"

Wade et al. (2017, p. 7)

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1   Introduction

The increasingly pervasive utilization of data, computational power, and connectivity has brought about profound transformations in the behaviors and interactions of both individuals and organizations (Tavoletti et al., 2021; Vial, 2019). Customers are becoming more knowledgeable and discerning, while their demands continue to evolve in response to emerging opportunities facilitated by the latest digital tools, particularly in terms of product and service integration (Tavoletti et al., 2021; von Leipzig et al., 2017). Simultaneously, digitalization has compelled numerous industries to quickly restructure their internal operations to align with the emerging digital environment. For instance, the conventional banking sector efficiently transitioned to the Fintech ecosystem (Tanda & Schena, 2019), international trade readily adopted e-commerce platforms (Terzi, 2011), and the manufacturing industry witnessed a proliferation of robotic technologies (Freddi, 2017).

Regarding the most recent advancements in digital technology, the Metaverse has emerged as a prominent and widely discussed phenomenon. Its significance has been acknowledged by influential advisory firms like Gartner, which has identified the Metaverse as a top strategic technology trend for 2023 (Gartner, n.d.-a). Simultaneously, numerous companies have recognized the potential of the Metaverse and are actively investing in its development. For instance, Mark Zuckerberg, the CEO of Facebook, has made the decision to rebrand the company as Meta, Microsoft is reimagining the future of connectivity with Microsoft Mesh, and renowned brands like Nike and Gucci are creating clothing and accessories specifically designed for the Metaverse (Hennig-Thurau et al., 2022; Stackpole, 2022). As emphasized by McKinsey (n.d.-b), "With its potential to generate up to \$5 trillion in value by 2030, the metaverse is too big for companies to ignore".

Given the imperative for companies to navigate the challenges presented by a volatile, uncertain, complex and ambiguous (VUCA) landscape, characterized by rapid technological advancements and digitalization, it becomes crucial to seek specialized consulting guidance and support - particularly when organizations face significant deficiencies in both technical and organizational capabilities. Therefore, even the consulting industry, traditionally known for its resistance to technological advancements (Christensen et al., 2013), has encountered the necessity to undergo substantial internal transformations in order to effectively align with the emerging digital landscape, including embracing transformative measures to respond to the disruptive influence of the Metaverse effectively. This has led some authors to write: "The industry that has long helped others sidestep strategic threats is itself being upended" (Christensen et al., 2013, p. 1).

Nevertheless, a notable absence of research exists examining the key drivers compelling the consulting industry to embrace this cutting-edge technology. Yet, one could argue that several factors may influence the adoption of the Metaverse, such as resistance to change and technological advancement, as well as infrastructural obstacles. In this context, understanding these factors plays a pivotal role in facilitating strategic decision-making within the consulting industry. Indeed, it empowers industry participants to make well-informed choices regarding their engagement with this technology, enabling them to evaluate the potential benefits, risks, and implications associated with its adoption. Simultaneously, comprehending the factors that drive the Metaverse adoption holds substantial competitive implications for consulting actors. By identifying these key factors, they can gain a competitive edge by either being early adopters or strategically positioning themselves to leverage the advantages presented by the Metaverse. Such insights empower them to remain ahead of competitors and attract clients who value cutting-edge and innovative approaches. Furthermore, identifying the essential factors that impact the Metaverse adoption allows consulting actors to allocate their resources effectively. By acquiring a comprehensive understanding of these factors, they can prioritize their investments in technology infrastructure, talent development, and partnerships. This focused resource allocation ensures the efficient utilization of resources and maximizes the return on investment in initiatives related to the Metaverse.

However, these can only be conjectures given the absence of studies in this domain. To date no research has been dedicated to the subject, and this endeavors to address this gap by exploring the following research question:

Q1: *What are the key factors influencing the adoption of the Metaverse in the consulting industry?*

In order to address this inquiry, the investigation employs a qualitative research methodology comprising 18 semi-structured interviews. The sample for this research consists of freelance professionals and consultants working in information technology (IT) and strategy consulting firms, all of whom are actively involved in utilizing Metaverse applications. Consequently, the analysis additionally endeavors to identify patterns among the various participants, namely freelancers and consulting firms, with the ultimate objective of deducing the influence that size and expertise exert on the adoption of the Metaverse within the consulting industry:

Q2: *How does the size and expertise of consulting firms and freelancers impact their ability to adapt to the Metaverse?*

From a theoretical standpoint, this research presents a robust conceptual framework that analyzes

the main factors that affect the adoption of the Metaverse in the consulting industry. Specifically, the study identifies the critical dynamic capabilities that consultants need to develop to embrace the disruptive potential of the Metaverse successfully. Moreover, it highlights the importance of actively monitoring the external landscape, as it is closely linked to the perceived sense of urgency and the obstacles related to Metaverse adoption. Furthermore, the study emphasizes the need for a thorough understanding of the expected benefits arising from the Metaverse, as they must outweigh the challenges encountered by freelancers and consulting firms.

From a practical standpoint, the study provides valuable insights that can support strategic decision-making, inform competitive positioning, and guide resource allocation within the consulting industry. With regards to strategic decision-making, the study equips participants in the consulting industry with essential information to assess the potential benefits, risks, and implications associated with adopting the Metaverse. In terms of gaining a competitive advantage, it assists both freelancers and consulting firms in determining whether early adoption or strategic positioning can enable them to harness the advantages presented by the Metaverse and achieve a competitive edge in the market. Furthermore, by identifying critical factors influencing Metaverse adoption, consulting professionals can strategically allocate resources, prioritizing investments in technology infrastructure, talent development, and partnerships. Significantly, this study also highlights the crucial role played by consultants in the Metaverse. They assist clients in understanding the nature of the Metaverse, formulating strategies for effective navigation, and facilitating the development and implementation of Metaverse initiatives.

2 Theoretical background

2.1 The Metaverse

The term "Metaverse", originally introduced in Neal Stevenson's science fiction novel "Snow Crash" back in 1992, derives its name from the combination of the Greek word "meta" - meaning "post", "after", or "beyond" - and "universe" (Mystakidis, 2022). It refers to an environment that transcends the physical world by integrating elements of extended reality (XR) (Herrman & Browning, 2021; Mystakidis, 2022), which encompasses virtual reality (VR), mixed reality (MR) and augmented reality (AR) (Lowry et al., n.d.). Expanding upon this definition, Hennig-Thurau et al. (2022) argue that the Metaverse should not be perceived as a singular entity but rather as a network of diverse and interconnected "micro-metaverses". In this context, Stackpole (2022) compares the Metaverse to the internet, highlighting its sprawling nature, with various sites and spaces forming an expansive network.

From a technological standpoint, the Metaverse results from the convergence of various technologies, including AI, head-mounted displays (HMDs) and spatial computing (States, 2022). To access the Metaverse, users generally rely on stereoscopic displays that possess the capability to capture and transmit depth perception (Mystakidis, 2022). Interaction within the Metaverse is facilitated by motion controllers, which track users' movements using external cameras or sensors embedded in headsets (Mystakidis, 2022). The presence of users in the Metaverse is represented by avatars (Mystakidis, 2022), virtual representations increasingly capable of realistically mimicking users' gestures and facial expressions.

The Metaverse is regarded as the fourth wave of computational innovation, following the advent of personal computers, the Internet and mobile devices (Mystakidis, 2022). In this regard, "Second Life" and "SIMS" can be viewed as predecessors to the Metaverse, as they allowed users to engage in virtual life (Dwivedi et al., 2022). However, the Metaverse represents a significant advancement by leveraging extended reality to enhance user engagement, interaction and overall experience. Moreover, the Metaverse warrants separate consideration from the Internet due to its immense potential to establish a novel economy centered around digital assets, digital trade and digital currencies (States, 2022). Indeed, cryptocurrencies enable Metaverse users to acquire virtual items such as clothing, vehicles, properties, and even tickets for concerts and sporting events. Notably, in just 12 months, Decentraland witnessed 21,000 real estate transactions amounting to a value of $110 million (Daugherty, 2022). Similarly, Fortnite's concerts featuring Travis Scott

attracted an audience of 27.7 million spectators (Daugherty, 2022), and in May 2022 Italy's Serie A football league broadcasted its first match within the Metaverse (Palmisano, 2022). Additionally, the Metaverse fosters a completely user-generated content environment, differentiating it from the Internet by eliminating centralized authority and promoting market liberalization and experimentation (Setiawan et al., 2022). In light of these differences, certain authors view the Metaverse as a prospective successor to the existing Web, giving rise to the term Web3 (Lowry et al., n.d.; Messinger et al., 2009). Conversely, alternative perspectives envision a symbiotic relationship between the Internet and the Metaverse, where the former continues to serve conventional functions such as browsing Wikipedia (Sparkes, 2021).

2.1.1 Metaverse's business applications

Particularly since the rebranding of Facebook as Meta in 2021, the Metaverse has garnered escalating interest. According to Gartner (n.d.-b), it is projected that by 2026, approximately 25% of individuals will actively engage with the Metaverse for a minimum of one hour per day, utilizing it for educational purposes, professional pursuits, or recreational activities.

Besides enhancing the gaming experience, exemplified by popular titles such as "Fortnite" and "Roblox", the Metaverse has emerged as a potential force with the ability to impact various sectors and businesses, particularly in the field of marketing. Mark Zuckerberg, in his promotion of Meta, had already envisioned advertising as a significant component within the Metaverse (Setiawan et al., 2022), recognizing its potential to foster stronger relationships between companies and their consumers through more engaging and interactive means (Dincelli & Yayla, 2022; Dwivedi et al., 2022). A recent report by McKinsey (2022) highlights the existence of a substantial market worth $54 billion for virtual goods traded through avatars. Notably, Gucci's marketing campaign stands out, as the luxury brand offered a digital twin of its Dionysus bag at a price even surpassing that of the physical product (McKinsey, 2022). Consequently, the Metaverse presents a novel channel, alongside physical stores and the Internet, for companies to market and sell their offerings (Dwivedi et al., 2022). Furthermore, the Metaverse presents unparalleled opportunities for businesses within the marketing domain particularly in terms of highly interactive advertisements that enhance brand awareness and customer loyalty. Simultaneously, it is crucial to acknowledge that the sensors integrated into head-mounted displays have the capacity to store vast quantities of data. This data can be subsequently leveraged for various purposes, including sales forecasting and delivering personalized experiences to users (Dincelli & Yayla, 2022).

In addition to marketing opportunities, the Metaverse holds tremendous potential to revolutionize the entire production chain. For instance, manufacturing enterprises can leverage the Metaverse to introduce changes to their digital product lines prior to implementing modifications in physical goods. This approach not only mitigates the costs associated with production errors or defects but also fosters experimentation and creativity. Similarly, car dealerships can utilize the Metaverse to showcase the interior features of vehicles to customers, even without possessing the specific physical stock of those vehicles. By leveraging digital representations, they can provide customers with a realistic preview of the product. In the automotive sector, BMW has already embarked on pioneering efforts by developing digital twins of 31 distinct factories (Daugherty, 2022). This initiative serves multiple purposes, ranging from training robots to enable autonomous movement within the manufacturing facilities to testing software updates (Daugherty, 2022).

Finally, the service industry can benefit from virtual workspaces offered by the Metaverse, which present enhanced opportunities for employee engagement, collaboration and connection compared to conventional two-dimensional tools like Microsoft Teams (Dincelli & Yayla, 2022; Hennig-Thurau et al., 2022; Mystakidis, 2022). These virtual workspaces facilitate a more immersive and interactive work environment, allowing organizations to leverage the full potential of their workforce.

2.1.2 Obstacles to the Metaverse adoption

Due to the newness of the topic, limited attention has been devoted by scholars to examining the obstacles associated with the implementation of the Metaverse. Given this context, it appears suitable to draw upon the insights presented by Chen et al. (2022), outlining the impediments to the adoption of VR. Indeed, considering the pivotal role that VR assumes in the advancement of the Metaverse (Herrman & Browning, 2021; Mystakidis, 2022), these barriers effectively impede the widespread acceptance and integration of the Metaverse.

Chen et al. (2022) identify four distinct barriers, namely: human-related, economic-related, technology-related and policy-related. When it comes to human-related barriers, there are specific concerns regarding body discomfort and the need for high-demanding skills (Chen et al., 2022; Dincelli & Yayla, 2022). Body discomfort arises from memory overload caused by additional sensory channels and can lead to a sense of isolation and motion sickness in immersive VR environments (Chen et al., 2022). Moreover, users must acquire significant skills to effectively navigate VR technologies (Chen et al., 2022; Queiroz et al., 2023). Queiroz et al. (2023) further highlight the role of

organizational culture as a critical driver, as the absence of a data-driven culture, top management support and collaboration between corporate functions pose significant barriers to the Metaverse adoption.

Turning to economic-related barriers, it is important to note that the costs associated with acquiring necessary equipment and hiring skilled personnel can be prohibitively expensive, discouraging investment in VR and Metaverse technologies (Chen et al., 2022; Dincelli & Yayla, 2022; Queiroz et al., 2023). Additionally, expenses related to VR maintenance and personalized training for individuals should be taken into account (Chen et al., 2022).

Regarding technology-related barriers, they often arise from a perceived disparity between the real world and the virtual world, particularly in terms of depth perception and unrealistic sensory experiences (Chen et al., 2022). Moreover, VR technology necessitates multi-user access to realize its full potential through effective collaboration and interaction among peers (Chen et al., 2022). Technological barriers can also emerge from hardware and software solutions that impede security, scalability and interoperability (School-Newark & Brunswick, 2022). Interoperability, in particular, is crucial as it enables users to project their virtual presence across various virtual spaces. Without it, the need to create a new avatar for each virtual environment would discourage users from entering the Metaverse (Purdy, 2022; School-Newark & Brunswick, 2022).

Lastly, policy-related barriers, such as intellectual property and accountability, must be considered (Chen et al., 2022; Dincelli & Yayla, 2022). Schmidt et al. (2022) argue that decentralization in the Metaverse poses challenges for authorities in tracking illegal transactions. Additionally, the immersive experience provided to users through extended reality involves the processing of vast amounts of personal data, raising privacy concerns (Dwivedi et al., 2022; Queiroz et al., 2023; Schmidt et al., 2022).

Similarly to Chen et al. (2022), Queiroz et al. (2023) highlight the primary obstacles faced by adopters of the Metaverse in the operation and supply chain management (O&SCM) domain. Their empirical analysis reveals that the foremost challenges pertain to "technology adoption and implementation", "lack of worker skills", and "costs of implementation", therefore bearing a striking resemblance to the technology-related, human-related, and economic-related barriers identified by Chen et al. (2022).

2.1.3 Capabilities for navigating the Metaverse

Given the anticipated advantages and challenges associated with the Metaverse, it is crucial for businesses to achieve a suitable equilibrium that maximizes benefits while minimizing obstacles.

In this context, States (2022) proposes four key considerations that companies should bear in mind to effectively navigate the potential of the Metaverse. Firstly, it is essential not to underestimate the potential of the Metaverse. Addressing the Metaverse requires the formulation of a robust strategy that allows for necessary adaptability to evolving technological advancements and consumer preferences, enabling the full exploitation of the aforementioned benefits and business applications. Secondly, businesses should adopt a long-term perspective. Recognizing that returns on investment in the Metaverse may not be immediate, companies should take a forward-looking approach to monitor KPIs related to consumer and employee engagement. This approach can aid in balancing economic-related barriers that have been previously identified. Thirdly, companies should prioritize demand and user motivations. To remain competitive, organizations should concentrate on creating captivating content and experiences, leveraging the potential of the Metaverse to enhance engagement and interaction through immersive experiences. Lastly, to effectively overcome policy-related barriers, businesses must commit to a responsible Metaverse. Organizations will need to proactively address complexities and risks associated with the Metaverse, such as privacy, security, and accessibility concerns.

