

# Entrepreneurship in Metaverse Real Estate: A Comprehensive Review

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## ABSTRACT

The evolution of the metaverse collective virtual environment with shared immersion that includes virtual reality (VR), augmented reality (AR), blockchain, and internet technologies has created new entrepreneurial opportunities, particularly in virtual real estate. Metaverse real estate is blockchain-backed virtual land parcels that can be bought, sold, developed, and rented out in virtual worlds such as Decentraland, The Sandbox, and others. Unlike traditional physical property, ownership in the metaverse is guaranteed through non-fungible tokens (NFTs) to enable transparent and irrevocable proof of ownership. The new digital asset class has created novel entrepreneurial opportunities, including property development, virtual renting, event planning, advertising, and real estate services for virtual properties. Immersive technologies are utilized by entrepreneurs here to develop interactive 3D environments, so it is now possible to provide customers with experiences that are not limited by geography and physics. Virtual real estate development involves building interactive digital properties such as virtual offices, malls, galleries, and entertainment hubs, which can be commercialized via rentals, ticketing, sponsorships, and advertising. Early adopters have realized significant returns on investments, with

some virtual plots appreciating by over 500% within months, underscoring the lucrative potential of this emerging market. The metaverse also fosters a democratized and inclusive entrepreneurial ecosystem by lowering classical entry barriers. Virtual businesses require less physical infrastructure and less up-front investment, and entrepreneurs can experiment, prototype, and test business models with less capital exposure. Moreover, the global connectedness of the metaverse enables collaboration across heterogeneous expertise and markets, accelerating innovation and business scaling. This review paper integrates available scientific literature and scrutinizes entrepreneurship in metaverse real estate in terms of market dynamics, technological underpinnings, entrepreneurial strategies, challenges, and opportunities.

Keywords: Entrepreneurship, Metaverse, Real Estate

## I. INTRODUCTION

The metaverse is a digital engagement paradigm that fuses interactive virtual worlds with economic ventures. Virtual real estate as tracts of digital land or property in a metaverse platform has emerged as a significant asset class for investors and entrepreneurs. The contrast between metaverse real estate and traditional real estate is that

metaverse real estate is purely digital, with ownership granted through blockchain-based non-fungible tokens (NFTs) (5). This market for digital assets is growing extremely fast, led by technological advance and growing adoption by users.

Entrepreneurship in Metaverse real estate has the potential to transcend the limitations of attrition entrepreneurship by fostering genuine value creation and societal wealth enhancement. Unlike traditional forms of attrition entrepreneurship (Farzpourmachiani M. and Farzpourmachiani A., 2024) such as war-driven industries or exploitative practices that capitalize on existing resources without innovation, Metaverse real estate leverages cutting-edge technology to develop new, immersive virtual environments. This form of entrepreneurship is inherently innovative, offering unique opportunities for economic dynamism by creating novel experiences and spaces in the digital realm.

The Metaverse allows entrepreneurs to design and construct virtual properties with distinct intellectual property (IP), establishing a framework where innovation thrives through protected creative assets. By emphasizing IP rights, these ventures not only secure proprietary technologies but also encourage ongoing investment into developing unique digital architectures, interactive platforms, and experiences that can adapt and grow over time.

Moreover, Metaverse real estate contributes to long-term societal well-being by enabling diverse applications such as virtual tourism, education, remote workspaces, and cultural exchanges. These uses foster global connectivity and inclusivity, transcending geographical limitations and reducing the carbon footprint associated with physical infrastructure development. By doing so, Metaverse real estate drives economic growth through sustainable, innovative practices that align with future societal needs.

In essence, entrepreneurship in Metaverse real estate represents a departure from short-term gains characteristic of attrition entrepreneurship. Instead, it exemplifies genuine innovation by developing new value propositions and enhancing both individual experiences and collective societal wealth through strategic use of IP and technological advancements (1).

## **II. METAVERSE REAL ESTATE MARKET OVERVIEW**

The global metaverse real estate market is projected to expand exponentially from a

preliminary USD 4.12 billion in 2025 to approximately USD 67.40 billion by 2034 at a compound annual growth rate (CAGR) of 36.55% (3). The market is led by North America at 35% in 2024 and projected to hit USD 16.64 billion by 2034. It is driven by increasing business investment and individual engagement in virtual land acquisition and development (3).

