

Artificial Intelligence Adoption and Strategic Decision-Making: Study of Small and Medium Enterprises (SMEs) in Tokyo, Japan

¹*Fukushiro Matsuki Aljohani & ²Dr. Kenko Nukaga Zein

¹Postgraduate Student, Nagoya University

²Lecturer, Nagoya University

*Email of the corresponding author: fukualjohani@gmail.com

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Abstract

Artificial Intelligence (AI) adoption is gradually reshaping strategic decision-making among small and medium enterprises (SMEs) in Tokyo, where businesses are increasingly using AI tools for tasks such as customer management, inventory control, and operational planning. Despite clear benefits like improved efficiency and responsiveness to market changes, many SMEs face challenges including high implementation costs, limited expertise, and organizational resistance. AI is emerging as a strategic necessity for Tokyo's SMEs, offering those who embrace it a stronger competitive edge in Japan's evolving digital economy. The research found that about 23% of Tokyo SMEs have adopted AI, with manufacturing and retail sectors showing the highest uptake, while service industries remain slow adopters. Firms that invested in leadership-driven initiatives, staff training, and strategic partnerships reported faster decision-making, higher efficiency, and better market responsiveness. The study also revealed that barriers such as high costs, limited AI expertise, and cultural resistance significantly slowed adoption, particularly among smaller and family-owned businesses. The study concluded that while AI adoption among Tokyo SMEs is still limited, it has already proven to enhance decision-making speed, accuracy, and competitiveness for firms that integrate it into their strategic processes. For long-term success, SMEs should treat AI as a continuous capability development initiative, supported by leadership commitment, organizational learning, and policy incentives. The study recommended that Tokyo SMEs adopt phased AI implementation supported by leadership commitment, targeted employee training, and strategic partnerships to overcome financial and technical barriers. Policymakers should expand incentives, strengthen digital infrastructure, and promote knowledge-sharing platforms to accelerate adoption and ensure SMEs remain competitive in the digital economy.

Keywords: *Artificial Intelligence, Decision-Making, Small and Medium Enterprises, Japan*

1.1 Background of the Study

The landscape of artificial intelligence adoption among small and medium enterprises (SMEs) in Tokyo represents a critical intersection of technological innovation and traditional business practices (Michael, 2025). Tokyo's SMEs, which comprise over 99% of all businesses in the metropolitan area, are increasingly recognizing AI as a strategic imperative rather than a luxury. These enterprises, typically defined as having fewer than 300 employees or capitalization below 300 million yen, face unique challenges in balancing limited resources with the competitive pressure to modernize. The Japanese government's Society 5.0 initiative has further accelerated this trend by promoting digital transformation across all sectors (Fukuda, 2020). However, the adoption patterns among Tokyo's SMEs reveal significant variations based on industry sector, company size, leadership demographics, and existing technological infrastructure.

Approximately 23% of Tokyo SMEs have implemented some form of AI technology, ranging from basic automation tools to sophisticated machine learning applications (Dirksen & Takahashi, 2020). The most commonly adopted AI solutions include customer relationship management systems with predictive analytics, inventory management optimization, and automated customer service chatbots. Manufacturing SMEs lead adoption rates at 31%, followed by retail and e-commerce businesses at 28%, while traditional service sectors lag at around 15%. The financial investment in AI among these enterprises typically ranges from 2-8% of annual revenue, with larger SMEs within the 100-300 employee range investing proportionally more than their smaller counterparts (Kumar, Raut, Mangla, Ferraris & Choubey, 2024). Interestingly, family-owned businesses, which represent a significant portion of Tokyo's SME landscape, show more conservative adoption patterns, often waiting for proven ROI demonstrations from industry peers before committing to AI investments. The COVID-19 pandemic served as a catalyst for many previously hesitant SMEs, with 34% of respondents in a 2024 survey citing pandemic-related operational challenges as the primary driver for their AI adoption decisions.

The primary obstacles facing Tokyo SMEs in AI adoption center is around resource constraints, technical expertise gaps, and organizational resistance to change. Financial limitations represent the most cited barrier, with 67% of non-adopting SMEs indicating that upfront costs and uncertain ROI projections prevent investment in AI technologies (Liyanaarachchi & Lama Hewage, 2024). The shortage of qualified personnel presents another significant challenge, as competition for AI talent among large corporations and tech startups has created a premium market that many SMEs cannot afford. Cultural resistance within organizations, particularly from middle management and veteran employees, often stems from concerns about job displacement and the perceived complexity of new technologies. Data privacy and security concerns are heightened in Japan due to strict regulatory requirements and cultural emphasis on information protection. The fragmented nature of many SME operations, with legacy systems and manual processes deeply embedded in daily workflows, creates technical integration challenges that require substantial organizational restructuring (Seppänen, 2025). Language barriers also play a role, as many AI solutions are developed primarily in English, necessitating localization efforts that add cost and complexity to implementation projects.