Simultaneously, it is imperative to promote the development of new skills, tools, and resources (Ivars, 2022). Individuals must possess fast-learning abilities, particularly considering the Metaverse's capacity to expedite skill acquisition and development through virtualization and gamification (Purdy, 2022). This scenario presents a unique opportunity for individuals to engage in simulations and experimentation with greater ease, speed and affordability, thereby facilitating rapid learning.

In broader terms, effectively navigating the Metaverse requires the application of dynamic capabilities (Yawised et al., 2022). According to Teece et al. (1997, p.516) dynamic capabilities refer to "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments". Drawing on Teece's work (2007), dynamic capabilities encompass sensing, seizing and transforming capacities. Sensing new opportunities entails actively scanning and comprehending the business environment, with specific attention given to understanding customer needs. Seizing opportunities involves capitalizing on new prospects by introducing new products, processes, or services. Finally, transforming refers to the internal reconfiguration

of business models to fully exploit the identified opportunities. The author argues that dynamic capabilities not only enable firms to adapt to business ecosystems but also empower them to shape these ecosystems through innovation. Similarly, Chiu et al. (2016) illustrate a significant correlation between dynamic capabilities and firms' capacity to engage in transformative technological advancements, specifically in the realm of radical innovation.

When considering the unique characteristics of the Metaverse, Yawised et al. (2022) propose that dynamic capabilities have a positive influence on the Metaverse adoption. In particular, Zabel et al. (2023) emphasize the significance of dynamic sensing capabilities for firms navigating the Metaverse. The authors identify two fundamental microfoundations of sensing activities: opportunity screening, which involves evaluating new potential technologies and scanning new potential markets, and partnership scouting, which entails identifying synergies with ecosystem actors and exploring alternative digital business ecosystems.

2.2 The consulting industry

As stated by Greiner and Metzger (1983, p. 7), "(Management) consulting is an advisory service contracted for and provided to organizations by specially trained and qualified persons who assist, in an objective and independent manner, the client organization to identify management problems, analyze such problems and help, when requested, in the implementation of solutions." This definition highlights the intangible nature of consulting itself, in contrast to the tangible outcomes it aims to achieve (Krivokapić et al., 2016).

The origins of modern consulting can be traced back to the late nineteenth century, coinciding with the introduction of scientific management principles by Frederick Taylor, which emphasized the rational utilization of resources (Krivokapić et al., 2016). Subsequently, in the aftermath of World War II, the consulting industry experienced significant expansion across developed nations, as it played a crucial role in facilitating post-war recovery (Krivokapić et al., 2016). However, it was the advent of the IT revolution that propelled the consulting industry to its greatest expansion. Starting from the mid-nineteenth century, the consulting sector began exhibiting an annual growth rate ranging from 15 to 20%, largely attributable to the impact of technological advancements (Poulfelt & Greiner, 2010).

The significance of the consulting industry can be attributed to the clients' limited expertise in a particular domain (Krivokapić et al., 2016). However, the traditional role of consultants, which involved providing advice and recommendations exclusively to the upper social classes (Krivokapić

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et al., 2016), has evolved over time. The true value offered by consultants today goes beyond their ability to simply solve client problems. In fact, as clients increasingly seek out the most qualified professionals, the key advantage of consults lies in their capacity to effectively share their knowledge (Sarvary, 1999). In this context, Hargadon and Sutton (1996) present consultants as technology brokers which, due to their extensive network across various industries, possess knowledge and ability to match problems with the most appropriate business solutions.

The information presented thus far supports the classification of the consulting industry as a knowledge-intensive sector within the service industry. With a market value of US$132 billion in 2022 (Statista, 2022), it stands as one of the largest segments within professional industrial services (Cri□an & Stanca, 2021). Furthermore, factors such as inflation, economic downturns, heightened uncertainty and the imperative to operate on a global scale have driven an increased reliance on consulting firms by companies (Payne, 1986).

2.2.1 Actors, services and business models

The consulting industry encompasses a diverse array of actors, spanning from international multifunctional consulting firms to independent professionals commonly referred to as freelancers (Sabath & Kubr, 1977). Primarily focusing in catering to the needs of large-scale and international clients, international multifunctional consulting firms currently hold a leading position in the market, boasting a substantial workforce comprising hundreds of professionals and establishing offices or affiliations across multiple countries (Sabath & Kubr, 1977). Conversely, the inherent strength of freelancers lies in their ability to offer a cost-effective, highly personalized and adaptable approach, which proves challenging to consistently implement for sizable consulting firms (Sabath & Kubr, 1977). While most freelancers primarily cater to the requirements of small enterprises, even major corporations occasionally seek the expertise of solo practitioners for minor assignments, policy guidance and specialized tasks (Sabath & Kubr, 1977). As illustrated in Table 1, these entities can be grouped into five primary categories, based on the nature and scope of their services (Turk, 2022).

It is rational to expect that the (growing) number of participants in the consulting industry serves as a compelling catalyst for innovation. According to O'Mahoney (2013)'s research, the primary impetus for innovation within the consulting industry lies in the necessity to distinguish oneself from competitors in an increasingly competitive market. Remarkably, a majority of respondents in her study view innovation as the development of novel products, processes, and services that are

Category	Services provided
Strategy consulting	Developing long-term strategies to help organizations achieve their goals, while also overseeing the implementation process (e.g., McKinsey, Bain, and BCG).
Operation consulting	Analyzing their clients' systems and processes that contribute to goal attainment, with the aim of enhancing efficiency (e.g., Deloitte, PwC, and KPMG).
Financial consulting	Evaluating their clients' financial position, providing guidance on improving business management from a financial perspective (e.g., Oliver Wyman, and Ernst & Young).
IT consulting	Offering advice on the implementation of information technology solutions to enhance business performance (e.g., Accenture, Capgemini, and IR).
HR consulting	Providing support during various stages of the recruitment and transition process, implementing welfare systems, and managing organizational change (e.g., Randstad, and ManpowerGroup).

Table 1: Consulting services.
Source: Turk (2022).

either new to the market or to the consultancy itself. Utilizing this definition, the emergence of the Metaverse can undeniably be regarded as a significant innovation within the consulting industry. However, it would be premature to conclude that a higher level of competition in the consulting industry directly corresponds to a higher level of innovation. Indeed, this conclusion is contradicted by studies that highlight an inverted U-shaped relationship between competition and innovation (Aghion et al., 2005).

2.2.2 The impact of digitalization

Until recently, it appeared that consulting firms had not undertaken internal reorganization to effectively adapt to the evolving business landscape, unlike other industries (Christensen et al., 2013). Christensen et al. (2013) identify opacity and agility as defining characteristics of the consulting sector that have protected it from significant changes, wherein opacity refers to industries where new entrants typically imitate already established business models.

However, the advent of digital transformation, particularly the democratization of knowledge resulting from it, is exerting a significant impact on consulting business models (Tavoletti et al., 2021).

The increased availability of data and subsequent transparency empowers customers to evaluate their own needs, leading them to rely on tailored consultations rather than depending solely on a single actor (Christensen et al., 2013). As noted by Christensen et al. (2013, p. 6–7), "When Clay Christensen first started working at BCG, in the early 1980s, a big part of his job was assembling data on the market and competitors. Today that work is often outsourced to market research companies such as Gartner and Forrester". Moreover, considering the growing utilization of digital channels by clients to search for consulting advice, it becomes imperative for both consulting firms and freelancers to enhance their online presence through digital marketing strategies, thus fostering (brand) awareness and loyalty (Nissen, 2018). In the given context, the competitive position of consulting firms is being challenged not only by the proliferation of numerous service providers but also by the convergence of consulting offerings, making it increasingly difficult for clients to perceive distinct differences among consulting firms (Nissen, 2018).

In response to this significant shift in consumer needs and purchasing behavior, the various entities within the consulting industry have embarked on a strategy of blurring the lines between professional services, providing tailored offerings, and even implementing automation in their consultations (Christensen et al., 2013). As an example, McKinsey embarked on business model innovation in 2007 by transforming the nature of client interactions through McKinsey Solutions (Christensen et al., 2013), a technology-driven enterprise that combines expertise with advanced technologies (McKinsey, n.d.-a). Currently, McKinsey Solutions, alongside McKinsey Insights, is part of McKinsey Digital, which is experiencing faster growth compared to McKinsey's traditional business (FIRMSconsulting, 2020).

Simultaneously, in addition to established players in the industry, new market entrants have emerged, promoting alternative professional services. Examples include Business Talent Group and Eden McCallum, which assemble teams of freelance consultants tailored to their clients' specific requirements (Christensen et al., 2013). These newcomers are capable of providing highly customized services at significantly lower prices compared to traditional competitors, streamlined by the fixed costs of personnel, huge headquarters and training activities (Nissen, 2018). As noted by Nissen (2018), these emerging competitors benefit from agile internal structures and corporate cultures that embrace change, while incumbents face the challenges posed by the "innovator's dilemma" (Christensen, 1997).

Furthermore, digitalization has brought forth a significant transformation in the value proposition of today's consulting actors. It no longer solely revolves around providing support during the ideation

phase, but now encompasses end-to-end solutions, including implementation and post-sales phases. This expanded complexity in the value proposition has led many actors to recognize the limitations of relying solely on their internal resources, rather appreciating the value of co-creating value with clients or external partners (Nissen, 2018; Tavoletti et al., 2021) who possess specialized digital expertise. Alternatively, larger consulting firms seeking to access new digital knowledge may opt for mergers and/or acquisitions with software vendors and high-tech startups (Tavoletti et al., 2021), easily tapping into the expertise of these entities. This trend is exemplified by PwC's acquisition of BGT and Accenture's purchase of Fjord in 2013, both of which were consulting firms specialized in digital services (Nissen, 2018).

Additionally, it is undeniable that the consulting industry is progressively shifting towards a data-driven approach, incorporating the utilization of big data and analytics to enhance the value proposition for clients. Furthermore, automated consulting services are being offered, wherein clients are provided with suggested measures automatically (Nissen, 2018). Consequently, as algorithms, AI and ML become pervasive in all industries, it is conceivable that digitalization may undermine the traditional role of consultants. Moreover, the advent of process virtualization through remote working arrangements is diminishing the direct interaction between consultants and their clients, thereby impacting the essence of the consulting industry as a "people business" that has historically relied on face-to-face engagements between consultants and clients (Nissen, 2018). However, despite the increasing prominence of technology, human resources continue to hold significant value for consulting firms (Tavoletti et al., 2021). In the present landscape, consultants are expected not only to excel in innovative solutions driven by technologies like blockchain, smart contracts and the Metaverse but also to collaborate effectively with other highly skilled professionals, particularly data scientists (Larsson et al., 2020). Consequently, the scarcity of talent poses a considerable threat to consulting firms (Tavoletti et al., 2021), prompting them to intensify their efforts in attracting the most exceptional individuals who possess expertise in entrepreneurial thinking, change management, and cutting-edge technological competencies (Nissen, 2018).

2.3 The application of the Metaverse within the consulting industry

To comprehensively understand the factors that drive the adoption of the Metaverse within the consulting industry, it is crucial to initially assess the level of acceptance of this technology within the industry. Among various theories, the Technology Acceptance Model (TAM) has emerged as a highly influential framework. Initially introduced by Davis (1985), TAM revolves around the notion that the acceptance of an information system is shaped by its Perceived Usefulness (PU)

and Perceived Ease of Use (PEOU). Building upon TAM, Aburbeian et al. (2022) have conducted a study focusing on the application of TAM to the Metaverse, affirming the positive influence of both PU and PEOU on individuals' attitudes towards using Metaverse technology.

However, no specific research has been conducted thus far to examine the acceptance of the Metaverse specifically within the consulting industry. It is logical to anticipate that the PEOU of the Metaverse within the consulting industry is contingent upon the human-related barriers highlighted in Section 2.1.2, namely physical discomfort and the requirement for high-demanding skills. Regarding PU, it can manifest itself in two primary domains: the provision of consultancy services related to the Metaverse, and the internal transformation necessary to embrace the Metaverse.

2.3.1 Providing consultancy services pertaining to the Metaverse

When considering the provision of consultancy services related to the Metaverse, the inherent intricacy and uncertainty associated with the Metaverse necessitate in-depth analysis and innovative problem-solving approaches, referred to as "brain projects" by Maister (1997), demanding a combination of creativity and expertise.

Currently, Accenture stands out as the consulting firm taking the most proactive approach towards the Metaverse. With over 15 years of experience, they possess a significant edge, boasting a portfolio of more than 600 patents and employing over 800 qualified professionals (Daugherty, n.d.). An emblematic example of their involvement in the field is the launch of the Accenture Metaverse Continuum in 2021 (Cavicchioli, 2022). This initiative offers three primary service categories to address the needs of enterprises in the Metaverse (Daugherty, n.d.):

- **Learn & Shape**, dedicated to providing comprehensive client education, enabling them to navigate the realm of the Metaverse and develop conscientious methodologies.
- **Set strategy**, centered around formulating transformative business strategies, encompassing areas such as marketing and brand development, enhancing customer experience, and optimizing digital commerce.
- **Build & Operate**, tailored to assist clients in conceptualizing, constructing, and overseeing Metaverse capabilities, including immersive reality environments and digital twins.

Accenture's decision to embrace the role of a pioneering force in the Metaverse can be attributed to the compelling findings of a recent survey conducted by the company. According to the survey, a significant 71% of executives acknowledge the highly influential nature of the Metaverse on

their respective organizations; furthermore, 42% of executives believe that the Metaverse has the potential to initiate a substantial transformation (Cavicchioli, 2022).

In a similar vein, the McKinsey Technology Council is dedicated to extensive research, informed discussions and providing expert guidance on the rapidly evolving technological landscape (Chui et al., 2022). This council brings together a distinguished group of over 100 scientists, entrepreneurs, researchers, and business leaders (Chui et al., 2022). Moreover, McKinsey conducts in-depth analyses of annual trends by examining various factors such as search engine queries, patent releases and investment statistics (Chui et al., 2022).

In conjunction with Accenture and McKinsey, a number of emerging realities have surfaced. In 2022, a consulting company called Metaversed, exclusively dedicated to the Metaverse, orchestrated a significant marketing event for McDonald's, projecting a digital replica of McDonald's headquarters in Chicago (Metaversed, n.d.). What made this endeavor particularly captivating was that the digital twin extended beyond a mere replication of the headquarters, encompassing distinct elements such as an entirely new "metaverse rooftop garden in the night sky" (Metaversed, n.d.). Similarly, Roover is a specialized boutique strategy consulting firm that focuses on advanced technologies like the Metaverse and Blockchain. In the realm of the Metaverse, Roover provides support to businesses aspiring to enter this world, conducting comprehensive market analyses, benchmarking and evaluating competitors' initiatives, as well as formulating long-term strategies to penetrate the market (Roover, 2022).

Even freelancers have ventured into the realm of the Metaverse, capitalizing on their industry expertise and utilizing advanced technological tools. A simple search on LinkedIn reveals a multitude of consultants positioning themselves as experienced in areas such as the Metaverse, Web 3, NFTs, and Blockchain.

2.3.2 Internally transforming to embrace the Metaverse

At the same time, given today's VUCA landscape, the consulting industry must proactively embrace the Metaverse rather than merely reacting to it. Today's consumers expect consultants to anticipate their future needs, making it crucial for both consulting firms and freelancers to swiftly adapt to this high-tech tool internally before providing their services to external businesses (von Leipzig et al., 2017). This ability to internally adapt and gain a comprehensive understanding of the Metaverse becomes a significant source of competitive advantage.

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When considering the internal transformation necessary to embrace the Metaverse, Accenture has established itself as a pioneering consulting firm. It has successfully developed its own Metaverse, which not only serves as a platform for onboarding new candidates but also offers learning opportunities to its employees (Cavicchioli, 2022). In this sense, Accenture's strategic objective entailed recruiting a minimum of 150,000 new employees to begin their work in the Metaverse by 2022 (Cavicchioli, 2022).

