

The Social Impact of Emerging Metaverse Business Models as Continuously Evolving and Innovative Environments



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Abstract

The metaverse is progressively being recognized as the next evolution of the mobile internet, offering the potential for major shifts in both markets and lifestyles. Its swift development calls for a deeper understanding of how it can drive innovation in business models. Business model innovation, essential for sustaining competitive advantage, is shaped by various external factors, such as technological disruptions. Although much of the research has focused on these external influences, there is an increasing interest in how emerging technologies like the metaverse are fueling business model innovation. However, specific studies on the metaverse's direct impact are limited. Industry experts categorize metaverse businesses into four types: infrastructure development, physical goods production, customer experience transformation, and marketing/branding adaptation. These range from creating metaverse technology foundations to producing immersive devices and offering innovative marketing strategies. As the metaverse evolves, so will these business types, adapting to technology and user needs. It is important to explore metaverse business models, identifying patterns by merging market and innovation orientations with evolutionary and positioning views of business model innovation.

Keywords: *Metaverse, Market Dynamics, Business Model Innovation, Sustainability, Digital Marketing,*

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This article introduces a classification system for business models in the fast-changing metaverse, highlighting distinctive patterns of innovation. By merging two theoretical frameworks, it blends evolutionary and positioning perspectives on business model innovation with market and innovation orientations. This approach yields **four main metaverse strategy categories**: market-driven, market-driving, market shaping, and market-creating, each divided into two distinct archetypes, resulting in eight overall. Then various companies are categorized into these archetypes, offering insights into business model innovation in the metaverse. Additionally, it incorporates a framework on social sustainability, extending the analysis beyond market dynamics to include social performance considerations in the metaverse business models.

The following view integrates two conceptual frameworks to understand metaverse business models. The first combines the evolutionary and positioning views of business model innovation. The evolutionary view focuses on incremental changes based on local problem-solving, while the positioning view emphasizes unique market activities and managerial cognition. The second framework contrasts market orientation, which prioritizes customer needs, with innovation orientation, focused on novel product development. These frameworks yield four strategic market-based approaches: market-driven, market-driving, market shaping, and market-creating. Each approach offers different strategic options for companies, from understanding and responding to market preferences to creating entirely new markets.

Metaverse Business Model Archetypes

The interplay of these dimensions results in four strategic panes in the metaverse, each with two contrasting perspectives, leading to a total of eight archetypes. **Figure 1** outlines this taxonomy. The archetypes range from market-driven models that respond to consumer needs to market-creating models that introduce novel solutions and create new demand.

(1) Market-driven models in the metaverse focus on satisfying consumer demands through research-driven product development and marketing.

(2) Market-driving models aim to shape market development, using the metaverse to establish unique value propositions.

(3) Market-shaping models use metaverse technologies to influence market structure and behaviors, aiming to create favorable environments for all market players.

(4) Market-creating models seek to forge new markets, identifying and filling unmet needs within the metaverse.

The metaverse business model archetypes outlined here offer a nuanced view of how companies can strategically utilize metaverse technologies for market engagement and innovation. These models provide insights for various industries, helping to navigate the evolving landscape of the metaverse.

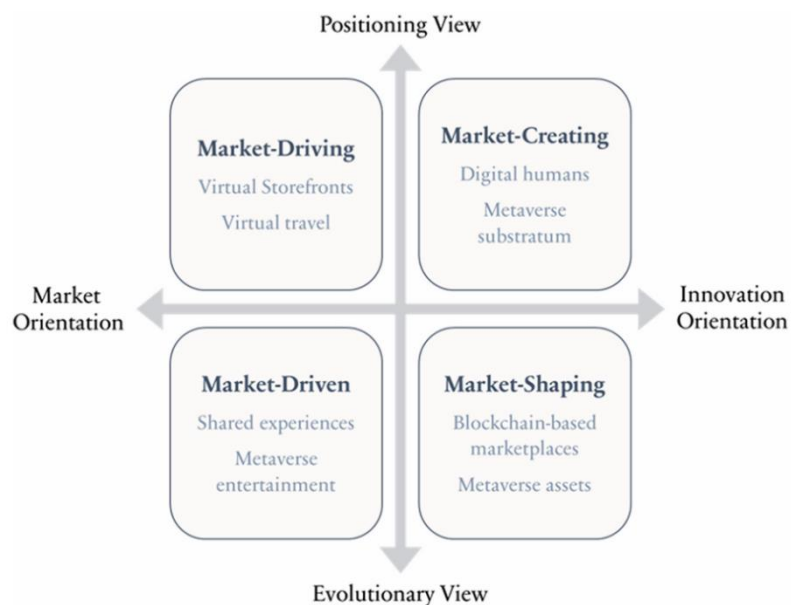


Fig. 1. Taxonomy of metaverse business models

Social Sustainability of Metaverse Business Models

Social sustainability has become a central focus in emerging business models, driven by a combination of various factors. As global awareness grows regarding issues like community development, inequality, and human rights, companies are recognizing the importance of integrating these factors into their business model innovation. Social sustainability is concerned with preserving and enhancing social well-being, prioritizing empowerment, social justice, and welfare. It emphasizes the fair distribution of the benefits of growth and development across communities, while also honoring cultural diversity.

