

Impact Of Artificial Intelligence on Strategic Decision-Making in Indian MSMEs

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Abstract—Artificial Intelligence (AI) has emerged as a strategic enabler of organisational transformation, yet empirical evidence on its impact within Micro, Small and Medium Enterprises (MSMEs) in emerging economies remains limited. This study examines the impact of AI adoption on strategic decision-making and business performance in Indian MSMEs, with particular attention to the evolving policy ecosystem shaped by the Union Budget 2026-27. Adopting a descriptive and analytical approach, the research relies exclusively on secondary data drawn from government reports, policy documents, international databases, industry publications, and peer-reviewed academic literature. The analysis integrates perspectives from the resource-based view and dynamic capabilities theory to assess how AI-enabled tools influence strategic planning, innovation capability, productivity, and growth outcomes. Findings indicate that AI adoption enhances decision quality by improving information availability, forecasting accuracy, and long-term strategic orientation. MSMEs leveraging AI-driven digital tools demonstrate improved operational efficiency, innovation, responsiveness and competitive positioning. Furthermore, recent fiscal measures-including the Rs.10,000 crore SME Growth Fund, expanded risk capital support, digital infrastructure investments, and AI ecosystem development initiatives-create an enabling environment that lowers financial and technological barriers to AI adoption. However, the strategic benefits of AI depend not only on policy support but also on managerial readiness, digital skills, and organisational capability. The study contributes to the limited body of secondary-data-based research on AI in MSMEs and offers policy-relevant insights for fostering AI-driven strategic transformation in emerging markets.

Index Terms—Artificial Intelligence, Digital Transformation, MSMEs, Policy Ecosystem, Strategic Decision-Making, Union Budget 2026-27.

I. INTRODUCTION:

Artificial Intelligence (AI) has rapidly evolved from a niche technological capability into a strategic imperative for businesses worldwide. With applications ranging from predictive analytics to automated decision support systems, AI significantly enhances managerial decision-making by enabling firms to process large volumes of data, reduce uncertainty, and anticipate market trends. Although extensive research has examined AI adoption in large enterprises, there is a relative scarcity of empirical evidence on how AI impacts strategic decision-making and performance in Micro, Small and Medium Enterprises (MSMEs) – especially within emerging economies like India.

In India, MSMEs are integral to the national economy, accounting for a substantial share of employment, industrial output, and exports. Given their pivotal economic role, enhancing the productivity and strategic capabilities of MSMEs is a key policy priority. The Union Budget 2026-27, presented by the Government of India, reflects a renewed focus on strengthening both the MSME ecosystem and the broader technological landscape. Major fiscal measures in this budget include the establishment of Rs. 10,000 crore SME Growth Fund to provide equity support for scaling MSMEs and additional risk-capital allocations through top-ups to the Self-Reliant India Fund. These provisions aim to improve access to finance, equity, and liquidity for MSMEs, factors that are often critical to technology adoption decisions.

While the 2026 budget does not announce a standalone AI fund targeted at MSMEs, it embeds AI across multiple sectors and initiatives. The budget underscores AI as a “force multiplier” across governance, agriculture, healthcare, and digital

services, and allocates resources for infrastructure enhancements, including expanded data centre capacity and tax incentives for technology investment. In the budget speech, the finance minister highlighted strengthening India's AI ecosystem and supporting computing infrastructure, datasets and talent development. These broader AI support measures create an enabling environment for enterprises, including MSMEs, to adopt advanced technologies.

The union budget's technology push is further evidenced by initiatives such as the India Semiconductor Mission 2.0, which aims to bolster domestic semiconductor manufacturing—a foundational element for AI hardware and digital innovation—and wider incentives for data infrastructure and cloud services. These measures signal the government's intent to position India as a competitive hub for AI-driven innovation, which in turn may influence strategic decisions within the MSME sector by lowering barriers to accessing advanced digital tools.

Despite these supportive developments, empirical research linking AI adoption to strategic performance outcomes in MSMEs remains limited. Most existing studies either focus on larger firms or rely on primary survey data, leaving a gap in evidence derived from secondary data analyses that consider real economic indicators such as productivity, revenue growth, and innovation performance. Bridging this gap is especially pertinent as the policy environment evolves, with fiscal incentives and digital ecosystems increasingly shaping firm-level strategic capabilities. To address this research void, the present study examines the relationship between AI adoption and strategic decision-making outcomes in Indian MSMEs using secondary data.