As Jones (2022) highlighted, the Metaverse also offers the potential to bring consultants from various geographical locations into a single immersive platform. This virtual meeting space can significantly reduce stress levels for consultants and provide a more engaging environment compared to being confined to a camera all day (Jones, 2022). Furthermore, utilizing the Metaverse enables consulting firms to remote hiring and selection processes while facilitating interactions between consultants and their clients without the need for physical presence. This has significant implications for cost and time management, considering that consultants currently spend up to 20% of their working time on travel (Jones, 2022).

Finally, adopting and operating within the Metaverse necessitates attracting new talent with expertise in this technology and developing high-tech competencies to meet clients' evolving demands. For example, it is plausible to expect the emergence of consultants specializing in Metaverse marketing (Jones, 2022).

3 Methodology

3.1 Research design

The novelty of the subject makes it suitable for a qualitative study (Edmondson & Mcmanus, 2007). Qualitative research is recognized for its depth and potential for uncovering new insights (Gioia et al., 2012), additionally offering the opportunity to elucidate a phenomenon from the perspective of the participants (Orb et al., 2001).

Specifically, the qualitative research methodology of a case study (Stake, 1995) has been employed to examine the key factors influencing the adoption of the Metaverse in the consulting industry. According to Robson (2002), a case study is a research strategy that involves investigating a specific contemporary phenomenon within its real-life context. Case studies focus on exploring events and phenomena in their natural settings following a "naturalistic" design, in contrast to an "experimental" design where researchers manipulate variables of interest (Crowe et al., 2011). These characteristics classify case studies as an inductive approach to qualitative analysis, as they allow "research findings to emerge from the frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies" (Thomas, 2006, p. 238).

Given the need to gain a comprehensive understanding of the key factors that influence Metaverse adoption in the consulting industry, multiple case studies have been employed as a research methodology. This particular type of case study entails the examination of several cases to attain a more comprehensive understanding of a particular issue or phenomenon, allowing for meaningful comparisons between the cases at hand (Stake, 1995).

The philosophical positioning of case studies in the philosophy of science is not straightforward, as they can be applied from various philosophical perspectives. For this analysis, a positivist perspective has been adopted, aiming to formulate abstract and universal laws regarding the operational dynamics of the social universe (Turner, 2001).

3.2 Research instruments

Method-triangulation has been employed to acquire a thorough comprehension of the subject matter (Denzin, 1978; Patton, 1999), therefore relying on multiple data collection methods pertaining to the same phenomenon (Polit & Beck, 2008). Indeed, method-triangulation allows to strengthen the reliability and validity of this research by seeking convergence and corroboration of evidence

from multiple perspectives. Specifically, primary data has been acquired through direct interviews, while secondary data has been obtained from the reports authored by the interviewed companies.

As for the former research method, semi-structured interviews with open-ended questions were conducted, incorporating targeted questions to investigate specific areas while ensuring flexibility for the interviewer to explore additional details beyond the predefined framework (Saunders et al., 2009).

The prior research conducted by Tavoletti et al. (2021) - examining BMI and digital transformation within global management consulting firms - played a crucial role in formulating a semi-structured interview framework for the present study. Specifically, their work provided a systematic methodology for designing questions, incorporating the business model components proposed by Clauß (2017).

Instead, the reports of the interviewed companies were utilized to support the assertions derived from the interviews. In fact, while participant observations provide valuable insights into actions, documents play a pivotal role in clearly representing organizational dynamics (Holstein & Gubrium, 2008).

3.3 Participants

The selection of participants involved the application of various criteria. First and foremost, participants were required to operate within the Metaverse domain. The analysis sought to include both decision makers and executives. Their participation ensured a comprehensive and cross-functional perspective on the concept, with decision makers formulating strategies and executives offering insights based on their direct experience with the effects of the Metaverse.

Additionally, both the consulting industry and the Metaverse phenomenon have a global presence, necessitating an international scope for the analysis.

Thirdly, participants were chosen to represent different sizes within the consulting industry, enabling an evaluation of whether adaptation to the Metaverse is influenced by the size factor. Size was assessed based on the number of employees, readily available through corporate statements and online sources. According to the existing literature, larger consulting firms possess advantages such as greater experience, a wider range of services, and more extensive networks of employees, clients and partners (Sabath & Kubr, 1977). Conversely, smaller consulting firms and freelancers are perceived as being more agile and adaptable, qualities that are vital for swiftly embracing digi-

talization (Sabath & Kubr, 1977).

Finally, the selection of consulting firms took into account the type of services provided to assess the influence of expertise on adaptation to the Metaverse within the industry. A particular emphasis has been placed on the inclusion of IT and strategy consulting firms. While IT consulting firms hold the responsibility of offering expert advice regarding the (Metaverse) effective implementation to enhance clients' business operations, strategy consulting firms play a pivotal role in devising strategies that are aimed at attaining (Metaverse) long-term goals and overseeing their successful execution (Turk, 2022).

In accordance with the aforementioned criteria, Table 2 presents a comprehensive summary of the participants' attributes, encompassing their size, expertise, and geographical scope.

Name	Expertise	n. employees	Geo. scope	Identifier
C. firm a	Strategy	15.000	Worlwide	Sa-n
C. firm b	Strategy & IT	624.000	Worlwide	SITb-n
C. firm c	IT	140.000	Worlwide	ITc-n
C. firm d	IT	2.000	Europe, North America, Asia	ITd-n
Freelancers	Strategy & IT	1	Netherlands & Germany	F-n

Table 2: Participants' attributes.

It is crucial to acknowledge at the outset that categorizing consulting firms strictly as either strategic or IT can be challenging, as the latter often offers strategic perspectives alongside IT consulting, particularly in the case of "C. firm a". Therefore, the classification employed here is only partial, serving the purpose of facilitating comprehension for the lecturers. Simultaneously, evaluating the expertise of the freelancers involved presents challenges. As a result, they are recognized as operating in both domains, offering a blend of strategic and IT consulting.

3.4 Data colletion

For the purpose of the analysis, primary data was gathered through semi-structured interviews. As mentioned, the interviews involved individuals in decision-making roles as well as executives. To ensure a fair distribution of interviews, a balanced representation was achieved by conducting interviews with 6 consultants from IT consulting firms (4 from "C. firm b", 1 from "C. firm c", and 1 from "C. firm d"), 6 strategy consultants affiliated with "C. firm a", and 6 freelancers. The

involvement of individuals in this project is denoted by their respective identifier (S for strategy consultants, SIT for strategy and IT consultants, IT for IT consultants, F for freelancers), followed by the company letter and a numerical identifier. For example, Sa-3 represents the third strategy consultant from "C. firm a".

The pool of interviewees consisted of consultants from the Netherlands (4), Germany (4), Italy (9), and the US (1). While the majority of the interviews were conducted in English, a significant portion of them were conducted in Italian, owing to the researcher's Italian heritage and the considerable number of Italian consultants who were interviewed.

The interviews typically lasted between 30 and 45 minutes. Recordings of interviews have been conducted to showcase the gathering of information, along with the solicitation of voluntary and informed consent from the respondents. Simultaneously, transparency has been upheld by notifying research participants of their option to withdraw from the study at any point and by providing comprehensive details regarding subsequent phases and procedures. Lastly, strict measures have been implemented to ensure confidentiality and anonymity by anonymizing the research data prior to its storage and analysis. To ensure adequate preparation prior to the interviews, open access information was utilized to gather background information about the organizations and the interviewees.

As for the evidence to be collected, the interviews center around the idea that effectively addressing the challenges posed by the Metaverse necessitates BMI by both freelancers and consulting firms. Particular emphasis is placed on the conceptual framework put forth by Clauß (2017), which highlights that BMIs manifests in one or more of the BM components, as illustrated in Table 3.

BM component	Sub-constructs	BMI
Value creation	Capabilities, technologies/equipment, processes & structures, partnerships.	eg. acquiring and developing new technologies; establishing new partnerships.
Value proposition	Offerings, customer segments/markets, channels, customer relationships.	eg. reaching customers through new channels.
Value capture	Revenue models, price and/or cost structures.	eg. establishing new revenue streams.

Table 3: Underlying conceptual framework.
Source: Own production based on Clauß (2017).

The interview guide can be found in Appendix A.1.

As previously stated, in addition to gathering data through interviews, official reports from the interviewed companies have been collected to provide further evidence and allow for method-triangulation.

3.5   Data analysis

The data was initially transcribed. Subsequently, thematic analysis was conducted following the approach described by Bell et al. (2019), which involves identifying emerging themes from the data. According to the authors, thematic analysis is a three-step process, starting with open coding to generate initial concepts derived from the data. The second step involves grouping these concepts into higher-order categories, referred to as second-order themes, through axial coding. Finally, selective coding is employed to merge the second-order themes into aggregate dimensions, also known as "theoretically fertile dimensions" (Bell et al., 2019, p. 526).

It is important to acknowledge that the rigor of the entire process may introduce potential biases and limitations. Specifically, there is a risk of confirmation bias, which refers to the tendency to search for evidence that confirms pre-existing hypotheses (Pohl, 2016).

4 Results

This section explores and presents the 1st-order concepts and 2nd-order themes identified through the qualitative data analysis of the semi-structured interviews, organized and structured into 3rd-order aggregate dimensions. A summary of the themes can be found in Table 5. Additionally, Appendix A.2 contains quotes supporting the 1st-order concepts.

1st-order concepts	*2nd-order themes*	*Aggregate dimensions*
Unrealistic and complex sensory experience	**Technology-related barriers**	**Barriers to the Metaverse adoption**
Inadequate broadband connectivity		
Lack of interoperability across Metaverses		
Limited multi-users access		
Knowledge acquisition and knowledge sharing	**Economic-related barriers**	
Financial investments to develop Metaverses		
Clients' lack of understanding	**Human-related barriers**	
Resistance to change by consulting firms and their clients		
Highly disrupting hardware		
Significant volume of biometric data	**Policy-related barriers**	
Irresponsible Metaverses		
Acquire Metaverse-specific knowledge	**Sensing**	**Dynamic capabilities to deal with the Metaverse**
Comprehend customers' needs		
Foster creative and experimental thinking		
Possess industry-specific knowledge		

Immerse in the Metaverse environment	**Seizing**	
Create Metaverses tailored to the clients' needs and objectives		
Establish Metaverse-based innovation centres	**Transforming**	
Establish Metaverse-based business units		
Reshape customer relationships through headset-based interactions		
Minimise unconscious bias in the recruitment process	**Consulting firms innovating existing processes**	
Onboard new hires in immersive virtual spaces		
Ensure heightened levels of engagement during internal meetings		
Offer consultancy services via NFTs	**Revenue streams diversification**	**Expected benefits from the Metaverse adoption**
Generate value through Metaverse-based e-commerce activities		
Heightened expertise in the Metaverse domain	**Increase freelancers' pricing power**	
Higher specialisation coupled with reduced competition		
Biometric KPIs	**Develop more sophisticated KPIs**	
Purchasing behaviors within the Metaverse		
Corporate culture and agility to change		

Monetary and reputational resources	**Level of competition in the consulting industry**	**Perceived sense of urgency**
Technological and strategic competences		
AI and ML mitigate the financial burden associated with Metaverse development	**Competing and complementary technologies**	
Gen. AI supports the creation of the Metaverse		
Generative AI diverts substantial resources away from investment in the Metaverse		
Accountability of customers and end-users in facilitating the adoption of the Metaverse	**Market readiness**	
Large firms and small yet highly innovative companies		
Retail and gaming sectors		

Table 4: Data structure.

4.1 Barriers to the Metaverse adoption

The primary category of barriers identified by the respondents pertains to *technology-related barriers*. In this regard, the conducted interviews provide clear evidence supporting a still **unrealistic sensory experience** within the Metaverse. *"The Metaverse should be immersive. However, what happens is that primarily it is accessed through a two-dimensional screen, and therefore this aspect of immersion is not conveyed (ITd-1)". "... It's as if there is an extra layer that only adds complexity. Why should I look at a screen where I'm looking at another screen? I'd rather directly look at the final screen (ITd-1)".* At the same time, respondents acknowledge that the **complex sensory experience** associated with the Metaverse pose additional challenges for consulting firms and freelancers seeking to provide their services. *"An Oculus headset is just too complicated. There are like six buttons on it. Then you can also move and you have other 12 buttons, plus two moving hands. If you're not into technology, you're not going to use it (F-3)".* Furthermore, the interview findings

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suggest that it is crucial to address the existing challenge of **inadequate broadband connectivity** in order to fully leverage the advantages offered by the Metaverse. *"When 5G is fully deployed, it will be much easier to adopt solutions that require high bandwidth connectivity (Sa-6)"*. Simultaneously, respondents perceive the **limited multi-users access** as an additional technological limitation preventing consistent user experience as the Metaverse becomes more crowded. *"It's already very expensive to ensure a seamless user friendly experience with 50 concurrent users with the current technology. Imagine if you want to have a Metaverse space with 300 or even 1000 participants (F-2)"*. Resolving this matter usually necessitates to create *"smaller groups, rooms or slots, (although this approach) creates a strange disorientation (Sa-1)"*. Finally, even when access to the Metaverse is possible, the respondents consider the **lack of interoperability across Metaverses** to further hamper its potential. *"Interoperability is a must, otherwise the Metaverse is not going to work. Otherwise it's just a 3D web shop where you have to put in your password again and again. Roblox is working a lot on interoperability so that you can seamlessly move your own avatar from one Metaverse to the others (F-5)"*.

In addition to technological barriers, consulting firms and freelancers encounter *economic-related barriers*. Indeed, respondents acknowledge that the processes of **knowledge acquisition** and **knowledge sharing**, which are vital for effectively navigating an unfamiliar realm like the Metaverse, involve significant costs. *"The main cost involves informing, raising awareness, and continuously training employees on this subject. We have dedicated consultants who focus on further developing knowledge about the Metaverse, and through these consultants, we disseminate our perspective even to those who haven't had the opportunity to delve into or become acquainted with the subject (Sa-5)"*. Similarly, *"We have a current budget that we can allocate to delve into specific topics and provide training. The information we gather is distributed internally, ensuring that all consultants have at least a basic understanding to initiate discussions and can redirect to experts if a deeper understanding is required (ITd-1)"*. Concurrently, the interview findings also suggest that the adoption of such advanced technological tools necessitates significant **financial investments to develop Metaverses**. *"There have been significant investments in creating the platform (ITb-1)"*. *"One of the main costs relates to the purchase of headsets (Sa-3)"*. As one freelancer noticed, *"The Metaverse costs a lot of money because it needs to be built by people (F-3)"*.

Of equal or greater significance are the *human-related barriers*. In this regard, according to the interview findings, these obstacles primarily revolve around **clients' lack of comprehension**, owing to the novelty and intangible nature of the Metaverse. *"In my opinion, the main barriers are directly related to the challenge of conveying to our customers the value associated with this new*

channel (Sa-5)". This proposition appears justifiable given the inherent challenge of engaging consumers with an unfamiliar concept. *"So what we're seeing is that the Metaverse is not there yet as a concept. It's very difficult to grasp for people. They need to see examples (F-2)"*. *"It is difficult to approach consumers with something that they haven't seen (ITb-2)"*. Concurrently, the escalating level of abstraction and uncertainty pertaining to the Metaverse is perceived by respondents to augment the **resistance to change by consulting firms and their clients**. *"We have encountered some resistance from the older population (ITb-1)"*. *"The main challenge is that people are interested and feel they should be doing something, but they're also afraid of change. This calls for education and building trust (F-2)"*. The conducted interviews also provide clear evidence that significant human-related obstacles arise from the **highly disruptive hardware** empowering the Metaverse. Indeed, *"The best technology is the one that is invisible and non-disruptive. Wearing glasses, on the other hand, is quite a disruptive gesture (Sa-6)"*. This factor has led a freelancer to conclude that *"Once the hardware becomes highly user-friendly and competitively priced, the Metaverse popularity will soar, much like the case with smartphones (F-3)"*.

