Chapter 17
Virtual Experiences, Real Consequences:
How Virtual Reality Transforms Consumer Behavior in E-Commerce

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ABSTRACT

According to Business Wire, the e-commerce market in India is expected to reach US$107.3 billion in 2023 and attract more players in online retailing. E-commerce is essentially backed by technology, and it can be assumed that e-commerce users are tech savvy, seek solutions in technology. VR is one of the important components of artificial intelligence transforming online retail experience to a large extent. The chapter explores the transformative effects of VR on consumer behavior. The chapter begins with the introduction and rise of VR in mitigating the limitations of online shopping and explains how VR is substituting physically examining of products, and how it empowers consumers to make more informed purchasing decisions. Later, the role of AI in virtual e-commerce is discussed followed by shopping convenience for e-commerce users and the future of VR in e-commerce. The findings of this chapter reveal that VR significantly impacts consumer behavior by fostering a sense of presence, interactivity, and immersion. At last, a conclusion is presented.

1. INTRODUCTION

In a digital age, businesses are constantly seeking innovative strategies to enhance customer experiences, streamline operations, and outpace the competition. One such transformative technology that has radically reshaped the shopping landscape is Virtual Reality (VR). This chapter aims to delve into the

DOI: 10.4018/979-8-3693-0418-1.ch017

burgeoning application of VR in the field of electronic commerce (e-commerce), examining its potential and shedding light on its implications for consumers.

The concept of VR involves creating an immersive, interactive 3D environment that mimics the real world. It aims at creating an entirely novel surrounding based on artificial intelligence technology. VR's realistic simulations has led to its application across diverse fields, from entertainment and gaming to education, healthcare, retailing and e- commerce. E-commerce which is the practice of buying and selling goods or services via the internet has revolutionized the traditional retail industry. It has led to provide an unparalleled shopping convenience and personalization to its customers. The interventions of AI make online shopping more promising and convenient for the shoppers. With VR, e-commerce promises to redefine the online shopping experience by bridging the gap between the physical and digital retail worlds.

This chapter will explore how VR technology is being harnessed in e-commerce, from enabling virtual storefronts that consumers can 'walk' through from the comfort of their homes. Also, highlighting the importance of immersive product demos that can help customers in taking more informed purchasing decisions. Furthermore, we will investigate the benefits and challenges of implementing VR in e-commerce and evaluate its future prospects in transforming online retailing.

The rapidly advancing VR technology is blurring the lines between reality and the virtual world, same as that of traditional retailing and e-commerce. The immersive and interactive shopping experiences often surpass those of brick-and-mortar stores; VR is gradually redefining what it means to shop online. This chapter sets the stage for understanding and exploring this exciting convergence of technologies and its potential to change the world of e-commerce.

2. RISE OF VR IN E-COMMERCE

The rise of Virtual Reality (VR) in e-commerce has been an exciting and transformative development in the online shopping landscape. As VR technology has advanced and become more accessible, e-commerce businesses have recognized its potential to redefine the consumer shopping experience and boost sales. Numerous studies have explored how VR can enhance user experience in e-commerce by creating immersive shopping environments (Jiang & Benbasat, 2004; Suh & Lee 2005; Martínez-Navarro et al., 2019; Tawira & Ivanov, 2023). VR allows customers to visualize and interact with products virtually, leading to increased engagement and satisfaction (Park and Kim, 2023). In their study (Barta et al., 2023) found that immersive technologies in online retail led to reduced cognitive effort, and increased purchase intention of consumers. This ultimately leads to improved overall shopping experience.

VR allows consumers to experience products in a more immersive and interactive way (Kim et al., 2021). Instead of relying solely on static images and text descriptions, shoppers can virtually interact with product. They can view them from different angles, and get a more realistic sense of size, scale, and features. This improved visualization leads to better and informed purchase decisions. In e- commerce set-up where the shopping is undertaken in an individual level i.e., without any human assistance, the scrutiny of every element is of utmost importance for avoiding the decision regret. Unlike in traditional retail setup, where a consumer is accompanied by different sales assistants that act as decision support to them, here the purchase decision are individual and hence bit difficult. VR, hence even helps in overcoming some of the limitations of traditional e-commerce. For example, VR experiences in the fashion industry enables customers to virtually try products on them (Chen et al., 2023), reducing the need for returns and exchanges.