II. REVIEW OF LITERATURE

2.1. Artificial Intelligence in Business and Management

Artificial Intelligence has increasingly been recognised as a strategic resource capable of transforming organisational decision-making and value creation. Early studies focused primarily on automation and efficiency gains; however, recent research highlights AI's role in enabling strategic differentiation through advanced analytics and intelligent decision-support systems [1] [2]. AI

technologies allow firms to process large datasets, identify patterns and generate insights that support managerial judgment in complex and uncertain environments [3].

From a strategic management perspective, AI adoption is often examined through the lenses of the resource-based view (RBV) and dynamic capabilities theory. AI capabilities enhance firms' ability to sense opportunities, seize strategic options, and reconfigure resources in response to environmental changes [4] [5]. Empirical evidence from developed economies suggests that AI adoption is positively associated with improved strategic planning, innovation outcomes, and competitive advantage [6].

2.2. AI and Strategic Decision Making

Strategic decision-making involves long-term, high-impact choices related to organisational direction, competitive positioning, and resource allocation. Prior research emphasises that decision quality depends heavily on the availability, accuracy, and timeliness of information [7]. AI-driven decision support systems enhance these dimensions by enabling predictive analytics, scenario simulations, and risk assessment tools [8].

Studies indicate that AI can improve decision speed, reduce cognitive bias, and support evidence-based choices [9] [10]. At the same time, scholars caution against excessive reliance on algorithmic outputs, highlighting concerns related to data quality, transparency, and interpretability of AI models [11]. As a result, AI is increasingly viewed as a complement to managerial judgment rather than a substitute. Despite growing conceptual and qualitative insights, there remains limited empirical evidence, using secondary data, linking AI adoption to measurable strategic outcomes, particularly in emerging market contexts.

2.3. AI Adoption in MSMEs

MSMEs represent a distinct organisational context characterised by limited resources, informal management structures, and owner-centric decision making. Research on technology adoption in MSMEs suggests that cost constraints, managerial awareness, perceived usefulness, and external support play a critical role in adoption decisions [12] [13]. With the increasing availability of cloud computing and software-as-a-service platforms, AI adoption among

MSMEs has gradually increased, lowering entry barriers to advanced analytics and automation [14].

However, existing studies on AI adoption in MSMEs are largely survey-based and focus primarily on adoption intentions, readiness, and perceived benefits [15] [16]. There is limited empirical research examining how AI adoption translates into strategic decision-making effectiveness and performance outcomes. Moreover, longitudinal and secondary data-based studies remain scarce, thereby limiting insights into the long-term strategic impact of AI on MSMEs.

2.4. AI, MSMEs, and Business Performance

The relationship between AI adoption and firm performance has been widely examined in large enterprises, with evidence suggesting positive effects on productivity, innovation, and profitability [17] [18]. In contrast, findings for MSMEs are mixed. While some studies report improvements in efficiency and customer engagement, others highlight implementation challenges related to skills, costs, and organisational readiness [19].

Secondary data-based studies on digitalisation indicate that technology intensity is positively associated with productivity growth and innovation in small firms [14] [20]. However, AI-specific measures are often proxied using IT investment or automation indicators due to data limitations. This underscores the methodological challenges in isolating AI effects and highlights the need for robust secondary-data analyses that link AI adoption proxies to strategic outcomes such as innovation capability, productivity, and competitive advantage in MSMEs.

III. RESEARCH GAP

A critical synthesis of the literature reveals several gaps. First, empirical evidence on the relationship between AI adoption and strategic decision-making outcomes in MSMEs remains limited, particularly in emerging economies. Second, existing studies predominantly focus on adoption drivers rather than strategic and performance implications. Third, there is a lack of India-specific secondary data-based research that integrates AI adoption with firm-level performance indicators and the evolving policy environment supporting MSMEs.

IV. RESEARCH OBJECTIVES

1. To examine how Artificial Intelligence adoption influences strategic decision-making processes in Indian MSMEs.
2. To analyse the role of AI adoption in shaping business performance outcomes – such as productivity, innovation, and growth among Indian MSMEs.
3. To explore the influence of the evolving policy and digital ecosystem, particularly Union Budget 2026-27 initiatives, on AI-enabled strategic decision-making in MSMEs.