Finally, when examining the obstacles to the Metaverse adoption, respondents acknowledge that it is imperative to take into account ***policy-related barriers*** arising from the **significant volume of biometric data** generated. *"Once you enter a 3D world, the amount of data you share is enormous. Nowadays, companies possess individuals' biometric data (ITd-1)"*. At the same time, it is considered fundamental to account for the risks of **irresponsible Metaverses**, considering *"... the impact that the Metaverse and virtual/augmented reality have on consumers' brain (F-6)"*. In this sense, *"I think governments should set boundaries to make sure that people design and develop the Metaverse responsibly. Otherwise, simply exploiting the customer's brain is extremely dangerous (F-6)"*.

4.2   Dynamic capabilities to deal with the Metaverse

The interview findings underscore the significance of the ***sensing*** dynamic capability possessed by consultants when engaging with the Metaverse. To this end, respondents consider the need to thoroughly **comprehend customers' needs** as a primary step. *"The recipe is understanding who are your customers, and what are their needs that you're trying to solve (ITb-2)"*. At the same time, as the interview findings suggest, it becomes crucial to **foster creative and experimental thinking** that surpasses conventional consulting practices. *"Creativity is important because moving from 2D to 3D needs paradigm shifts. It really requires thinking from scratch. So being open minded, and being creative might be soft skills that are more important for consulting in the Metaverse versus*

consulting on general business issues (F-4)". Lastly, respondents perceive that effective consultancy in the realm of the Metaverse necessitates to **acquire Metaverse-specific knowledge** and to **possess industry-specific knowledge**. *"We combine our expertise with the specific knowledge of the company where our clients work. It is the combination of these two elements that creates a winning solution (Sa-4)"*. When it comes to acquiring Metaverse-specific knowledge, certain individuals favor internal development - *"We are conducting training activities across the entire workforce on the topic of the Metaverse (Sa-2)"* -, while others advocate for external acquisition - *"Compared to other companies, we do not have expertise in the legal field, so we rely on external structures or specialists. This is because legal matters and data privacy are of great significance in the Metaverse (Sa-6)"*. Instead, regarding the possession of industry-specific knowledge, many consulting firms assert that *"In addition to consultants specialized in the Metaverse, we need a more traditional consultant with extensive experience in the specific industry. If we envision undertaking a project in the Metaverse for a luxury fashion company, it is necessary to have someone who is familiar with that world and capable of applying new ideas to that industry. Therefore, we need individuals who not only possess knowledge of that industry, such as its value chain, but also someone who can apply innovation to that value chain. Our task is to embrace new ideas and adapt them to the industry at hand (ITb-1)"*.

In addition to possessing sensing capacities, the respondents emphasize the necessity to acquire ***seizing*** abilities in order to navigate the Metaverse landscape effectively. Consequently, they consider imperative to actively **immerse in the Metaverse environment**, allowing them to gain firsthand experience and effectively operate within its vast landscape. *"Basic knowledge of these technologies (behind the Metaverse) and an understanding of how they work together are fundamental (ITd-1)"*. For instance, *"If you're consulting about VR, you need to be at least a regular VR user. Otherwise, even if you're methodologically correct, you're not a good consultant in the Metaverse (F-4)"*. Furthermore, as the interview findings suggest, consultants should also demonstrate proficiency in **create Metaverses tailored to the clients' needs and objectives**. *"... when developing a Metaverse solution, it is important to understand who will use it, how they will use it, and at which stages of their activity (Sa-6)"*. Therefore, *"From a technological standpoint, there is an aspect of implementation that requires specific skills, which may differ from those typically possessed by a full stack programmer (Sa-1)"*.

Still in the dynamic capabilities domain, the conducted interviews highlight the relevance for consultants to possess and cultivate ***transforming*** dynamic capabilities. In this context, respondents acknowledge the significance of comprehending and engaging with the Metaverse from its inception,

particularly through **Metaverse-based innovation centers**. *"Part of learning is experimenting. You have to experiment: if you're gonna sell something, you gotta taste it. How can we sell something that we don't have an experience on? (ITb-2)"*. Given the novelty and intricacies inherent in the Metaverse, the interview findings also indicate the importance for consulting firms to establish **Metaverse-based business units** to effectively navigate its complexities. *"The core of a consulting firm is undergoing a transformation to the extent that new roles are emerging, where previously only strategic and generalist consultants existed. Now, there is a growing presence of specialized roles, particularly in areas such as innovation (Sa-4)"*. For instance, *"The Metaverse Continuum is a globally dedicated business unit solely focused on the Metaverse. We have organized it vertically, with one group handling consumer goods and another group overseeing retail operations (ITb-1)"*. Furthermore, as acknowledged by both freelancers and consulting firms, it is essential for them to **reshape customer relationships through headset-based interactions**, thereby unlocking the Metaverse's full potential. *"In a traditional consultant-client relationship you wouldn't bring hardware to a meeting. Yet, with the rise of the Metaverse, of course you bring a couple of quest two glass to business meetings (F-4)"*.

4.3 Expected benefits from the Metaverse adoption

According to the respondents, one of the primary advantages associated with the integration of the Metaverse pertains to the ability of *consulting firms* to *innovate existing processes*. In particular, they believe that the Metaverse enables consulting firms to **minimise unconscious bias in the recruitment process**. *"We are experimenting with the topic of recruiting because we are carrying out a strong campaign on the issue of unconscious biases in recruiting. Therefore, we have drastically modified the interview process to minimize these biases. Clearly, in this case, the Metaverse helps because it eliminates the physical visualization of the person you are talking to, allowing it to be done through avatars (Sa-2)"*. Indeed, *"When you enter the Metaverse, you can also use avatars that do not necessarily reflect your own identity. Of course, in recruiting processes, the empathetic aspect is crucial. However, in the initial stages where content is more important than empathy, there are a series of biases that could be eliminated (Sa-2)"*. The interview findings suggest that also the onboarding procedures can undergo significant revisions as the Metaverse facilitates to **onboard new hires in immersive virtual spaces**. *"When Covid arrived, the option of a local office died, and as a result, our CEO made this bold move to purchase 60,000 Oculus devices. We became the world's leading company in terms of Oculus ownership - second only to Meta which produces them - and we created our office in the Metaverse. Here, we onboarded 150,000 people in two*

years (ITb-1)". Similarly, *"There is a project led by Innovation & Design that is progressing internationally for the creation of a metaverse for recruiting and onboarding new talents. This is the area where we have chosen to test the Metaverse (Sa-6)"*. Furthermore, the conducted interviews provide clear evidence that the Metaverse possesses the potential to **ensure heightened levels of engagement during internal meetings**. *"Some activities on the Metaverse were carried out at the level of internal meetings. Remote working is something that already exists. However, the Metaverse allows you to create experiences similar to reality within a virtual space, thus overcoming to some extent the lack of interaction behind a screen in two dimensions Sa-3)"*.

Respondents also acknowledge that the Metaverse offers opportunities for ***revenue streams diversification***, as it would enable consulting firms and freelancers to potentially **offer consultancy services via NFTs**. *"An NFT would be like a one our consultancy about the Metaverse. You can buy it for €200 and then you get one hour. Or if you want, you can to sell it to someone else (F-3)"*. At the same time, the interview findings suggest that the Metaverse would also enable consulting firms and freelancers to **generate value through Metaverse-based e-commerce activities**. *"We have created our office in the Metaverse. At first, it was just an onboarding platform. Now, we will add recruiting and e-commerce (ITb-1)"*.

In contrast to consulting firms, freelancers assert that entering the Metaverse has enabled them to ***increase*** their ***pricing power***, mainly as a consequence of **heightened expertise in the Metaverse domain**. *"My pricing power has increased. Working in the industry for so many years, setting up an association, specialization and expertise brings you into a price range that is not comparable (F-1)"*. At the same time, freelancers believe that the increasing pricing power also results from a dual effect of **higher specialisation coupled with reduced competition**. *"Highly specialized consultants are always higher in price than generic ones. If I did social media consulting, I wouldn't probably earn as much money as I do right now (F-1)"*. *"In my industry, there are not so many people focusing on hospitality and Metaverse. So, it's worth a lot of money (F-3)"*.

The conducted interviews provide clear evidence that entering the Metaverse allows to ***develop more sophisticated KPIs***, which can be refined and enhanced through its utilization. The interviews show that one advantage lies in the ability to generate accurate and intricate **biometric KPIs** by leveraging the extensive processing of biometric data through headsets. *"We're going to get biometrics involved. We're going to measure the level of users immersion and interaction inside the Metaverse, making all this information available through the devices that users use to enter the Metaverse (F-2)"*. Additionally, respondents recognize they can observe and analyze consumer

purchasing behaviors within the Metaverse. *"Of course, when talking about KPIs, we also refer to virtual goods, similarly to real life sales. How many items did we sell, and to how many people? (F-2)"*.

4.4 Perceived sense of urgency

The conducted interviews suggest that the extent to which the consulting industry adopts the Metaverse is contingent upon the ***level of competition in the consulting industry***, primarily influenced by the **corporate culture and agility to change** observed in the industry. In this sense, *"If you're a big consulting company, it can be very hard to change direction, or at least it takes a lot of time. If you're small, you can move quicker (F-3)"*. Moreover, as noticed by a freelancer, *"If McKinsey wants to hire experts on the Metaverse, would them fit into the McKinsey culture? Most probably not. They would probably fit much better into an Accenture culture. Or even in a smaller one which has more competences on the Metaverse (F-5)"*. Simultaneously, the interview findings suggest that it is crucial to monitor the influence of **monetary and reputational resources** in shaping the aforementioned degree of competition. *"If you are a freelancer, it's extremely difficult to keep up with all the latest trends and technologies. If you are a five person consulting company, this could work, but you will never get the international scaling because this would be too expensive. So at the end of the day, you will only get real and full consulting about the Metaverse from one of the big global players that has also the IT capabilities (F-5)"*. Ultimately, respondents acknowledge the significance of **technological and strategic competences** that consulting firms and freelancers must possess to maintain their competitiveness in the industry. *"It wouldn't make sense for us to handle the construction of Metaverses for our clients. We bring the strategic thinking aspect to understand what makes sense to do (Sa-1)"*. *"Accenture has the technology capability to build a Metaverse for every client. But Accenture is missing quite often the strategic view. While I was at Accenture there were a lot of people building great things. But those people did not understand the business. Of course Accenture has a strategy unit, but this strategy unit is not always in the project (F-5)"*.

At the same time, the conducted interviews provide evidence that the presence of ***competing and complementary technologies*** significantly influence the trajectory of the Metaverse adoption within the consulting industry. From one perspective, respondents are confident that **AI and ML mitigate the financial burden associated with Metaverse development**. *"AI or generative AI will play for sure a huge role when building virtual worlds. It's so exhaustive, while now it's time and cost consuming to build 3D assets (F-4)"*. Similarly, *"With machine learning, Metaverse will gradually*

get cheaper (F-3)". Likewise, the application of **Generative AI supports the creation of the Metaverse**. *"I think that generative AI will turn out to be the biggest enabler of the Metaverse. In the future we will be able to generate our own Metaverse spaces when we need them (F-2)"*. On the contrary, the tangibility and easiness in use of **Generative AI diverts substantial resources away from investment in the Metaverse**. *"A lot of the money right now is flowing to generative AI. There's a clear competing market for these two technologies (F-2)"*. *"Generative AI deserves more attention at the moment. It is easier to apply and automates and facilitates a whole range of activities that already exist and ease existing processes (Sa-3)"*.

Respondents consider the pace at which the Metaverse is being adopted to be fundamentally influenced by the *market readiness* to embrace this new technology, particularly in relation to the **accountability of customers and end-users in facilitating the adoption of the Metaverse**. In this context, there is a divergence of opinions among respondents regarding the responsibility for driving the widespread adoption of the Metaverse, with some attributing it to consulting clients - *"With every new technology, even with mobile phones, the first adopters will always be businesses and then when it gets cheaper it will be consumers as well. What we expect is that companies will start first creating Metaverses (F-3)"* - and others to end-users - *"I feel that Metaverse adoption is more B2C driven. If you look at the Web 3, the answer is quite clear: it's individuals owning wallets and buying NFTS. In terms of VR, most headsets have being used by individuals. In general I feel it's more coming from the consumer side (F-4)"*. Furthermore, as the interviews highlight, the readiness of the market is heavily influenced by the size and expertise of the clients within the consulting industry. **Large firms and small yet highly innovative companies** are the primary entities seeking consultancy services for the Metaverse. *"The main clients are either small, highly innovative companies or very large companies that heavily invest in new technologies (Sa-2)"*. In addition, respondents consider the Metaverse to have already gained significant traction in the **retail and gaming sectors**, creating a favorable environment for consulting firms and freelancers operating within these industries. *"The sectors that have gained the most interest are gaming and retail. The latter is the one in which, for now, the Metaverse has gained a little more ground, the one for which it has been easier to develop use cases (Sa-5)"*.

5 Discussion and conclusion

This research sought to address the following research question: *"What are the key factors influencing the adoption of the Metaverse in the consulting industry?"*.

The study utilizes interviews and company reports to gather data, and the findings reveal that the degree of Metaverse adoption in the consulting industry is influenced by several significant factors. These factors include the level of dynamic capabilities possessed by freelancers and consulting firms, as well as the perceived sense of urgency to embrace this new technology. Regarding dynamic capabilities, it has been found that freelancers and consulting firms need to possess a suitable combination of sensing, seizing and transforming dynamic capabilities in order to leverage the potential of the Metaverse fully. Additionally, the perceived sense of urgency to adopt the Metaverse is contingent upon various factors such as the presence of competing and complementary technologies, the level of competition among firms, and the market's readiness to embrace such a disruptive technology. However, it is important to note that the successful adoption of the Metaverse in the consulting industry faces several barriers. These barriers may be technological, economic, human, or policy-related, and their combination can further hinder the successful implementation of Metaverse solutions. Therefore, for the consulting industry to embrace the disruptive nature of the Metaverse, the expected benefits from its adoption must outweigh these barriers. These benefits may include innovation in existing organizational processes, differentiation of revenue streams, the development of more sophisticated KPIs, and increased pricing power.