Blockchain technology is the enabler through enabling transparency, security, and efficiency in virtual property transactions. Smart contracts substitute intermediaries with peer-to-peer transactions that have tamper-proof records, thus fostering trust in the ecosystem (3, 6). Virtual auctions and decentralized marketplaces also enhance liquidity and price discovery in this emerging market (3).

## **III. ENTREPRENEURIAL OPPORTUNITIES IN METAVERSE REAL ESTATE**

Entrepreneurs can tap into several opportunities in metaverse real estate, including:

- **Virtual Land Acquisition and Development:** Purchase, sale, and development of virtual land parcels to construct immersive experiences such as virtual offices, galleries, gaming arenas, and branded ecosystems (2, 6).
- **Virtual Commerce and Monetization:** Hosting global events, virtual showrooms, and NFT exhibitions to generate revenue streams from advertising, sponsorships, and digital asset sales (2, 6).
- **PropTech Innovation:** Leveraging AI, VR, blockchain, and IoT to create data analytics tools, virtual tours, smart contracts, and real estate management solutions designed especially for virtual environments (4).
- **Decentralized Finance (DeFi) Applications:** Deploying blockchain-based financial products in an effort to lend, lease, and invest in virtual properties (2).

These opportunities require entrepreneurial vision and early initiative, as with businesses like Prager Metis International LLC investing significant sums (e.g., \$35,000 for a three-story virtual office in Decentraland) in getting a foothold in the metaverse (7).



**Image 1:** Image 1 displays the top business opportunities within the Metaverse, including some that are discussed in the accompanying text and others that are not. The image is sourced from PixelPlex (<https://pixelplex.io/blog/best-metaverse-business-opportunities/>).

#### IV. MARKET DYNAMICS AND VALUATION

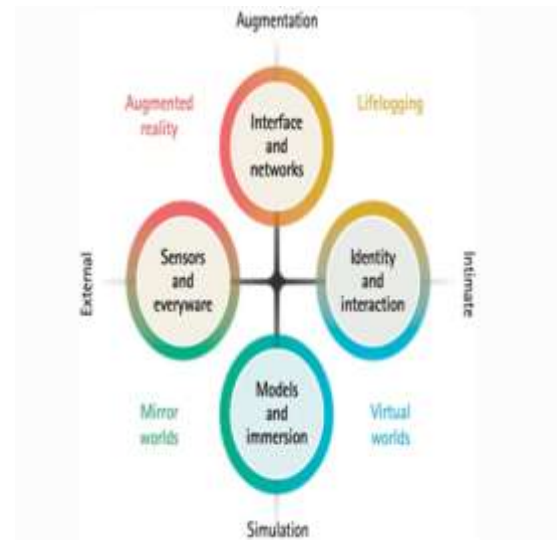
Virtual property value studies, such as studies of Decentraland, indicate that while some traditional real estate concepts apply in particular, the importance of location and spatial characteristics virtual real estate markets exhibit distinctive speculative and volatility characteristics (5). Their price fluctuations are linked to the rates of platform adoption, the movement of cryptocurrency markets, and the degree of user engagement and are thus distinct from the physical real estate markets (5, 6).

The buy segment dominates the market with a 47% market share, reflecting strong demand for the ownership of digital assets. The sell segment is growing aggressively, supported by safe transactions through blockchain and virtual auctions that render the market transparent and competitive (3).

#### V. ENTREPRENEURIAL LEARNING AND OPPORTUNITY EXPLOITATION IN THE METAVERSE

Metaverse real estate entrepreneurial success is contingent upon personal entrepreneurial characteristics (PEC) and metaverse environment characteristics (MEC). The literature indicates that entrepreneurial learning (EL) is influenced by innovativeness, risk-taking, and adaptability, while some characteristics such as metaverse scalability have minimal influence on EL (8).

Having knowledge of such dynamics enables entrepreneurs to better capitalize on emerging opportunities and cope with the evolving digital environment.



**Image 2:** A diagram of the 4 types of Metaverse according to Metaverse Roadmap Summit (Kye et al., 2021).

#### VI. CHALLENGES AND RISKS

Although with potential, entrepreneurialism in metaverse real estate is faced with many issues:

**Legal and Regulatory Issues:** Rights over intellectual property, privacy, taxation, and jurisdictional doubts make virtual property ownership and transactions challenging (2).

**Technical Issues:** Interoperability among platforms, virtual world scalability, and cyber threats are predominant issues (2).

