

# Ai-Driven Business Intelligence: Optimizing Market Prediction Models for Competitive Advantage

Daniel Jr D. Dasig <sup>abc</sup>, Isagani D. Valenzuela II <sup>b</sup>, Lucila T. Magalong <sup>be</sup>, Carolina D. Ditan <sup>bd</sup>, Paulo Noel Mazo <sup>c</sup>, Sharon F. Sanchez <sup>b</sup>, Maria Victoria S. Trinidad <sup>b</sup>

<sup>a</sup> De La Salle- College of Saint Benilde, Manila Philippines

<sup>b</sup> Jose Rizal University, Mandaluyong City Philippines

<sup>c</sup> Pamantasan ng Lungsod ng Maynila, Manila Philippines

<sup>d</sup> De La Salle Araneta University, Malabon City, Philippines

<sup>e</sup> Philippine Women's University, Manila Philippines

[https://doi.org/10.35609/gcbssproceeding.2025.1\(94\)](https://doi.org/10.35609/gcbssproceeding.2025.1(94))

---

## ABSTRACT

---

In today's hypercompetitive and rapidly changing business environment, organizations are increasingly turning to advanced technologies to maintain and enhance their market positions. Business intelligence (BI) systems have long been central to corporate strategy by providing data-driven insights. Recently, the integration of artificial intelligence (AI) into BI has heralded a new era of predictive analytics, enabling organizations to forecast market trends with unprecedented precision and agility. While the promise of AI-driven BI is substantial, its effective implementation requires a confluence of technological prowess, human capital development, and supportive organizational culture. Executives must navigate the challenges of integrating new technologies with legacy systems, upskill their workforce, and foster a data-centric mindset across the organization. Consequently, the competitive advantage derived from AI-driven BI is not merely a function of technology adoption but also a reflection of an organization's ability to leverage its human and organizational resources effectively. Despite the burgeoning literature on AI and business intelligence, there remains a significant gap in understanding the precise mechanisms by which AI-driven market prediction models contribute to competitive advantage. In particular, the interplay between technological integration, human capital development, and strategic outcomes warrants further empirical exploration. The present study addresses the following overarching research problem: How does the integration of AI into business intelligence systems optimize market prediction models, and what is its impact on achieving competitive advantage?

JEL Codes: O33, M15, L25

**Keywords:** *Business Intelligence, Artificial Intelligence, Market Prediction, Competitive Advantage, Descriptive Correlational Study, Digital Transformation*