Figure 1 depicts a conceptual model that graphically elucidates the influence of the identified critical factors on the level of Metaverse adoption within the consulting industry. The following section explains how these findings contribute to the existing theory and offer practical implications for freelancers and consulting firms seeking to embrace the Metaverse potential.
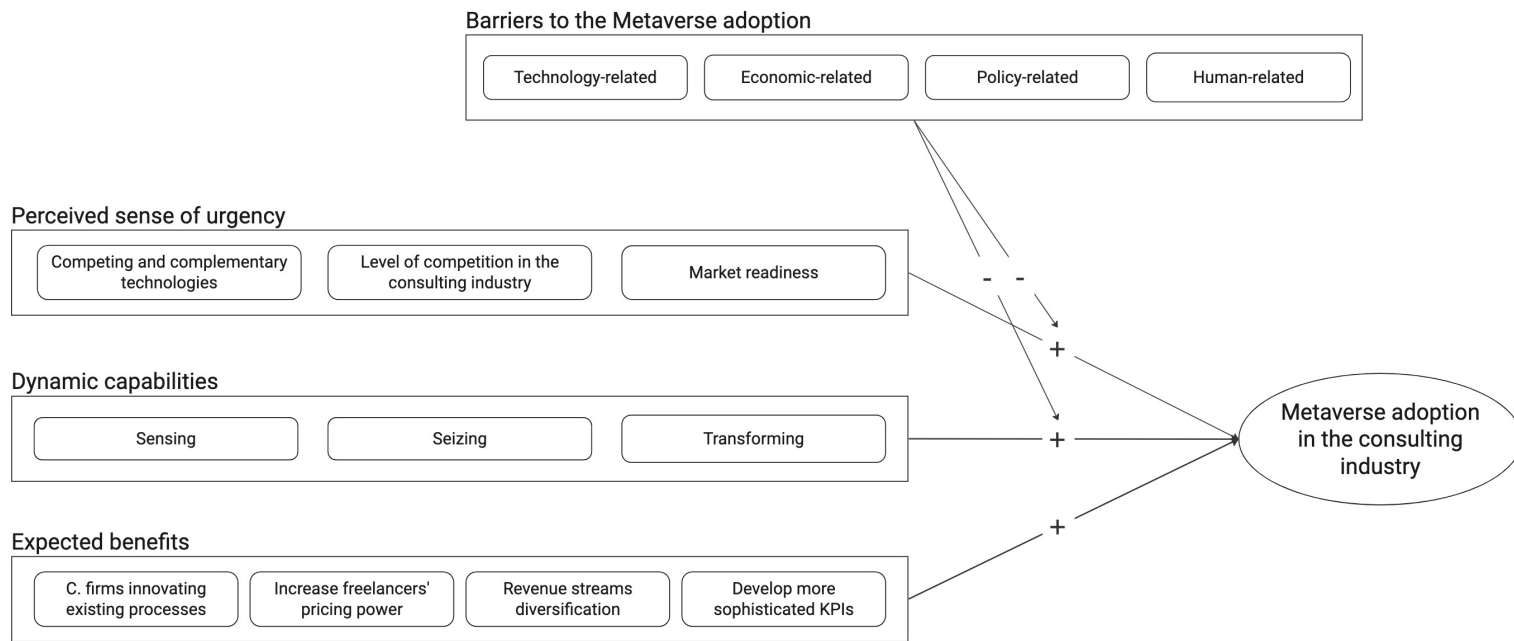
Figure 1: Conceptual model for the adoption of the Metaverse in the consulting industry.

5.1 Theoretical implications

According to Figure 1, the **perceived sense of urgency** plays a critical role in driving the adoption of the Metaverse in the consulting industry. In this regard, the developed model expands upon the current body of literature by emphasizing that the perceived sense of urgency in the consulting industry, alongside the level of competition (O'Mahoney, 2013), is also influenced by market readiness and the existence of both competing and complementary technologies.

Regarding market readiness, previous studies have explored the consulting industry's ability to embrace digital transformation (Christensen et al., 2013; Larsson et al., 2020; Nissen, 2018; Tavoletti et al., 2021). However, no research has specifically investigated whether the industry is prepared to the disruptive impact of the Metaverse. Based on the interviews conducted, the extent to which the consulting industry will embrace the Metaverse is contingent upon the size and expertise of its clients. In this regard, there appears to be a greater impetus when catering to large corporations and small yet exceptionally innovative enterprises operating in the retail and gaming sectors.

In terms of competing and complementary technologies, the analysis emphasizes the importance of monitoring the impact of (generative) AI and ML on the evolution of the Metaverse. Indeed, while the utilization of AI and ML contributes to cost reduction and facilitates Metaverse development, the tangibility and user-friendliness of generative AI pose a risk of diverting significant resources away from Metaverse investments.

> *Proposition 1: The perceived sense of urgency generally positively relates to the adoption of the Metaverse within the consulting industry.*

At the same time, possessing **dynamic capabilities to deal with the Metaverse** is essential for consultants in order to fully embrace its potential (see Figure 1). In this regards, the analysis expands upon the findings of Zabel et al. (2023) by revealing two additional significant sensing dynamic capabilities. The first one pertains to an enhanced level of creative and experimental thinking, which is deemed essential for transitioning from 2D to 3D environments. Furthermore, the analysis demonstrates that many consulting firms not only externally acquire knowledge relevant to the Metaverse but also internally cultivate it through extensive training of their existing workforce.

When it comes to seizing and transforming dynamic capabilities, there has consistently been a lack of scholarly attention on their influence on the Metaverse. This research addresses this gap by identifying the specific capabilities necessary for capitalizing on the opportunities presented by the Metaverse, as well as internally reconfiguring consulting business models to fully leverage the

Metaverse potential. Regarding seizing dynamic capabilities, this study highlights the importance for consultants to immerse themselves in the Metaverse environment, thereby gaining firsthand experience and effectively navigating its expansive landscape. Moreover, the provision of Metaverse-based products and services necessitates the effective possession of the capability to create tailored Metaverse solutions that align with the unique needs and objectives of clients (States, 2022). On the other hand, leveraging transforming dynamic capabilities involves undertaking internal business model reconfigurations, establishing innovation centers and business units that are specifically focused on the Metaverse, and actively encouraging headset-based interactions with clients.

> *Proposition 2: The possession of sensing, seizing and transforming dynamic capabilities positively relates to the adoption of the Metaverse within the consulting industry.*

As depicted in Figure 1, the presence of **barriers to the Metaverse adoption** hinders its acceptance within the consulting industry.

Regarding technology-related barriers, this study identifies the complex and unrealistic sensory experience and the limited multi-user access (Chen et al., 2022) as major impediments to the Metaverse adoption, as they prevent a consistent user experience as the environment becomes more crowded. At the same time the limitations of the current broadband connection further hinder the scalability and interoperability of the Metaverse (School-Newark & Brunswick, 2022).

Simultaneously, freelancers and consulting firms need to consider significant economic-related barriers resulting from the acquisition and dissemination of knowledge as well as the development of Metaverse spaces (Chen et al., 2022; Queiroz et al., 2023).

With regards to human-related barriers, this study goes beyond addressing the clients' lack of understanding (Chen et al., 2022) and delves into the resistance to change experienced by consulting firms and their clients, as well as the significant disruptive nature of the hardware. In this context, the resistance to change is considered a substantial source of exogenous resistance that may be more challenging to overcome compared to disruptive hardware, given that technological advancements and customer familiarity with headsets and VR over time may help mitigate the latter barrier. Moreover, the aforementioned human-related barriers certainly influence the Perceived Ease Of Use (PEOU) dimensions within the Technology Acceptance Model (TAM) (Davis, 1985). Specifically, the "Clients' lack of understanding" and the "Highly disrupting hardware" significantly diminish the PEOU, thus adversely affecting the attitude towards embracing the Metaverse within the consulting industry.

In relation to policy-related barriers, this study aligns with the notion that the immersive experience provided to users through extended reality entails the processing of vast amounts of personal data, raising privacy concerns (Dwivedi et al., 2022; Queiroz et al., 2023; Schmidt et al., 2022). These concerns are further amplified when considering the potential monitoring of biometric data through biometric KPIs.

Expanding upon the previous discussion, this study posits that these barriers indirectly impact the level of Metaverse adoption in the consulting industry by diminishing the perceived sense of urgency and impeding the development of dynamic capabilities.

Delving into the perceived sense of urgency, it is evident that the existence of barriers to the Metaverse adoption diminishes its attractiveness, thereby impeding its path to widespread utilization. Consequently, in a highly competitive consulting industry, actors will likely prioritize technologies that are considered reliable rather than those presenting significant obstacles like the Metaverse. Additionally, the presence of substantial barriers complicates market readiness by exacerbating the chicken-and-egg dilemma of whether the Metaverse is primarily driven by B2B or B2C interactions, as neither firms nor end-users are inclined to be early adopters of such technology. Finally, the existence of competing and complementary technologies suggests that barriers to the Metaverse adoption would likely divert significant resources away from Metaverse investments, favoring more reliable competing technologies despite the availability of solid complementary technologies.

Regarding sensing dynamic capabilities, it is reasonable to infer that higher barriers discourage freelancers and consulting firms from engaging in creative and experimental thinking necessary for a successful transition from 2D to 3D environments. In terms of seizing dynamic capabilities, when barriers to the Metaverse adoption are high, there is little incentive for freelancers and consulting firms to navigate the Metaverse landscape or specialize in creating Metaverses for their clients. Lastly, when it comes to transforming dynamic capabilities, freelancers and consulting firms have little reason to adapt their business models to a technology that is perceived as weak and unlikely to succeed, given the multitude of barriers to its widespread adoption.

> *Proposition 3: The existence of barriers to the Metaverse adoption diminishes the positive impact exercised by the perceived sense of urgency.*

> *Proposition 4: The existence of barriers to the Metaverse adoption diminishes the positive impact exercised by sensing, seizing and transforming dynamic capabilities.*

The degree of adoption of the Metaverse in the consulting industry is also influenced by the ***expected***

benefits associated with its implementation (see Figure 1). Indeed, it is reasonable to posit that an increase in the perceived benefits would lead to a greater investment of resources and efforts in adopting the Metaverse.

In this context, the Metaverse is recognized for its ability to enhance engagement levels (Dwivedi et al., 2022; Hennig-Thurau et al., 2022; Mystakidis, 2022), while also providing a novel channel, alongside physical stores and the Internet, for companies to market and sell their products and services (Dwivedi et al., 2022). Specifically, as emphasized by this study, the Metaverse has the potential to foster revenue diversification in the consulting industry by facilitating e-commerce activities within the Metaverse and providing consultancy services through NFTs.

Further, this study expands the existing literature by elucidating additional benefits arising from the Metaverse adoption in the consulting industry. It is certainly worth mentioning the potential for innovating established business models, enabling differentiation from competitors and ensuring competitiveness in the market. This innovation includes minimizing unconscious bias during recruitment processes and facilitating the onboarding of new personnel through virtual spaces. Moreover, specializing in the Metaverse domain may enhance consultants' pricing power as a result of increased specialization and reduced competition. Lastly, another important expected benefit stemming from the Metaverse adoption pertains to the development of sophisticated KPIs, such as customers' purchasing behaviors within the Metaverse and biometric KPIs, enabled by the real-time data generated by head-mounted displays.

When taken collectively, these benefits expand of the existing literature by identifying those factors that influence the Perceived Usefulness (PU) dimension within the Technology Acceptance Model (TAM) formulated by Davis (1985).

> *Proposition 5: The expected benefits stemming from the Metaverse positively relate to its adoption within the consulting industry.*

In addition to addressing the primary research question, this study sought to go even deeper investigating *"How does the size and expertise of consulting firms and freelancers impact their ability to adapt to the Metaverse?"*. The ultimate objective is to determine which category of actors possesses the most favorable attributes to successfully embrace the transformative impact of the Metaverse.

In terms of the perceived sense of urgency, a notable difference emerges concerning the agility to adapt to change. In this regard, freelancers may possess a significant competitive advantage over consulting firms in easily and seamlessly embracing new technologies, without incurring substantial

costs and organizational restructuring. This concept aligns with the findings presented by Nissen (2018) and Christensen (1997), who assert that emerging competitors gain advantages from flexible internal frameworks and organizational cultures that embrace adaptability, while established companies confront the difficulties arising from the "innovator's dilemma". Conversely, consulting firms enjoy a competitive advantage over freelancers due to their greater financial resources, enabling them to make substantial investments in those complementary technologies required to unlock the Metaverse potential fully.

> *Proposition 6: Freelancers exhibit higher agility to adopting the Metaverse, while consulting firms possess higher financial resources to invest in complementary technologies.*

As for the dynamic capabilities necessary to navigate the Metaverse landscape, it can be argued that freelancers' highly personalized and adaptable approaches (Sabath & Kubr, 1977) enhance their ability to sense opportunities. On the other hand, consulting firms, with their greater financial resources, would likely have a competitive advantage over freelancers in terms of seizing and transforming dynamic capabilities.

Regarding participants' expertise, one could expect IT consulting firms to have a competitive edge over strategy consulting firms in creating Metaverses for clients and reshaping customer relationships through headset-based interactions. This advantage stems from various factors, including their technical expertise, implementation capabilities, integration skills and technical talent pool, all of which are not inherently possessed by strategy consulting firms.

> *Proposition 7: Freelancers exhibit superior sensing dynamic capabilities, while consulting firms excel in seizing and transforming dynamic capabilities.*

> *Proposition 8: IT consulting firms demonstrate higher proficiency in seizing and transforming dynamic capabilities compared to strategy consulting firms.*

Regarding the barriers to the widespread adoption of the Metaverse in the consulting industry, particular attention should be given to economic and human-related obstacles. as for the former, the complex organizational structures and large workforce within consulting firms make it more challenging and costly to acquire and share the knowledge necessary to embrace the potential of the Metaverse fully. Conversely, the substantial financial resources held by major consulting firms make it easier for them to invest in Metaverses development.

Additionally, regarding the differences between IT and strategy consulting firms concerning this matter, while the former internally possess the capabilities required to create Metaverses for their clients, strategy consulting firms often need to rely on external third parties, resulting in increased investment requirements.

> *Proposition 9: Freelancers benefit from easier and faster knowledge acquisition and sharing, while consulting firms are better positioned to sustain the investments necessary for building Metaverses.*

> *Proposition 10: IT consulting firms face lower economic-related barriers compared to strategy consulting firms.*

Delving into human-realated barriers, consulting firms have been found to have implemented fewer internal restructuring measures compared to numerous other industries, thus limiting their ability to effectively adapt to the constantly evolving business environment (Christensen et al., 2013). The research findings further support the idea that consulting firms may face significant competitive disadvantages in comparison to freelancers, primarily due to their organizational structure and scale which increase the time and cost required to adapt to changes.

> *Proposition 11: Consulting firms face higher human-related barriers compared to freelancers.*

Finally, in relation to the expected benefits resulting from the Metaverse adoption, notable disparities have surfaced. Specifically, freelancers expect a boost in their pricing power due to increased specialization and reduced competition. On the other hand, consulting firms benefits from innovating their existing processes therefore strengthening their competitiveness in the market.

> *Proposition 12: The adoption of the Metaverse in the consulting industry will solely benefit the pricing power of freelancers.*

> *Proposition 13: The adoption of the Metaverse in the consulting industry will lead to process innovation solely for consulting firms.*

5.2 Practical implications

This study provides a comprehensive analysis of the factors influencing the adoption of the Metaverse within the consulting industry. Specifically, the study assists in identifying the essential dynamic capabilities that consultants should cultivate to effectively embrace the disruptive potential

of the Metaverse. Additionally, it emphasizes the importance of monitoring the external environment, as it is inherently linked to the perceived sense of urgency and the barriers associated with Metaverse adoption. Moreover, the study prompts a thorough examination of the expected benefits stemming from the Metaverse, as they must sufficiently outweigh the current obstacles faced by both freelancers and consulting firms in order to justify the substantial long-term investments necessary for embracing the Metaverse.

The aforementioned has significant practical implications, especially in terms of strategic decision-making, competitive advantage and resource allocation within the consulting industry. Regarding strategic decision-making, the study enables participants in the consulting industry to make well-informed choices regarding their engagement with the Metaverse. It equips them with the necessary information to evaluate the potential benefits, risks, and implications associated with adopting the Metaverse, thereby facilitating effective decision-making. In terms of competitive advantage, this study helps both freelancers and consulting firms assessing whether they possess a substantial competitive edge and whether it is strategically advantageous for them to enter the Metaverse landscape. It assists in understanding whether becoming early adopters or strategically positioning themselves will allow to leverage the advantages presented by the Metaverse and gain a competitive advantage in the market. Lastly, the identification of essential factors that impact the Metaverse adoption allows consulting actors to allocate their resources effectively. With this knowledge, they can prioritize their investments in technology infrastructure, talent development and partnerships. By strategically allocating resources, consulting firms can enhance their readiness for the Metaverse revolution, ensuring they have the necessary capabilities and capacities to thrive in this new paradigm.