**Economic Risks:** Market volatility, speculative bubbles, and uncertain sustainable revenue models increase risk of investment (2, 5).

**Social and Ethical Concerns:** Blockchain technology's digital addiction, inclusiveness, and environmental impact need thoughtful consideration (2).

#### VII. FUTURE TRENDS AND SUGGESTIONS:

In order to harness metaverse real estate entrepreneurship, stakeholders are required to:

- Embrace blockchain and NFT technologies for safe, transparent ownership and transactions (3, 6).
- Develop innovative PropTech solutions based on AI, VR, and data analytics to enhance user experience and operational efficiency (4).

- Develop regulatory frameworks that establish legal status and protect stakeholders (2).
- Highlight entrepreneurial learning and adaptability to oversee the fast-changing metaverse environment (8).
- Examine sustainable business models that harmonize speculative interests with long-term value creation (5).

The demand for virtual land is expected to rise sharply, fostering vibrant virtual neighborhoods, commercial hubs, and entertainment districts. This research delves into the risks and challenges of entrepreneurship in metaverse real estate, including legal and regulatory uncertainties, security concerns, technical difficulties, and issues of digital inclusivity. The metaverse represents a new paradigm for real estate, offering unique opportunities for expansion and virtual property management. Virtual assets, such as plots of land in the metaverse, can be traded and developed, opening a novel market for real estate agents, digital creators, and investors. It also revolutionizes how potential buyers explore properties, providing more immersive and interactive virtual tours compared to traditional online listings or 3D walkthroughs. Additionally, it offers fresh possibilities for property staging and showcasing various design or renovation options, enhancing the purchasing experience. As real estate ventures extend into the metaverse, developers and architects have a unique chance to pioneer virtual property creation, designing distinctive digital environments that cater to businesses, individuals, and groups—from virtual offices for remote teams to digital tourism simulations. Yet, integrating the metaverse into real estate comes with challenges such as unclear legal frameworks, security vulnerabilities, and technological hurdles. This paper aims to investigate these issues and offer guidance for entrepreneurs and real estate companies looking to explore this emerging domain. Ensuring robust privacy and security measures is critical as virtual property transactions become more widespread. Real estate firms must prioritize data protection and foster user trust within the metaverse to safeguard sensitive information and maintain integrity. Employing encryption, multi-factor authentication, and secure payment systems can help mitigate cyber threats and unauthorized access. Navigating the metaverse's regulatory landscape requires collaboration with policymakers and regulators to establish clear, comprehensive rules for virtual real

estate dealings. Active advocacy by real estate organizations is essential to shape policies that address legal, ethical, and consumer protection concerns. By promoting regulatory clarity, firms can achieve compliance, reduce legal risks, and boost investor confidence in virtual real estate ventures (10-15).

## VIII. CONCLUSION

Metaverse real estate entrepreneurship is an emerging frontier with vast space for innovation, investment, and economic development. Convergence of blockchain, immersive technology, and decentralized finance is transforming real estate paradigms, creating a dynamic digital economy. Despite challenges, entrepreneurial strategic entry and technological advancement will keep propelling market maturation and expansion in this new space. In conclusion, metaverse real estate entrepreneurship represents a new horizon in digital innovation, weaving together technology, creativity, and business in new and unprecedented ways. With the power of immersive technology, blockchain security, and global networks, entrepreneurs can tap into new business models and revenue streams while shaping the future of real estate and digital economies. Continued research along with flexible regulatory frameworks will be required to fully realize the potential of this emerging ecosystem.

The emergence of the metaverse has created fresh opportunities for businesses, entrepreneurs, and consumers, revolutionizing how industries operate and engage with their audiences. This expanding virtual realm enables entrepreneurs to develop innovative products, services, and immersive experiences. This study examines the new entrepreneurial prospects and challenges within the metaverse. Business models such as virtual property development, non-fungible tokens, and interactive experiences are prominent examples leveraging the metaverse. Entrepreneurs benefit from access to a global market, enhanced consumer engagement, and novel monetization methods for virtual goods and services. However, they also face obstacles related to technology, market dynamics, and shifting consumer preferences. The real estate sector, in particular, holds significant potential to capitalize on this growth, ranging from construction and design to showcasing properties and closing sales. With rapid advancements in the metaverse, trends in virtual real estate and augmented reality adoption are set to transform how people interact, work, and entertain themselves digitally.



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