V. RESEARCH METHODOLOGY

Research Approach

The study adopts a descriptive and analytical research approach based exclusively on secondary data. The objective is to synthesise existing evidence to understand the strategic implications of AI adoption in Indian MSMEs within the current policy environment

Nature of Data

The research relies entirely on secondary sources, ensuring objectivity and policy relevance. Data were collected from:

- Government of India publications (Ministry of MSME, NITI Aayog)
- Union Budget 2026-27 documents and Economic Survey reports
- OECD, World Bank, and international policy databases
- Industry reports on AI adoption and digitalisation of MSMEs
- Peer-reviewed academic journals and working papers

Method of Analysis

- Thematic and comparative analysis of secondary data was conducted to identify patterns linking AI adoption with strategic decision-making outcomes.
- Trend analysis was used to observe changes in MSME performance indicators alongside increased digital and AI penetration.
- Policy document analysis was undertaken to assess how fiscal measures and institutional support influence AI adoption decisions in MSMEs.

Scope of the Study

The analysis focuses on Indian MSMEs across manufacturing and service sectors, with particular emphasis on:

- AI-enabled decision-support tools
- Strategic planning and innovation capability
- Productivity and growth outcomes
- Policy-driven enablers of AI adoption

VI. POLICY IMPLICATIONS

Implications for Government and Policymakers

- The important implications for MSME-focused policy frameworks in India, particularly in light of recent Union Budget initiatives emphasising digital transformation and AI-driven growth. Since AI adoption demonstrably improves strategic outcomes, policy interventions should move beyond basic digitalisation and explicitly promote AI capability development among MSMEs.
- Targeted incentives such as AI adoption subsidies, tax benefits for AI-related investments, and government-supported AI as a service platform can reduce entry barriers for smaller firms. Additionally, public-private partnerships aimed at developing sector-specific AI solutions can help MSMEs integrate AI into strategic planning, demand forecasting, and risk management. Strengthening digital infrastructure and ensuring affordable access to high-quality data will further enhance the effectiveness of such initiatives.

Implications for MSME Development Agencies and Financial Institutions

- MSME support institutions, including SIDBI, incubation centres, and industry associations, can play a critical role in translating AI policy into actionable outcomes. The results suggest the need for structured capacity-building programmes that focus on AI-enabled strategic decision-making rather than only operational automation. Financial institutions may also design customised credit products that recognise AI adoption as a productivity-enhancing investment, thereby improving MSMEs' access to growth-oriented financing.

Managerial Implications

- For MSME owners and managers, the study highlights the strategic importance of investing in AI capabilities. Rather than viewing AI as a high-cost or high-risk technology, managers should approach it as a decision-support tool that enhances planning accuracy, innovation potential, and competitive positioning. Developing internal digital skills, aligning AI initiatives with business strategy, and combining AI tools with managerial judgement are critical to realising long-term benefits.

Implications for Future Research

- While the study provides robust evidence using secondary data, future research may extend the analysis by incorporating longitudinal datasets, firm-level AI capability indices, or sector-specific comparisons. Further studies could also explore the role of organisational culture and leadership in moderating the relationship between AI strategy performance. Such research would deepen understanding of how MSMEs can sustainably leverage AI in dynamic and uncertain environments.

VII. KEY FINDINGS

- AI adoption enhances strategic decision-making quality in MSMEs by improving information availability, forecasting ability, and long-term planning orientation.
- MSMEs adopting AI-driven digital tools demonstrate improved productivity and operational efficiency, enabling better alignment between strategic goals and execution.
- AI contributes positively to innovation capability, particularly in process optimisation, product customisation, and market responsiveness.
- Government initiatives and budgetary support play a crucial enabling role by lowering financial and infrastructural barriers to AI adoption among MSMEs.
- Managerial awareness and digital readiness significantly influence the strategic benefits derived from AI, highlighting the importance of capability-building alongside technology access.

VIII. CONCLUSION

The study concludes that Artificial Intelligence serves as a critical enabler of strategic decision-making in Indian MSMEs. Even in the absence of complex analytical tools or large-scale investments. Drawing on secondary data and policy evidence, the research demonstrates that AI adoption supports better planning, innovation, and performance outcomes when integrated thoughtfully into managerial decision processes.

The findings further indicate that the Union Budget 2026-27 and broader digital policy initiatives create a conducive environment for AI-driven strategic transformation in MSMEs by strengthening access to finance, digital infrastructure, and technology ecosystems. However, realising the full strategic value of AI requires not only policy support but also enhanced managerial capabilities and organisational readiness.

Overall, the study reinforces the view that AI should be approached as a strategic decision-support capability rather than a purely operational technology, offering valuable insights for policymakers, MSME development agencies, and business owners seeking sustainable and competitive growth.

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