Importantly, this study sheds light on the pivotal role that consultants play in the Metaverse. It can be conceptualized as a three-step approach, commencing with assisting clients in comprehending the nature of the Metaverse. Once a common understanding is established, consultants formulate the strategies necessary for effectively navigating the Metaverse. Finally, they facilitate the development and implementation of Metaverse initiatives. While this three-step approach may resemble traditional consulting practices, executing it within the Metaverse necessitates additional skills such as creative and experimental thinking, as well as proficiency in navigating the Metaverse landscape. Specifically, when it comes to strategy formulation, consultants must be capable of clearly defining both the "why" and the "how" behind their clients' entry into the Metaverse. At the same time, consultants should provide support in critical decision-making, such as selecting which Metaverse to join or proposing necessary organizational restructuring to accommodate sig-

nificant changes. In this regard, effective collaboration and close cooperation between consultants and clients are paramount to co-create value successfully. Once the strategy is defined, Metaverse consultants should be capable of supporting clients in implementing the proposed outcomes. This can be accomplished either by taking on the implementation themselves, as often seen with IT consulting firms and freelancers, or by collaborating with external providers, as is typically the case with strategy consulting firms.

5.3 Limitations and future research

Despite the significance of its contributions, this study is subject to potential limitations. Firstly, the interviews and coding activities conducted in the study introduce the risk of confirmation bias, which refers to the tendency to seek evidence that confirms existing hypotheses (Pohl, 2016). Hence, the list of key factors influencing the adoption of the Metaverse in the consulting industry might be incomplete, encouraging the identification of other relevant variables.

Secondly, this study may suffer from sample selection bias, which occurs when non-randomly selected samples are used to estimate behavioral relationships (Heckman, 1979). In this regard, the 18 interviews were conducted based on the availability of the respondents, potentially overlooking interesting and useful contributions. For instance, all respondents from strategy consulting firms were affiliated with "C. firm a", which could provide a limited perspective on the topic.

Thirdly, as mentioned, the strict categorization of consulting firms and freelancers as either strategic or IT poses challenges, resulting in a partial and potentially incorrect classification.

Finally, the entire study revolves around the assumption that the Metaverse, despite being an immature technology, will fully manifest in the coming years, without considering the influence of uncertainties surrounding its adoption. In this context, the work conducted by MacMillan and Gunther McGrath (2002) establishes a strong foundation for examining both technological and market uncertainties associated with this technology. Notably, the Metaverse exhibits moderate market uncertainty but substantial technological uncertainty, placing it within the "Positioning options" quadrant (MacMillan & Gunther McGrath, 2002). This suggests that it would be optimal to invest in multiple technologies rather than relying solely on the Metaverse, thereby hedging against making a single incorrect decision.

In light of the innovative nature of the subject, ongoing research should consistently monitor the evolution of the identified factors. In this context, it is foreseeable that technological advancements

would not only alleviate technology-related barriers such as insufficient broadband connectivity, but also significantly reduce the investment required to create and access the Metaverse. Concurrently, it would be worthwhile to investigate whether a specific dynamic capability plays a pivotal role in facilitating the adoption of the Metaverse in the consulting industry, or if all three are simultaneously necessary to exploit its potential fully. In terms of the anticipated benefits resulting from the Metaverse adoption, future research should assess whether it is realistic and feasible to expect the consulting industry to diversify revenue streams and develop biometric KPIs, as these objectives still appear to be distant. Finally, given today's VUCA landscape, the perceived sense of urgency needs to be continuously updated to evaluate, for instance, whether Generative AI serves as enablers or impediments to the Metaverse progress.

In addition to ongoing monitoring the identified factors, future research should consistently update the developed model to assess the necessity of incorporating additional variables, particularly concerning the existence of competing and complementary technologies.

Finally, future research should focus on empirically testing the developed model to provide confidence regarding the impact of the identified key factors on the degree of adoption of the Metaverse in the consulting industry.

5.4 Conclusion

The Metaverse has emerged as a prominent digital trend that has garnered considerable attention from companies across various sectors, including the consulting industry.

Aimed at overcoming a significant research gap, this study identifies the primary factors that influence the adoption of the Metaverse within the consulting industry, namely: perceived sense of urgency, dynamic capabilities to deal with the Metaverse, barriers to Metaverse adoption, and expected benefits from the Metaverse adoption. Furthermore, this study explores how the size and expertise of participants influence their adoption of the Metaverse, ultimately concluding that no individual participant holds a considerable competitive edge over others. Instead, various actors demonstrate unique strengths and weaknesses, implying that all participants will reap advantages by entering the Metaverse.

In the current business environment, competitive advantage hinges on the capacity to identify early signals, accurately interpret them and take appropriate action. Consequently, it is expected that the consulting sector's future growth will largely stem from those who can anticipate and effectively

leverage technological trends that best address client requirements. The Metaverse, therefore, merits heightened attention in this regard, especially in today's VUCA landscape wherein continuous experimentation and strategic reallocation of financial resources have gained favor over solely relying on emulating early adopters' strategies.

A Appendix

A.1 Interview guide

1. What roles do consultants play in the Metaverse?

2. What competencies and skills are essential for consultants to effectively adapt to the Metaverse?

3. How do you plan to acquire or develop the necessary competencies and skills to adapt to the Metaverse? Think to internal development and external acquisition.

4. How has the Metaverse influenced your internal processes? Think for instance to recruitment and training activities.

5. What are the primary challenges you encountered in dealing with the Metaverse? Think for instance to lack of technical knowledge and/or organisational resistance to change.

6. What area(s) of your business have been negatively impacted as a result of the emergence of the Metaverse in the consulting industry? Think for instance to already consolidated consulting practices which are now becoming marginal.

7. What are the new services you have specifically developed to address the emergence of the Metaverse in the consulting industry? Think for instance to virtual space development and/or training activities.

8. How has the Metaverse changed the relationships with your customers?

9. How has the Metaverse changed the size and area of expertise of your customers?

10. How has the Metaverse changed the needs and expectations of your customers? Think for instance whether your customers require highly customised solutions.

11. What are the new revenue streams you expect from participating into the Metaverse? Think for instance to sales of virtual goods and NFTs.

12. What are the main monetary costs you expect from dealing with the Metaverse?

13. What are the main non-monetary costs you expect from dealing with the Metaverse? Think for instance to high-tech solution dependencies, risks, and uncertainties.

14. What are the main KPIs you monitor to evaluate your presence into the Metaverse? Think for instance to client engagement and retention rate.

15. How do you expect your pricing power to change once participating into the Metaverse?

A.2 Quotes

Quotes	1st-order concepts
"An Oculus headset is just too complicated. There are like six buttons on it. Then you can also move and you have other 12 buttons, plus two moving hands. If you're not into technology, you're not going to use it (F-3)". "The Metaverse should be immersive. However, what happens is that primarily it is accessed through a two-dimensional screen, and therefore this aspect of immersion is not conveyed (ITd-1)". "In some cases, the Metaverse is experienced through a screen. It's as if there is an extra layer that only adds complexity. Why should I look at a screen where I'm looking at another screen? I'd rather directly look at the final screen (ITd-1)". "The interface through which we interact with the Metaverse is not yet optimal." "The reality is that there's nothing that's going to beat me and you in a room together (ITb-2)". "Having the avatar of this person in front of me made me feel more detached compared to the Teams call with the camera on. This is creating difficulties. It is therefore necessary to change the perception, conveying the Metaverse as a place that makes the virtual real, not the other way around (SITb-3)".	**Unrealistic and complex sensory experience**
"There are still technological barriers. Some enablers are missing. Think of 5G, for example. When 5G is fully deployed, it will be much easier to adopt solutions that require high bandwidth connectivity (Sa-6)". "The main barriers in terms of technologies are 6G and powerful infrastructures (ITc-1)". "One of the main barriers concerns the technical infrastructure, such as the internet connection bands needed to access the Metaverse. It requires a stable and functional connection (Sa-3)".	**Inadequate broadband connectivity**

"Interoperability is a must, otherwise the Metaverse is not going to work. Otherwise it's just a 3D web shop where you have to put in your password again and again. Roblox is working a lot on interoperability so that you can seamlessly move your own avatar from one Metaverse to the others (F-5)". "Compared to other technologies, the Metaverse suffers, among other things, from the problem of interoperability in the sense that currently, the various Metaverses do not want to be interconnected (ITd-1)".	**Lack of interoperability across Metaverses**
"I cannot create a room where all 36,000 employees are sitting at one table because technologically this setup is not feasible. Therefore, we need to divide them into smaller groups, rooms or slots, which creates a strange disorientation (Sa-1)". "It's already very expensive to ensure a seamless user friendly experience with 50 concurrent users with the current technology. Imagine if you want to have a Metaverse space with 300 or even 1000 participants (F-2)".	**Limited multi-users access**
"The main cost is about gathering the knowledge. You can't clone yourself so you have to educate other consultants to perform on the same length. You have to, meet the right people, educate them, educate yourself (F-2)". "The main costs to offer consultancy services in the metaverse are primarily training costs (Sa-2)". "One of the main barriers concerns skills and competencies, as individuals operating within the Metaverse need to be trained to acquire new knowledge (Sa-3)". "The main cost involves informing, raising awareness, and continuously training its employees on this subject. We have dedicated consultants who focus on further developing knowledge about the Metaverse, and through these consultants, we disseminate our perspective even to those who haven't had the opportunity to delve into or become acquainted with the subject. In this regard, I do not consider training as a direct cost. In my opinion, it represents a missed revenue opportunity if we and other consulting firms fail to intercept, understand, and comprehend how this change can impact their clients. As a consulting company, we miss out on a business opportunity by not being able to position ourselves in a new channel called the Metaverse and advise our clients on how to develop their operations within that channel (Sa-5)".	**Knowledge acquisition and knowledge sharing**

"We have, for example, a current budget that we can allocate to delve into specific topics and provide training. The information we gather is distributed internally, ensuring that all consultants have at least a basic understanding to initiate discussions and can redirect to experts if a deeper understanding is required (ITd-1)". "The greatest cost lies in the time that a dedicated group of individuals invests in building knowledge and expertise on the subject (ITd-1)". "The main cost is about finding competent people that can consult about the Metaverse (F-5)".	
"One of the main costs relates to the purchase of headsets (Sa-3)". "It's already very expensive to ensure a seamless user friendly experience with 50 concurrent users with the current technology. Imagine if you want to have a Metaverse space with 300 or even 1000 participants (F-2)". "Immense investments are needed to build your own meta space (F-2)". "The Metaverse costs a lot of money because it needs to be built by people (F-3)". "There have been significant investments in creating the platform (ITb-1)".	**Financial investments to develop Metaverses**
"The main challenge at this moment is to make our clients understand that the Metaverse is a vast, immersive three-dimensional experience that encompasses web 3.0, blockchain, NFTs, and other related technologies (Sa-1)". "So what we're seeing is that the Metaverse is not there yet as a concept. It's very difficult to grasp for people. They need to see examples (F-2)". "The whole Metaverse hype is more coming from a narrative and less from an emerging technology, so that it's harder to grasp what we're actually talking about (F-4)".	**Clients' lack of understanding**

"In my opinion, the main barriers are directly related to the challenge of conveying to our customers the value associated with this new channel (Sa-5)". "One of the main challenges that consulting companies face when consulting about the Metaverse is that people don't really understand what it means (F-5)". "It is difficult to approach consumers with something that they haven't seen (ITb-2)".	
"We have encountered some resistance from the older population "(ITb-1)". "I think the biggest problem is that the deciders on top of the companies are quite old and cannot imagine the change (F-5)". "The main challenge is that people are interested and feel they should be doing something, but they're also afraid of change. This calls for education and building trust (F-2)". "The biggest issue is that we bring something new into realities that are designed to be more or less closed. This initially creates difficulties, requiring alignments and adjustments (Sa-1)". "The hospitality is a very old school sector. Strict hierarchy is there and hotels stick to what they know (F-3)".	**Resistance to change by consulting firms and their clients**
"An Oculus headset is just too complicated. There are like six buttons on it. Then you can also move and you have other 12 buttons, plus two moving hands. If you're not into technology, you're not going to use it (F3)". "If you have headsets on for two hours they are very uncomfortable (F3)". "Once the hardware becomes highly user-friendly and competitively priced, its popularity will soar, much like the case with smartphones (F-3)".	**Highly disrupting hardware**

"The best technology is the one that is invisible and non-disruptive. Wearing glasses, on the other hand, is quite a disruptive gesture (Sa-6)".	
"Once you enter a 3D world, the amount of data you share is enormous. Nowadays, companies possess individuals' biometric data (ITd-1)". "Through the Metaverse it is possible to monitor the time users spend in their part of the Metaverse and what they do (F-2)".	**Significant volume of biometric data**
"I think governments should set boundaries to make sure that people design and develop the Metaverse responsibly. Otherwise, simply exploiting the customer's brain is extremely dangerous (F-6)". "We should consider the impact that the Metaverse and virtual/augmented reality have on consumers' brain (F-6)".	**Irresponsible Metaverse**
"We are conducting training activities across the entire workforce on the topic of the Metaverse (Sa-2)". "After developing our viewpoints on what the Metaverse is, we will conduct an oral sharing within the company (Sa-4)". "Within the Metaverse, there is a need for a unique breed of designers who are comfortable engaging with the fashion industry and accepting its challenges. It is therefore preferable to nurture and develop these individuals from within. In fact, our growth is primarily driven by organic means rather than through acquisitions (Sa-1)". "There will be an effort to make all consultants aware of the Metaverse and how this innovation can impact our clients. This will prompt each of us to start asking questions within our respective areas of expertise about how the Metaverse can be applied (Sa-5)". "We have a certain budget for training and exploring certain topics. Today, several individuals are being trained in the field of emerging technologies, of which the Metaverse is a part (ITd-1)".	**Acquire Metaverse-specific knowledge**

"We are actively recruiting new talents and collaborating with numerous start-ups. We engage in partnerships with technology companies because highly specialized skills are essential in this domain. Consider the topic of NFTs as well; there are small companies that excel in this area and possess extensive expertise. Therefore, it is often much simpler to access these experiences rather than starting from scratch by building them internally (Sa-6)". "Compared to other companies, we do not have expertise in the legal field, so we rely on external structures or specialists. This is because legal matters and data privacy are of great significance in the Metaverse (Sa-6)". "Collaborations and joined forces with other companies specialised on different technologies (ITc-1)". "I also joined a collective of other consultants that have a couple of specialists on the Metaverse (F-3)". "Most of the time, we acquire specialized expertise from external sources, especially because they are typically senior profiles (Sa-2)". "We also go out and search for the best talents externally, bringing in individuals who have experience, capability, and different perspectives from outside. This is because you can't always grow your internal staff at the same speed as your clients or your internal needs. For example, we have made hires from Disney (SITb-3)". "We have established a Global Network Community pool, where every two weeks various topics are presented, including undoubtedly themes related to the Metaverse. Moreover, to promote education, the materials are uploaded to an internal Knowledge Sharing portal (SITb-4)".	
"I think that consultants should try to focus on specific needs that clients have (ITc-1)". "The recipe is understanding who are your customers, and what are their needs that you're trying to solve (ITb-2)".	**Comprehend customer needs**

"In order to assist our clients, it is certainly necessary to understand the practical implications and to empathize with the individuals who will be utilizing the technology or virtual space (SITb-3)".	
"Creativity is important because moving from 2D to 3D needs paradigm shifts. It really requires thinking from scratch. So being open minded, and being creative might be soft skills that are more important for consulting in the Metaverse versus consulting on general business issues (F-4)". "One of the most important skills is creative thinking and thinking outside the box, as it is essential to adopt a perspective where the world is constantly changing and to consider alternative approaches to what can be done (Sa-5)". "It is a risk to invest in the Metaverse now, knowing that there are these current limitations in infrastructure rather than privacy. Yet from our point of view, an experimentation phase is essential; otherwise, the risks we face without experimenting are much greater than the risks we face by doing so. Not investing now means losing market share in 3 to 4 years (ITd-1)". "With respect to traditional consulting, there is a higher level of creativity (ITb-2)".	**Foster creative and experimental thinking**
"In addition to consultants specialized in the Metaverse, we need a more traditional consultant with extensive experience in the specific industry. If we envision undertaking a project in the Metaverse for a luxury fashion company, it is necessary to have someone who is familiar with that world and capable of applying new ideas to that industry. Therefore, we need individuals who not only possess knowledge of that industry, such as its value chain, but also someone who can apply innovation to that value chain. Our task is to embrace new ideas and adapt them to the industry at hand (ITb-1)". "The approach we use for any problem involves understanding the current state of the market, its key characteristics, and the players involved within it (Sa-3)".	**Possess industry-specific knowledge**

