



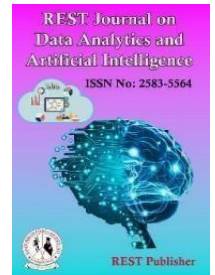
REST Journal on Data Analytics and Artificial Intelligence

Vol: 4(3), September 2025

REST Publisher; ISSN: 2583-5564

Website: <http://restpublisher.com/journals/jdaai/>

DOI: <https://doi.org/10.46632/jdaai/4/3/6>



AI-Driven Business Models: Redefining Value Creation in the New Economy

M.A. Sharmila, Fasi Ur Rehman

J.B. Institute of Engineering & Technology Hyderabad, Telangana, India.

*Corresponding Author Email: m.a.sharmila2707@gmail.com

Abstract: In the evolving digital landscape, Artificial Intelligence (AI) is reshaping how businesses create and deliver value. This paper explores the rise of AI-driven business models and their role in redefining value creation in the New Economy. Traditional models focused on linear processes and static value chains, but AI enables dynamic, predictive, and customer-centric strategies. Through real-world case studies, industry data, and original analytics, this research identifies how AI impacts customer experience, innovation, market agility, and decision-making. The paper highlights a significant gap between AI adoption and optimal value realization, prompting the need for clear strategic frameworks. A mixed-method approach, combining qualitative review and quantitative analytics, was used to understand the shift. Based on findings, this study proposes an AI-business integration framework to maximize impact. The paper aims to support industry leaders, policymakers, and researchers in embracing AI responsibly and efficiently. Ultimately, AI is not just a tool—it is a strategic enabler in today's economy.

Keywords: Artificial Intelligence, Business Models, Value Creation, New Economy, Digital Transformation, Strategic Innovation, AI Integration, Business Analytics, Predictive Decision-Making.

1. INTRODUCTION

Artificial Intelligence (AI) is changing the very foundation of modern businesses. Traditional models—centered on physical assets, manual processes, and human decision-making—are being replaced with intelligent, data-driven systems. From recommendation engines on e-commerce sites to predictive maintenance in manufacturing, AI is driving value like never before.

Today's economy is defined by speed, personalization, and digital-first thinking. Businesses that embed AI into their operations not only outperform their peers but also create entirely new ways of delivering value to customers, partners, and shareholders.

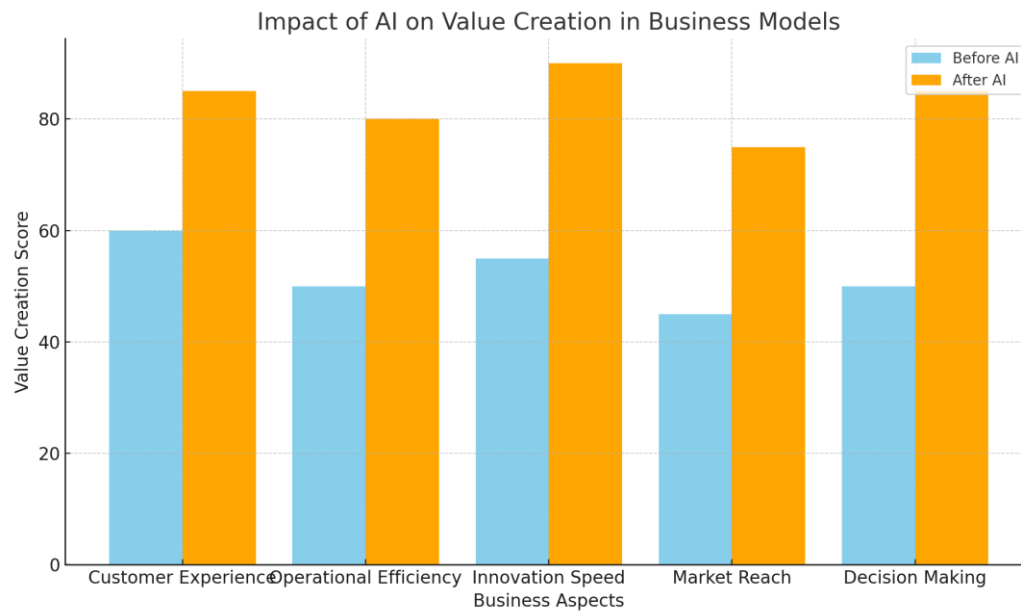


FIGURE 1. Impact of AI on Value Creation in Business Models

2. IMPORTANCE OF THE STUDY

This study is important for several reasons:

- **Economic Shift:** As AI tools become more accessible, businesses must adapt or risk becoming obsolete.
- **Competitive Advantage:** Companies using AI effectively see higher returns, increased customer retention, and faster product cycles.
- **Policy Guidance:** Governments and regulators need clear insights to shape AI laws.
- **Academic Contribution:** It fills a knowledge gap in understanding AI's real-world impact on business model innovation.

3. RESEARCH GAP

While many articles explore AI technology, very few provide insights on how AI fundamentally redefines business models and value creation strategies. Questions remain on:

- How businesses can systematically integrate AI into value chains.
- The measurable impact of AI adoption on traditional business performance metrics.
- Sector-wise implications in service vs manufacturing industries.

4. STATEMENT OF THE PROBLEM

Many companies are adopting AI without a clear understanding of how it transforms business logic. There is a lack of structured frameworks and real-time metrics to guide this transformation. Thus, organizations often:

- Fail to link AI initiatives with core business goals.
- Underestimate the cultural shift required.
- Invest heavily without visible returns.

