Chapter 3
Marketing Simulations in Strategic Decision-Making:
A Comprehensive Literature Review

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ABSTRACT

This chapter systematically reviews the existing literature regarding marketing simulations and their role in strategic decision-making processes. Through a comprehensive analysis of recent studies, this research investigates how simulations enhance organizational performance by establishing controlled environments for testing marketing strategies without incurring real-world risks. The review establishes that marketing simulations significantly enhance forecasting accuracy, risk

DOI: 10.4018/979-8-3373-3141-6.ch003

management, and strategic adaptability, particularly in volatile market conditions where traditional methods have demonstrated inadequacy. Key findings indicate that AI-enhanced simulations, which incorporate artificial neural networks and machine learning techniques, yield improvements of up to 20% in forecasting accuracy and a 15% increase in campaign return on investment (ROI). This chapter also examines various simulation approaches, including agent-based models, hybrid methodologies, and business games, and highlights their applications across different market contexts. Furthermore, it addresses ethical considerations, challenges related to organizational readiness, and the regulatory frameworks associated with implementing these technologies. The research concludes by identifying emerging trends and future directions for research, underscoring the growing significance of simulations in maneuvering through increasingly complex market dynamics.

INTRODUCTION

Marketing simulations are progressively employed in strategic decision-making to model intricate market dynamics and forecast outcomes (Cohen & May, 2025; Negahban & Yilmaz, 2014). These simulations assist businesses in comprehending consumer behavior, optimizing marketing strategies, and enhancing decision-making processes (Al-Surmi et al., 2021). This literature review synthesizes findings from numerous studies regarding the application of simulations in marketing, underscoring their advantages, methodologies, and potential avenues for future research (Chaudhari & Damle, 2023).

Numerous studies indicate that marketing simulations play a crucial role in strategic decision-making. They enable companies to evaluate marketing strategies, examine market dynamics, and forecast outcomes without the risks associated with real-world experiments (Glazer & Weiss, 1993; Nnaji et al., 2024). In addition, based on the literature review, marketing simulations study complex systems and social interactions within the market (Awdziej & Tkaczyk, 2016; Yu et al., 2024). Agent-based simulations, for instance, are used to analyze individual decision-making styles, communication channels, and social system structures, providing insights into emergent phenomena in marketing.

These simulations provide a controlled setting for testing different strategic scenarios, yielding insights into possible market reactions and organizational effectiveness (Davtyan, 2024). By offering a safe environment for experimentation, they enable businesses to evaluate various strategies, investigate market dynamics, and anticipate outcomes without the financial or reputational risks associated with real-world trials (Stummer, Lüpke, & Günther, 2021). Moreover, simulation business games serve as an effective method for exploring the decision-making processes of