Furthermore, adopting socially sustainable practices empowers firms to cultivate trust and loyalty among their customers, employees, and stakeholders. This trust is increasingly crucial as individuals base their decisions on ethical considerations and corporate responsibility. Sustainable businesses today consider a comprehensive spectrum of environmental, economic, and social factors when making critical business decisions. These organizations diligently monitor the impact of their operations to ensure that short-term profits do not translate into long-term liabilities. In the context of the metaverse, where interactions and transactions are rapid and far-reaching, the significance of social sustainability is notably magnified. Businesses operating in the digital environment must navigate the complexities ethically, ensuring that digital progress fosters inclusive, secure, and equitable spaces. Prioritizing social sustainability not only allows businesses to make a positive societal impact but also positions them as trailblazers and innovators in an increasingly conscientious market. This strategic approach not only mitigates potential risks associated with social concerns but also unlocks new opportunities by creating value that resonates with a broader spectrum of stakeholders.

Ultimately, it leads to the development of a more resilient and adaptable business model, well-equipped to respond to evolving social dynamics. Emerging business models in the metaverse hold the potential to significantly influence social sustainability by intertwining technological progress with wider societal implications. Through their diverse applications, the new business models in the metaverse possess immense capacity to affect social sustainability. They promise groundbreaking solutions to age-old issues while introducing fresh challenges that require prudent management. The overall impact hinges on the development and execution of these models, underscoring the necessity for responsible innovation and inclusive strategies. The following are some aspects of how they can impact social sustainability in the literature:

- *Enhanced Access to Services and Opportunities:* The metaverse can democratize access to education, healthcare, and employment by creating virtual spaces where resources and opportunities are more widely accessible, regardless of geographic location. This potential reduction in inequalities and improvement in social inclusion contributes to a more sustainable society.
- *Community and Identity:* The metaverse allows for the formation of new communities and social interactions that transcend physical boundaries. This can foster inclusivity and understanding among diverse groups, helping to build a more cohesive and resilient society. However, it can also pose challenges to identity and raise questions about authenticity and representation.
- *Cultural Preservation and Promotion:* Virtual environments can be used to preserve and promote cultural heritage. Museums, art, and historical sites can be replicated and experienced in the metaverse, making culture more accessible and aiding in its preservation.
- *Health and Wellbeing Enhancement:* Virtual environments offer innovative avenues to enhance health and well-being, from delivering platforms for mental health assistance to encouraging physical activity through gamified experiences. Nevertheless, challenges related to addiction, seclusion, and the effects of extended virtual interaction on physical and mental health are concerns that require attention and resolution.

- *Education and Skill Enhancement*: The metaverse has the potential to transform education and skill acquisition, offering immersive and interactive learning environments that are more captivating and efficacious. This could result in a populace that is better educated and possesses a broader array of skills, which in turn contributes to social sustainability.
- *Work-Life Balance and Remote Work*: As the metaverse facilitates more immersive and engaging forms of remote work, it could provide avenues for improved work-life balance. Nonetheless, it may also obscure the lines between personal and professional life, eliciting concerns about privacy and the evolving nature of work.
- *Ethical and Regulatory Considerations*: The metaverse presents substantial ethical dilemmas, ranging from data privacy and security to the repercussions of virtual conduct on real-world activities. Guaranteeing that the metaverse is crafted and governed in a manner that fosters social benefit is essential to its impact on social sustainability
- *Digital Divide*: Although the metaverse holds the promise of numerous advantages, there is a concern that it might intensify existing inequalities if the access to requisite technology is inequitably distributed. Bridging the digital divide is essential to ascertain that the advantages of the metaverse are accessible to everyone.

Conclusions

This article's exploration into the metaverse's business model innovation offers a comprehensive taxonomy, encompassing various strategies and archetypes. It bridges two conceptual frameworks: the evolutionary and positioning views of business model innovation with market and innovation orientations. This integration leads to four strategic approaches: market-driven, market-driving, market-shaping, and market creating, each with distinct archetypes. This taxonomy not only categorizes companies within the metaverse but also provides critical insights for business model innovation in this emerging domain.

Moreover, the analysis is extended to include the aspect of social sustainability in metaverse business models. It emphasizes the importance of integrating social considerations into business strategies, highlighting how metaverse technologies can potentially impact various facets of social sustainability. These include enhanced access to services, community and identity formation, cultural preservation, health and wellbeing enhancement, education and skill development, work-life balance in remote work, ethical and regulatory challenges, and bridging the digital divide.

The metaverse, as a rapidly advancing technological space, presents both opportunities and challenges. Its business models, constantly evolving with the technology and user needs, have the potential to significantly influence social dynamics. The focus on social sustainability underscores the need for responsible innovation and inclusive strategies in the metaverse. As companies navigate this new digital landscape, understanding and applying these business model archetypes will be crucial for success, ensuring that technological progress aligns with broader societal goals and contributes positively to the social fabric.

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