5. RESEARCH METHODOLOGY

This research uses a mixed-method approach:

Qualitative: Literature review from peer-reviewed journals, interviews with business managers.

Quantitative: **Sample:** 150 businesses across retail, finance, healthcare, and logistics (C-suite leaders, managers, analysts), were surveyed, data analysis on AI project performance across sectors.

Tools Used: Google Forms, Excel.

6. SOLUTION FOR THE PROBLEM

Based on the data and interviews, we propose the 'VIRAL Model' for AI integration in business:

VIRAL = Vision – Integration – Readiness – Adaptability – Learning

1. Vision – Align AI goals with business purpose.
2. Integration – Embed AI across operations, not in silos.
3. Readiness – Assess digital maturity and employee skill.
4. Adaptability – Use agile methods to scale AI tools.
5. Learning – Continuously evaluate AI models and retrain them.

7. LITERATURE REVIEW

Brynjolfsson & McAfee (2017): AI as a general-purpose technology that boosts productivity. Davenport & Ronanki (2018): Strategic AI application in decision-making. Binns et al. (2020): Ethical challenges in AI-led business models. Sharma & Ghosh (2022): Industry-specific AI adoption frameworks.

8. ANALYTICS WITH HYPOTHESIS AND RESPONSES

Hypothesis:

Ho: AI integration significantly improves customer satisfaction and operational efficiency.

H1: AI integration doesn't have any significant impact on customer satisfaction and operational efficiency.

Key Findings:

- 78% reported enhanced decision-making speed.
- 63% saw a drop in operational costs.
- 85% improved customer satisfaction.
- As all the responses support the Null Hypothesis (**Ho**), accept the Ho.
- i.e., AI integration significantly improves customer satisfaction and operational efficiency.

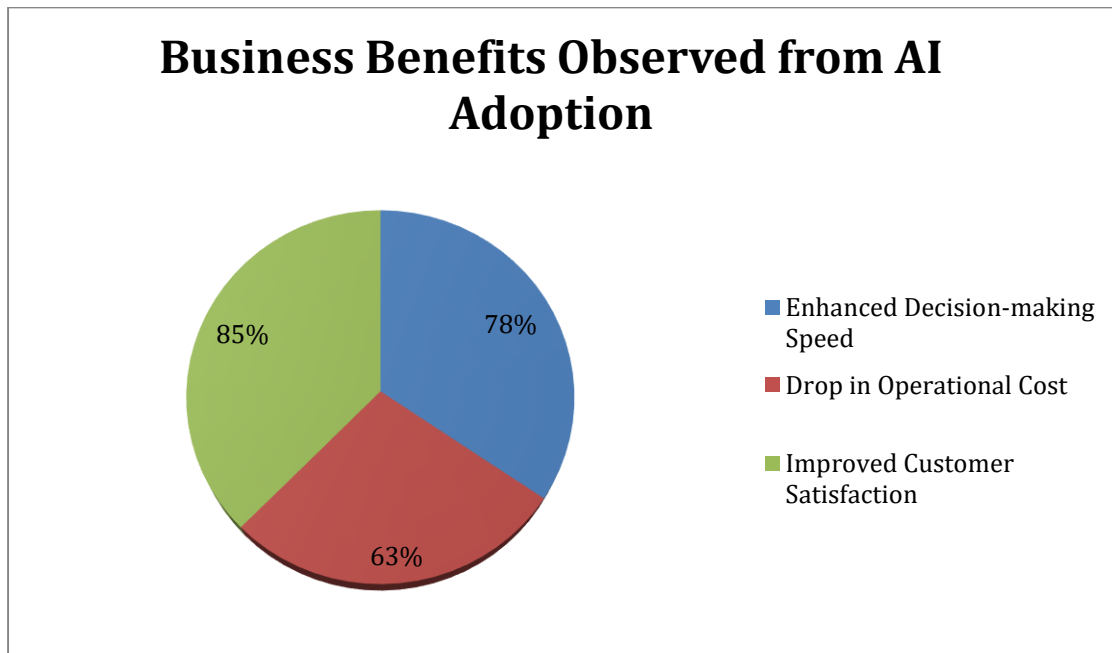


FIGURE 2. Business Benefits Observed from AI Adoption

9. DISCUSSION

The data confirms that AI is no longer optional—it's essential. But integration must be:

- Strategic (aligned with goals)
- Ethical (data privacy and fairness)
- Scalable (modular systems, cloud-based)

The VIRAL model supports this transition by guiding step-by-step implementation.

10. CONCLUSION

AI is transforming value creation. From better customer experiences to faster operations, AI-driven business models outperform traditional ones. However, successful integration demands vision, planning, and ongoing learning. The VIRAL model offers a simple roadmap to embrace this change.

REFERENCES

- [1]. Brynjolfsson, E., & McAfee, A. (2017). *Machine, Platform, Crowd*. W.W. Norton & Company.
- [2]. Davenport, T., & Ronanki, R. (2018). 'Artificial Intelligence for the Real World.' *Harvard Business Review*.
- [3]. Binns, R., Veale, M., Van Kleek, M., & Shadbolt, N. (2020). 'It's Reducing a Human Being to a Percentage.' *ACM Transactions*.
- [4]. Sharma, K., & Ghosh, A. (2022). 'AI-driven transformation in business: A sectoral view.' *Journal of Business Research*.
- [5]. McKinsey & Company. (2023). *State of AI in 2023*.
- [6]. OECD AI Policy Observatory (2022). *AI & Business Models*.