"We combine our expertise with the specific knowledge of the company where our clients work. It is the combination of these two elements that creates a winning solution (Sa-4)".	
"Metaverse consultants should be aware of web3 way of working (ITc-1)". "You really have to know the space and the community. To do that in a meaningful way you really have to dig into that and possess the technological capabilities: you have to know the platform and the tools to give good advice (F-1)". "You need to deeply understand and be able to implement Metaverse within the work you do for your client. This ranges from being able to meet in virtual spaces and have meaningful conversations there, to be able to move effortlessly across Mataverse enabled spaces (F-2)". "If you're consulting about VR, you need to be at least a regular VR user. Otherwise, even if you're method-ologically correct, you're not a good consultant in the Metaverse (F-4)". "Basic knowledge of these technologies (behind the Metaverse) and an understanding of how they work together are fundamental (ITd-1)". "One of the most important skills is personally testing various experiences with technology, which involves trying out different types of devices. This helps, for instance, in understanding the differences between mixed reality, augmented reality, and virtual reality (SITb-4)".	**Immerse in the Metaverse environment**
"From a technological standpoint, there is an aspect of implementation that requires specific skills, which may differ from those typically possessed by a full stack programmer (Sa-1)". "In the Metaverse, we see the future of customer engagement. Consequently, it is essential for us to have the capability to create the Metaverse (ITd-1)".	**Create Metaverses tailored to the clients' needs and objectives**

"After assisting the client in understanding what makes sense to do and how to do it, we then guide them through the implementation of this new technology (Sa-1)".	
"In the creation of the Metaverse, data scientists play a crucial role in managing data from an architectural perspective (Sa-1)".	
"Innovation design deals with the users experience aspects, which includes interface design, user experience design, and the study of various consumer journeys. Therefore, when developing a Metaverse solution, it is important to understand who will use it, how they will use it, and at which stages of their activity (Sa-6)".	
"Building something in the Metaverse requires a strong design component. Simultaneously, there must be experts in blockchain and programming language proficiency (ITb-1)". "Another fundamental skill is that of experience design. Some of our colleagues are specifically responsible for designing an end-to-end experience, a customer journey that is optimized for the individual you are dealing with (SITb-3)".	
"We have created a digital Lab that we utilize for showcasing what technology can offer, aiming to accompany and assist clients in truly understanding the possibilities. There is nothing better than experiencing these technologies firsthand (Sa-6)". "We have an innovation center in Milan at a European level. It is a center where we strive to bring the future to our clients by showing them what we believe the future will be through rooms, demo speakers, and researches (ITb-1)". "Part of learning is experimenting. You have to experiment: if you're gonna sell something, you gotta taste it. How can we sell something that we don't have an experience on? (ITb-2)".	**Establish Metaverse-based innovation centres**

"The Metaverse Continuum is a globally dedicated business unit solely focused on the Metaverse. We have organized it vertically, with one group handling consumer goods and another group overseeing retail operations (ITb-1)". "We have dedicated consultants who focus on further developing knowledge about the Metaverse, and through these consultants, we disseminate our perspective even to those who haven't had the opportunity to delve into or become acquainted with the subject (Sa-5)". "Our digital world involves the Advanced Analytics Group, a team comprising experts in the fields of data science, data engineering, and software engineering (Sa-6)". "The core of a consulting firm is undergoing a transformation to the extent that new roles are emerging, where previously only strategic and generalist consultants existed. Now, there is a growing presence of specialized roles, particularly in areas such as innovation (Sa-4)". "A globally dedicated group has been established for the Metaverse, aiming to bring together various skills, encompassing both software and hardware expertise, as well as industry-specific and cross-disciplinary knowledge (SITb-4)".	**Establish Metaverse-based business units**
"In a traditional consultant-client relationship you wouldn't bring hardware to a meeting. Yet, with the rise of the Metaverse, of course you bring a couple of quest two glass to business meetings (F-4)". "In the Metaverse, we see the future of customer engagement. Consequently, it is essential for us to have the capability to create the Metaverse (ITd-1)".	**Reshape customer relationships through headset-based interaction**
"We are experimenting with the topic of recruiting because we are carrying out a strong campaign on the issue of unconscious biases in recruiting. Therefore, we have drastically modified the interview process to minimize these biases. Clearly, in this case, the Metaverse helps because it eliminates the physical visualization of the person you are talking to, allowing it to be done through avatars (Sa-2)". "The Metaverse is truly extraordinary because it breaks down those barriers that we all have when we conduct an interview (Sa-6)".	**Minimise unconscious bias in the recruitment process**

"An important topic to discuss concerns issues related to bias and diversity inclusion. Surely, in this regard, the Metaverse can help democratize certain processes by highlighting other aspects of a person beyond physical appearance, color, race, and gender (Sa-3)". "When you enter the Metaverse, you can also use avatars that do not necessarily reflect your own identity. Of course, in recruiting processes, the empathetic aspect is crucial. However, in the initial stages where content is more important than empathy, there are a series of biases that could be eliminated (Sa-2)".	
"For a year I onboarded with the Metaverse (ITb-2)". "When Covid arrived, the option of a local office died, and as a result, our CEO made this bold move to purchase 60,000 Oculus devices. We became the world's leading company in terms of Oculus ownership - second only to Meta which produces them - and we created our office in the Metaverse. Here, we onboarded 150,000 people in two years (ITb-1)". "Some people from my team have undergone onboarding in the Metaverse. A girl was telling me that while she was doing the onboarding, she (virtually) met this Chinese girl at the café and they became friends. This is exactly what used to happen in St. Charles when we did onboarding in person, and it's something that can happen both physically and in the Metaverse, but not on Teams or in a 2D environment (ITb-1)". "There is a project led by Innovation & Design that is progressing internationally for the creation of a metaverse for recruiting and onboarding new talents. This is the area where we have chosen to test the Metaverse (Sa-6)". "The Metaverse offers significant potential for recruiting, talent intuition, and onboarding within the company. Currently, in Italy, there is no training process within the Metaverse. However, it is definitely something that we have analyzed and are currently analyzing, and there is great potential in it (Sa-3)". "In the HR field, many companies have already started creating metaverses to onboard new talents (Sa-6)".	**Onboard new hires in immersive virtual spaces**

"If you talk about onboarding new hires and training, then there are a lot of possibility to do it in the Metaverse (F-6)". "So far, the use case of collaboration is undoubtedly one of the strongest (SITb-4)".	
"The easiest thing will be to have video conferences in some Metaverse platform instead of on Zoom (Sa-5)". "Some activities on the Metaverse were carried out at the level of internal meetings. Remote working is something that already exists. However, the Metaverse allows you to create experiences similar to reality within a virtual space, thus overcoming to some extent the lack of interaction behind a screen in two dimensions Sa-3)". "The metaverse would allow people located in different parts of the world, who find it difficult to physically come together due to logistical reasons, to achieve a virtual experience similar to reality (Sa-3)". "We have already conducted an experiment in a virtual world, but we were not very satisfied, so we are continuing with this pilot project (ITd-1)".	**Ensure heightened levels of engagement during internal meetings**
"An NFT would be like a one our consultancy about the Metaverse. You can buy it for €200 and then you get one hour. Or if you want, you can to sell it to someone else (F-3)". "In the Metaverse, people can even trade my time as a consultant. This is something that we might see in 10 years from now (F-4)".	**Offer consultancy services via NFTs**
"There will most likely be a stream area resulting from the evolution of e-commerce, namely through a store in the Metaverse. However, we don't have it yet (ITd-1)". "We have created our office in the Metaverse. At first, it was just an onboarding platform. Now, we will add recruiting and e-commerce (ITb-1)".	**Generate value through Metaverse-based e-commerce activities**
"My pricing power has increased. Working in the industry for so many years, setting up an association, specialization and expertise brings you into a price range that is not comparable (F-1)".	**Higher expertise in the Metaverse domain**

"My pricing power has increased because of the the early exposure I had to the topic and I worked in the consulting part of an agency that was close to the topic at that time (F-4)".	
"Highly specialized consultants are always higher in price than generic ones. If I did social media consulting, I wouldn't probably earn as much money as I do right now (F-1)". "Helping you setting up your Instagram is at an entirely different levels, because the competition is way higher when working in traditional digital media world (F-1)". "In my industry, there are not so many people focusing on hospitality and Metaverse. So, it's worth a lot of money (F-3)".	**Higher specialisation coupled with reduced competition**
"We're going to get biometrics involved. We're going to measure the level of users immersion and interaction inside the Metaverse, making all this information available through the devices that users use to enter the Metaverse (F-2)". "In the Metaverse, it is possible monitor the time that visitors spend in their part of the Metaverse, as well as what customers do (F-2)". "Roblox has a great counter about how many people have been visiting that kind of experience (F-1)".	**Biometric KPIs**
"Being able to issue an NFT could also, in a certain way, be an important KPI when operating in the Metaverse (F-4)". "Of course, when talking about KPIs, we also refer to virtual goods, similarly to real life sales. How many items did we sell, and to how many people? (F-2)".	**Purchasing behaviors within the Metaverse**
"If you're a big consulting company, it can be very hard to change direction, or at least it takes a lot of time. If you're small, you can move quicker (F-3)".	

"If McKinsey wants to hire experts on the Metaverse, would them fit into the McKinsey culture? Most probably not. They would probably fit much better into an Accenture culture. Or even in a smaller one which has more competences on the Metaverse (F-5)".	**Corporate culture and agility to change**
"It wouldn't make sense for us to handle the construction of Metaverses for its clients. We bring the strategic thinking aspect to understand what makes sense to do (Sa-1)". "If you're small you can move quicker, but big consulting firms have a big client base already (F-3)". "I've been working in this niche sector for 15 years. So I know where to find people and people know where to find me. In this case, it doesn't really matter how big or small you are, it's just about your network. It's also about trust. I've been in this industry. People know me. They trust me (F-3)". "If you are a freelancer, it's extremely difficult to keep up with all the latest trends and technologies. If you are a five person consulting company, this could work, but you will never get the international scaling because this would be too expensive. So at the end of the day, you will only get real and full consulting about the Metaverse from one of the big global players that has also the IT capabilities (F-5)".	**Monetary and reputational resources**
"It wouldn't make sense for us to handle the construction of Metaverses for our clients. We bring the strategic thinking aspect to understand what makes sense to do (Sa-1)". "I've been doing workshops with the big three consulting to find out what the Metaverse is, set Metaverse strategies, find out potential revenue sources (F-4)". "I don't want to be consulted, for example, by McKinsey regarding the Metaverse, because it doesn't have the people that understand how it works. Of course, they consult companies, but it's always very superficial and it's more about developing a strategy to enter the Metaverse. But if if I ask them, can you build me a platform? HOw much does it cost to build the platform? Who would be potential providers?They cannot answer (F-5)".	**Technological and strategic competences**

"Accenture has the technology capability to build a Metaverse for every client. But Accenture is missing quite often the strategic view. While I was at Accenture there were a lot of people building great things. But those people did not understand the business. Of course Accenture has a strategy unit, but this strategy unit is not always in the project (F-5)".	
"In the Metaverse that's going to be a lot of costs. With machine learning and AI it will be different. It will be like websites right now you know. For a couple of euro you will be able to create a Metaverse (F-3)". "AI or generative AI will play for sure a huge role when building virtual worlds. It's so exhaustive, while now it's time and cost consuming to build 3D assets (F-4)". "With machine learning, Metaverse will gradually get cheaper (F-3)".	**AI and ML mitigate the financial burden associated with Metaverse development**
"I think that generative AI will turn out to be the biggest enabler of the Metaverse. In the future we will be able to generate our own Metaverse spaces when we need them (F-2)". "AI or generative AI will play for sure a huge role when building virtual worlds. It's so exhaustive, while now it's time and cost consuming to build 3D assets (F-4)". "I see generative AI as a component of the Metaverse. The Metaverse will undoubtedly be based on generative AI as well (ITd-1)".	**Generative AI supports the creation of the Metaverse**
"Generative AI deserves more attention at the moment. It is easier to apply and automates and facilitates a whole range of activities that already exist and ease existing processes (Sa-3)". "I see Generative AI as a more clear practical application of the Metaverse (Sa-2)". "Generative AI is much stronger as a trend, and in my opinion, it is much more of a revolution compared to the Metaverse. While not all industries are beginning to understand the use cases of the Metaverse, there is a strong penetration of generative AI in the open AI, regardless of the industry (Sa-5)".	**Generative AI diverts substantial resources away from investment in the Metaverse**

"In my opinion, in the next few years, Generative AI could also change the role of consultancy. Perhaps if today it takes me an hour to perform an analysis, tomorrow it could take me just fifteen minutes because Chat GPT helps me with some of the initial work. Then, I would need to provide a post-analysis evaluation by adding additional value to the output (Sa-5)". "Then there is that blurry boundary between physical reality and the virtual reality of the Metaverse, which can be intimidating, while on Open AI one has concrete advantages (Sa-5)". "Generative AI is easier to apply and is already ready to be implemented, while the Metaverse is still weak in terms of interoperability and connectivity (ITd-1)". "Generative AI has rapid application scenarios, with clear cost reductions. Therefore, in my opinion, it is much simpler at this moment to operate in that direction. So, rather than telling you that there is a preference between the two technologies, I would say that there is a market readiness issue (Sa-4)". "A lot of the money right now is flowing to generative AI. There's a clear competing market for these two technologies (F-2)".	
"With every new technology, even with mobile phones, the first adopters will always be businesses and then when it gets cheaper it will be consumers as well. What we expect is that companies will start first creating Metaverses (F-3)". "We suffer from a scalability issue. For example, if we participate in Career Days, it is clear that we cannot be the only ones in the Metaverse while others are physically present, so there must still be an adoption by the entire ecosystem in which we operate as a consulting company to make this happen (Sa-2)". "We cannot expect that all the candidates we want to interview have virtual reality glasses. Therefore, we cannot do everything in virtual reality (ITd-1)".	**Accountability of customers and end-users in facilitating the adoption of the Metaverse**

"I feel that Metaverse adoption is more B2C driven. If you look at the Web 3, the answer is quite clear: it's individuals owning wallets and buying NFTS. In terms of VR, most headsets have being used by individuals. In general I feel it's more coming from the consumer side (F-4)". "The Metaverses that already exist today are sparsely populated. So imagine a company that decides to use them. When you enter one of the most important Metaverses and there are only 5000 or 6000 people inside, the potential for communication is very limited. Therefore, companies might develop solutions within the Metaverse and then communicate them through traditional channels because there are still very few people in the Metaverse (Sa-6)".	
"Our main clients are certainly the largest ones, given the investments required. Especially if you want to rely on your own blockchain, a small client cannot easily access it at this time (Sa-4)". "My clients are mostly large companies. There are great tools in terms of democratization to make the Metaverse also available to smaller enterprises but the current economic situation, post pandemic era and war in Ukraine, is not bringing smaller companies into the position to invest heavily in the Metaverse (F-1)". "The main clients are either small, highly innovative companies or very large companies that heavily invest in new technologies (Sa-2)". "My major clients are either big hotel chains, or very tech small hotel chains (F-3)". "Big companies are always the first ones to move because they have enough cash to do so (F-3)".	**Large firms and small yet highly innovative companies**
"The thing I notice is a trend among retail customers to want to identify specific areas of application for three-dimensional spaces (Sa-4)". "Luxury is a very strong industry when it comes to the Metaverse. Anything tied to (big) three-dimensional objects has very strong Metaverse applications. This could be cars, real estate, aviation, aerospace (F-4)".	**Retail and gaming sectors**

"The Metaverse is expanding to many industries, but the majority of its applications is still in the retail domain (F-5)".

