# Chapter 11

# Metaverse and Digital Twins:
## An Opportunity to Increase Retailers' Profitability? An Exploratory Research Using Nike Case Study and Retail Managers' In-Depth Interviews

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## ABSTRACT

*The purpose of this research is to assess the opportunity to increase retailers' profitability through metaverse stores, digital spaces, and digital twins. An exploratory methodology using Nike pioneer case studies and in-depth interviews with retail managers was used. The case studies analysis focused on the Nikeland store on Roblox and the Nike virtual store in Milan through Matterport 3D technology. Additionally, five retail managers were interviewed expressing their perceptions about the advantages, disadvantages and risks, and challenges and precautions in the implementation of metaverse stores and digital twins in their organizations. The findings demonstrate that these technologies have the potential to increase sales growth, market share, capital-to-labor ratio and promotion efforts, and therefore retailers' profitability. Moreover, the implementation can reduce inventory levels and operational costs improving the overall efficiency and profitability of retailers. The study also identified key measures to be considered when implementing these technologies.*

## INTRODUCTION

Retail businesses must consistently expand their network of sales outlets and channels in order to sustain and enhance their profitability, sales and customer traffic. Failing to progress their physical and online stores, apps, and other sales channels will result in a reduction in market share as competition from other retailers increases and emerging technological advancements create additional competing marketing and

sales avenues vying for customer attention and expenditure (Kumar et al, 2017; Pratas & Brito, 2019). Presently the retail industry is experiencing the effects of new technologies, such as metaverse stores, digital twins and digital spaces (Dwivedi et al, 2022). However, given the novelty of these technologies, most retailers are either in the initial stages of adoption or have yet to embrace them. According to TLT (2022), only 12% of the top UK retailers have integrated this metaverse technology and 39% have plans to do so in the future.

The number of people adopting the metaverse is skyrocketing. Statista (2022a) forecasts that by 2026, about a quarter of the world's population will spend at least an hour a day on metaverse platforms, with 30% of companies tailoring their offerings to the metaverse. In metaverse-based e-commerce, market forecasts predict significant growth from $22.72 billion in 2023 to $201.8 billion by 2030, an astounding 36.6% annual growth rate (Statista, 2022b). This growth rate far outpaces retail actual average growth rates, where the world's top 250 retailers saw a meager 8.5% increase in revenue in 2023 (Deloitte, 2023). Furthermore, estimates until 2026 suggest that physical retail will only experience a 3.47% average annual growth, while e-commerce is expected to grow by 13.85% per annum (Statista, 2022c).

Thus it is important to research Metaverse retailing, digital spaces, and digital twins technologies as they are essential to the future growth and profitability of the retail industry. Their importance as sales channels will continue to expand, and it is crucial to evaluate their expected profitability impacts, advantages, disadvantages and risks, challenges and precautions in their operationalization. Despite the increase in research on retail in the metaverse and user experience, a gap exists in understanding what motivates retailers to adopt Metaverse retailing and its direct impact on their bottom line (Dwivedi et al., 2022).

## BACKGROUND

## Determinants of Retailer Profitability and Impacts of Operating in Metaverse Retailing Environments

Cronin (1985) has demonstrated that retailers who employ specific marketing strategies tend to have higher levels of profitability, as assessed by Return on Total Assets (ROTA). His findings indicate that there is a positive correlation between profitability and factors like sales growth, improved market share and capital-to-labor intensity, in addition to greater relative promotion efforts. In contrast, inventory levels have an inverse relationship with profitability.

To increase sales, retailers must attract more customers, increase transaction frequency per customer, and raise the average transaction size (Kaufman, 2020). Metaverse stores have the potential to increase the number of customers, transaction frequency per customer, and average transaction size, particularly among Generation Z consumers who enjoy digital engagement and seek immersive buying experiences uniquely offered by the Metaverse (Periyasami & Periyasami, 2022). As such, the Metaverse can act as a novel touchpoint and distribution channel for retailers (Breiter & Siegfried, 2022). Various studies demonstrate that omnichannel customers earn more sales for retailers than those who only shop online or offline (Kumar & Venkatesan, 2005; Thomas & Sullivan, 2005). Retailers are therefore focusing on building an omnichannel value proposition that integrates different sales channels and touchpoints to take advantage of this trend and boost sales growth by adopting the Metaverse as one of these new channels (Verhoef et al., 2015; Verhoef, 2021).

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