

Chapter 23

Embracing the Future of Retail With Virtual Try-On Technology

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ABSTRACT

This chapter provides an overview of virtual try-on technology and its potential impact on the retail industry. It defines the technology and its various types, including AR, VR, and 3D modeling. The chapter also discusses the benefits of virtual try-on technology, including improved customer engagement, reduced return rates, and increased sales. However, the chapter also explores the limitations of the technology, such as technical constraints and cost barriers. Privacy and ethical considerations are also discussed. The chapter examines the future of virtual try-on technology, particularly the potential impact of emerging technologies such as 5G, AI, and AR/VR. It emphasizes the need for retailers to invest in this technology and prioritize user experience to stay competitive and meet changing consumer needs. Overall, this chapter provides a comprehensive overview of virtual try-on technology and its significance in the digital age of retail.

1. INTRODUCTION

Over the past few decades, there has been a tremendous revolution in the retail sector, driven by changes in customer behaviour and technological improvements (Shankar et al., 2021). The emergence of e-commerce has completely changed the game by allowing customers to shop whenever they want, from anywhere. To deliver a pleasurable shopping experience that rivals the in-store experience, for example, has proven to be a new challenge for retailers as a result of this shift (Arora and Verma, 2019).

DOI: 10.4018/979-8-3693-0049-7.ch023

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Introducing virtual try-on. Retailers looking for fresh approaches to communicate with customers and give them a more engaging and dynamic shopping experience are increasingly implementing this cutting-edge technology. Customers can virtually try on things, such as apparel or accessories, in a simulated setting without having to make physical contact. To give users a realistic and dynamic experience, it makes use of a variety of approaches, including augmented reality (AR), virtual reality (VR), and 3D modelling (Bonetti et al., 2019, Dacko, 2017, Liu11 et al., 2018). The Figure 1 shows the market shear of AR in Retail.

Figure 1. AR in retail market research report 2022-2028

Source: Alam et al. (2022)



The capacity of virtual try-on to address a number of difficulties faced by retailers is the reason for its rising popularity. First off, by giving customers a more engaging and immersive experience with the product, it improves consumer engagement and happiness. Secondly, it can reduce return rates and associated costs by allowing customers to make more educated purchasing decisions (Violante et al., 2019). Finally, because technology enables customers to more clearly perceive the product and its features, virtual try-on can result in higher sales and revenue.

Virtual try-on does have some restrictions and difficulties, though. This article will examine the potential of virtual try-on technology and its implications on the future of retail management. Technical constraints and economic obstacles may prevent its adoption, while user experience issues and ethical and privacy concerns may also surface (Xi et al., 2022). The article's thesis is that businesses may improve customer experiences, lower return rates, and boost sales by utilising virtual try-on technology, which is a game-changer. The essay will go into greater detail about the advantages and drawbacks of virtual try-on, the effects it has had on the retail sector, and the potential and difficulties it brings for merchants. By the end of this essay, readers will have a better grasp of how virtual try-on technology may help shops stay competitive and fulfil the changing needs of consumers in the digital age.

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