"In general the Metaverse lacks a little bit of practicality right now, but for brands and retail it makes complete sense (ITb-2)".

"The sectors that have gained the most interest are gaming and retail. The latter is the one in which, for now, the Metaverse has gained a little more ground, the one for which it has been easier to develop use cases (Sa-5)".

"Gaming is definitely one of the most developed industries within the theme of the Metaverse (Sa-3)".

Table 5: Interview quotes.

References

Aburbeian, A. M., Owda, A. Y., & Owda, M. (2022). A Technology Acceptance Model Survey of the Metaverse Prospects. *AI*, *3*(2), 285–302. https://doi.org/10.3390/ai3020018

Aghion, P., Bloom, N., Blundell, R., Griffith, R., & Howitt, P. (2005). Competition and Innovation: An Inverted-U Relationship*. *Quarterly Journal of Economics*, *120*(2), 701–728. https://doi.org/10.1162/0033553053970214

Bell, E., Bryman, A., & Harley, B. (2019). *Business research methods* (Fifth edition). Oxford University Press.

Cavicchioli, M. (2022). Accenture lancia Accenture Metaverse Continuum. Retrieved January 12, 2023, from https://cryptonomist.ch/2022/03/18/accenture-lancia-accenture-metaverse-continuum/

Chen, Z., Chen, K., & Cheng, J. C. (2022). ISM-based analysis of VR-AEC adoption barriers and their inner mechanisms. *Engineering, Construction and Architectural Management*. https://doi.org/10.1108/ECAM-01-2022-0085

Chiu, W.-H., Chi, H.-R., Chang, Y.-C., & Chen, M.-H. (2016). Dynamic capabilities and radical innovation performance in established firms: A structural model. *Technology Analysis & Strategic Management*, *28*(8), 965–978. https://doi.org/10.1080/09537325.2016.1181735

Christensen, C. M. (1997). *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Harvard Business School Press.

Christensen, C. M., Wang, D., & Bever, D. v. (2013). Consulting on the Cusp of Disruption. *Harvard Business Review*. Retrieved January 10, 2023, from https://www.readkong.com/page/consulting-on-the-cusp-of-disruption-8193502

Chui, M., Roberts, R., & Yee, L. (2022). McKinsey Technology Trends Outlook 2022 | McKinsey. Retrieved January 5, 2023, from https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-top-trends-in-tech

Clauß, T. (2017). Measuring Business Model Innovation: Conceptualization, Scale Development and Proof of Performance. *R& D Management*, *47*, 385–403. https://doi.org/10.1111/radm.12186

Cri□an, E. L., & Stanca, L. (2021). The digital transformation of management consulting companies: A qualitative comparative analysis of Romanian industry. *Information Systems and e-Business Management*, *19*(4), 1143–1173. https://doi.org/10.1007/s10257-021-00536-1

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. https://link.springer.com/content/pdf/10.1186/1471-2288-11-100.pdf?pdf=button

Daugherty, P. (n.d.). Enterprise Metaverse Services & Solutions | Accenture. Retrieved January 13, 2023, from https://www.accenture.com/us-en/services/metaverse-index

Daugherty, P. (2022). Group Chief Executive - Technology & Chief Technology Officer.

Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems : Theory and results* (Thesis). Massachusetts Institute of Technology. Retrieved May 30, 2023, from https://dspace.mit.edu/handle/1721.1/15192

Denzin, N. K. (1978). *Sociological methods: A sourcebook* (2d ed). McGraw-Hill.

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

Dwivedi, Y. K., Hughes, L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., Dennehy, D., Metri, B., Buhalis, D., Cheung, C. M., Conboy, K., Doyle, R., Dubey, R., Dutot, V., Felix, R., Goyal, D., Gustafsson, A., Hinsch, C., Jebabli, I., … Wamba, S. F. (2022). Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management: The Journal for Information Professionals*, *66*(100). https://doi.org/10.1016/j.ijinfomgt.2022.102542

Edmondson, A. C., & Mcmanus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1246–1264. https://doi.org/10.5465/amr.2007.26586086

FIRMSconsulting. (2020). McKinsey Solutions and McKinsey Analytics. Retrieved January 10, 2023, from https://www.firmsconsulting.com/blog/quarterly/mckinsey-solutions-mckinsey-analytics/

Freddi, D. (2017). Digitalisation and employment in manufacturing: Pace of the digitalisation process and impact on employment in advanced Italian manufacturing companies. *AI & SOCIETY*, *33*. https://doi.org/10.1007/s00146-017-0740-5

Gartner. (n.d.-a). Top Strategic Technology Trends for 2023: Metaverse. Retrieved January 5, 2023, from https://www.gartner.com/en/documents/4020026

Gartner. (n.d.-b). What Is a Metaverse? And Should You Be Buying In? Retrieved January 7, 2023, from https://www.gartner.com/en/articles/what-is-a-metaverse

Gioia, D., Corley, K., & Hamilton, A. (2012). Seeking qualitative rigor in inductive research: Notes on the Gioia Methodology. *Organizational Research Methods*, *16*, 15–31.

Greiner, L. E., & Metzger, R. O. (1983). *Consulting to Management*.

Hargadon, A., & Sutton, R. I. (1996). *Technology Brokering and Innovation: Evidence from a Product Design Firm*. Academy of Management Proceedings , pp. 229-233.

Heckman, J. J. (1979). Sample Selection Bias as a Specification Error. *Econometrica*, *47*(1), 153. https://doi.org/10.2307/1912352

Hennig-Thurau, T., Aliman, D. N., Herting, A. M., Cziehso, G. P., Linder, M., & Kübler, R. V. (2022). Social interactions in the metaverse: Framework, initial evidence, and research roadmap. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-022-00908-0

Herrman, J., & Browning, K. (2021). Are We in the Metaverse Yet? *The New York Times*. Retrieved January 7, 2023, from https://www.nytimes.com/2021/07/10/style/metaverse-virtual-worlds.html

Holstein, J. A., & Gubrium, J. F. (2008). *Handbook of Constructionist Research* [Google-Books-ID: _MkmsFn5NeQC]. Guilford Press.

Ivars, A. (2022). Council Post: Embracing The Metaverse: What New Skills Will Businesses Need To Succeed? [Section: Small Business]. Retrieved February 23, 2023, from https://www.forbes.com/sites/forbesbusinesscouncil/2022/03/29/embracing-the-metaverse-what-new-skills-will-businesses-need-to-succeed/

Jones, H. (2022). Role of Metaverse in Consulting | LinkedIn. Retrieved January 12, 2023, from https://www.linkedin.com/pulse/role-metaverse-consulting-henry-jones/

Krivokapić, J., Savić, M., & Čudanov, M. (2016). Development and trends in the management consulting industry. *Reshaping the future through sustainable business development and entrepreneurship. Symorg*, *1291*(19), 1305–1311.

Larsson, A., Andersson, N., Markowski, P., Nilsson, M., & Mayor, I. (2020). Consulting in the digital era? The role of tomorrow's management consultants. https://doi.org/10.4324/9780429317866-15

Lowry, P. B., Boh, W., Petter, S., & Leimeister, J. M. (n.d.). Call for Submission to the Special Issue Fostering the Design and Governance of the Metaverse. Retrieved January 7, 2023, from https://www.jmis-web.org/cfp

MacMillan, I., & Gunther McGrath, R. (2002). Crafting R&D Project Portfolios. *Research-Technology Management*, *45*, 48–59.

Maister, D. H. (1997). *Managing the professional service firm*. Free Press.

McKinsey. (n.d.-a). Solutions | McKinsey & Company. Retrieved January 10, 2023, from https://www.mckinsey.com/solutions

McKinsey. (n.d.-b). Value creation in the metaverse | McKinsey. Retrieved January 5, 2023, from https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/value-creation-in-the-metaverse

McKinsey. (2022). Marketing in the metaverse: An opportunity for innovation and experimentation | McKinsey. Retrieved January 9, 2023, from https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/marketing-in-the-metaverse-an-opportunity-for-innovation-and-experimentation

Messinger, P. R., Stroulia, E., Lyons, K., Bone, M., Niu, R. H., Smirnov, K., & Perelgut, S. (2009). Virtual worlds — past, present, and future: New directions in social computing. *Decision Support Systems*, *47*(3), 204–228. https://doi.org/10.1016/j.dss.2009.02.014

Metaversed. (n.d.). Metaversed. Retrieved January 12, 2023, from https://www.metaversed.consulting/blog/mcdonalds-enters-the-metaverse

Mystakidis, S. (2022). Metaverse [Number: 1 Publisher: Multidisciplinary Digital Publishing Institute]. *Encyclopedia*, *2*(1), 486–497. https://doi.org/10.3390/encyclopedia2010031

Nissen, V. (2018). Digital Transformation of the Consulting Industry—Introduction and Overview. In V. Nissen (Ed.), *Digital Transformation of the Consulting Industry: Extending the Traditional Delivery Model* (pp. 1–58). Springer International Publishing. https://doi.org/10.1007/978-3-319-70491-3_1

O'Mahoney, J. (2013). Management Innovation in the UK Consulting Industry. In K. Haynes & I. Grugulis (Eds.), *Managing Services* (1st ed., pp. 83–104). Oxford University PressOxford. Retrieved May 22, 2023, from https://academic.oup.com/book/43801/chapter/368196148

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in Qualitative Research. *Journal of Nursing Scholarship*, *33*(1), 93–96. https://doi.org/10.1111/j.1547-5069.2001.00093.x

Palmisano, G. (2022). Milan-Fiorentina nel Metaverso: Un altro gol della Lega Serie A. Retrieved January 10, 2023, from https://laragione.eu/life/sport/milan-fiorentina-nel-metaverso-un-altro-gol-della-lega-serie-a/

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, *34*(5 Pt 2), 1189–1208. Retrieved May 30, 2023, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/

Payne, A. (1986). NEW TRENDS IN THE STRATEGY CONSULTING INDUSTRY. *Journal of Business Strategy*, *7*(1), 43–55. https://doi.org/10.1108/eb039141

Pohl, R. F. (Ed.). (2016). *Cognitive Illusions: Intriguing Phenomena in Judgement, Thinking and Memory* (2nd ed.). Psychology Press.

Polit, D. F., & Beck, C. T. (2008). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed). Wolters Kluwer Health/lippincott Williams & Wilkins. Retrieved May 30, 2023, from http://catdir.loc.gov/catdir/toc/ecip0711/2007006184.html

Poulfelt, F., & Greiner, L. (2010). *F. Poulfelt, & L. Greiner, Management Consulting Today and Tomorrow: Perspectives and Advice from 27 Leading World Experts*.

Purdy, M. (2022). How the Metaverse Could Change Work. *Harvard Business Review*. Retrieved February 23, 2023, from https://hbr.org/2022/04/how-the-metaverse-could-change-work

Queiroz, M. M., Fosso, W. S., Pereira, S. C. F., & Chiappetta, J. C. J. (2023). The metaverse as a breakthrough for operations and supply chain management: Implications and call for action. *International Journal of Operations & Production Management*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/IJOPM-01-2023-0006

Robson, C. (2002). *Real world research: A resource for social scientists and practitioner-researchers* (2nd ed). Blackwell Publishers.

Roover. (2022). Roover Metaverse Consulting: Strategic Metaverse Consultancy. Retrieved January 12, 2023, from https://roover.eu/en/metaverse-consulting/

Sabath, R. E., & Kubr, M. (1977). Management Consulting, a Guide to the Profession. *Journal of Marketing Research*, *14*(3), 422. https://doi.org/10.2307/3150794

Sarvary, M. (1999). Knowledge Management and Competition in the Consulting Industry. *California Management Review*, *41*(2), 95–107. https://doi.org/10.2307/41165988

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. Pearson Education.

Schmidt, M. N., Banusch, B., Sahin, O., & Stefanoski, D. (2022). As the metaverse evolves, how can we transform barriers into enablers? Retrieved February 23, 2023, from https://www.ey.com/en_ch/technology/as-the-metaverse-evolves-how-can-we-transform-barriers-into-enablers

School-Newark, R. B., & Brunswick, N. (2022). Challenges facing the adoption of Web3 and the metaverse. Retrieved February 23, 2023, from https://www.business.rutgers.edu/business-insights/challenges-facing-adoption-web3-and-metaverse

Setiawan, K. D., Anthony, A., Meyliana, & Surjandy. (2022). The Essential Factor of Metaverse for Business Based on 7 Layers of Metaverse – Systematic Literature Review. *2022 International Conference on Information Management and Technology (ICIMTech)*, 687–692. https://doi.org/10.1109/ICIMTech55957.2022.9915136

Sparkes, M. (2021). What is a metaverse and why is everyone talking about it? Retrieved January 10, 2023, from https://www.newscientist.com/article/2286778-what-is-a-metaverse-and-why-is-everyone-talking-about-it/

Stackpole, T. (2022). Exploring the Metaverse. *Harvard Business Review*. Retrieved January 7, 2023, from https://hbr.org/2022/07/exploring-the-metaverse

Stake, R. E. (1995). *The Art of Case Study Research*. SAGE.

States, D. U. (2022). The Future of the Metaverse. Retrieved January 9, 2023, from https://www2.deloitte.com/us/en/pages/technology/articles/what-does-the-metaverse-mean.html

Statista. (2022). Global consulting market size. Retrieved January 11, 2023, from https://www.statista.com/statistics/466460/global-management-consulting-market-size-by-sector/

Tanda, A., & Schena, C.-M. (2019). *FinTech, BigTech and Banks: Digitalisation and Its Impact on Banking Business Models*. Springer.

Tavoletti, E., Kazemargi, N., Cerruti, C., Grieco, C., & Appolloni, A. (2021). Business model innovation and digital transformation in global management consulting firms. *European Journal of Innovation Management*, *25*(6), 612–636. https://doi.org/10.1108/EJIM-11-2020-0443

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, *28*(13), 1319–1350. https://doi.org/10.1002/smj.640

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management.

Terzi, N. (2011). The impact of e-commerce on international trade and employment. *Procedia - Social and Behavioral Sciences*, *24*, 745–753. https://doi.org/10.1016/j.sbspro.2011.09.010

Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, *27*(2), 237–246. https://doi.org/10.1177/1098214005283748

Turk, B. (2022). Five types of consulting - which is best for you? Retrieved January 10, 2023, from https://gradaustralia.com.au/career-planning/five-types-of-consulting-which-is-best-for-you

Turner, J. H. (2001). Positivism: Sociological. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 11827–11831). Pergamon. Retrieved January 18, 2023, from https://www.sciencedirect.com/science/article/pii/B0080430767019410

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, *28*(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003

von Leipzig, T., Gamp, M., Manz, D., Schöttle, K., Ohlhausen, P., Oosthuizen, G., Palm, D., & von Leipzig, K. (2017). Initialising Customer-orientated Digital Transformation in Enterprises. *Procedia Manufacturing*, *8*, 517–524. https://doi.org/10.1016/j.promfg.2017.02.066

Wade, Macaulay, Noronha, & Barbier. (2017). Amazon.com: Orchestrating Transformation: How to Deliver Winning Performance with a Connected Approach to Change.

Yawised, K., Apasrawirote, D., & Boonparn, C. (2022). *From traditional business shifted towards transformation: The emerging business opportunities and challenges in 'Metaverse' era*.

Zabel, C., O'Brien, D., & Natzel, J. (2023). Sensing the Metaverse: The microfoundations of complementor firms' dynamic sensing capabilities in emerging-technology ecosystems.