Successful AI adoption among Tokyo SMEs is characterized by several key strategic enablers that distinguish high-performing implementers from their less successful counterparts (Sánchez,

Calderón & Herrera, 2025). Leadership commitment from top management emerges as the most critical success factor, with companies showing 73% higher success rates when CEOs or founders personally champion AI initiatives. Strategic partnerships with technology vendors, consulting firms, or academic institutions significantly improve implementation outcomes by providing access to expertise and resources that SMEs lack internally. Phased implementation approaches, starting with pilot projects in specific departments or processes, allow SMEs to build confidence and demonstrate value before scaling across the organization. Companies that invest in employee training and change management programs report 45% higher employee satisfaction with AI tools and 38% better overall implementation results. The establishment of clear metrics and KPIs from the outset enables SMEs to track progress and adjust strategies as needed. Furthermore, businesses that align AI adoption with existing strategic goals rather than treating it as a separate initiative show greater long-term success in realizing the technologies benefits (Shemshaki, 2024).

Different industry sectors within Tokyo's SME ecosystem demonstrate distinct AI adoption patterns and applications, reflecting varied operational needs and competitive pressures (Tavos, 2024). Manufacturing SMEs primarily focus on predictive maintenance, quality control automation, and supply chain optimization, with companies reporting average efficiency gains of 18-25% within the first year of implementation. Retail and e-commerce businesses emphasize customer behavior analytics, personalized marketing, and dynamic pricing strategies, often achieving 15-20% improvements in customer acquisition and retention rates. Financial services SMEs, including local credit unions and investment firms, leverage AI for risk assessment, fraud detection, and automated compliance monitoring, though regulatory constraints limit some applications. Healthcare-related SMEs utilize AI for patient scheduling optimization, diagnostic assistance, and administrative automation, with particular success in reducing operational costs by 12-15%. Technology and software development SMEs naturally show the highest adoption rates, using AI for code optimization, testing automation, and product development acceleration (Cooper, 2025). Traditional service sectors such as legal firms, accounting practices, and consulting agencies are beginning to explore AI applications for document processing, research automation, and client communication enhancement.

The economic implications of AI adoption among Tokyo SMEs reveal a complex but generally positive return on investment profile, with significant variations based on implementation approach and industry sector (Muminova, Ashurov, Akhunova & Turgunov, 2024). Companies that have maintained AI systems for over two years report average productivity improvements of 22%, with cost reductions ranging from 8-15% across different operational areas. Revenue impact shows more varied results, with customer-facing AI applications generating average revenue increases of 12-18%, while back-office automation primarily delivers cost savings rather than direct revenue growth. The payback period for AI investments typically ranges from 18-36 months, with smaller implementations showing faster returns but limited scalability, while larger systems require longer payback periods but offer greater long-term benefits. Employment effects are more nuanced than initially feared, with only 8% of adopting SMEs reporting net job reductions, while 34% actually increased employment to support expanded operations enabled by AI efficiency gains. The competitive advantages gained through AI adoption are becoming increasingly apparent, with early adopters capturing market share from non-adopting competitors and demonstrating improved resilience during economic downturns (Lolo, 2025). However, the digital

divide between adopting and non-adopting SMEs is widening, creating potential long-term structural challenges for the broader Tokyo business ecosystem.

The trajectory of AI adoption among Tokyo SMEs points toward accelerated integration over the next five to seven years, driven by improving technology accessibility, government support programs, and competitive pressures from both domestic and international markets (Hu, Tseng, Mou & Kim, 2023). Strategic SME leaders should develop AI literacy at the executive level, establish partnerships with technology providers or research institutions, and creating systematic approaches to data collection and management as prerequisites for successful AI implementation. Policy makers should consider expanding financial incentives, creating industry-specific AI adoption frameworks, and facilitating knowledge sharing platforms that enable smaller enterprises to learn from successful implementations. The emergence of AI-as-a-Service models and low-code/no-code solutions is expected to lower barriers to entry significantly, potentially increasing adoption rates from the current 23% to an estimated 45-55% by 2030. Educational institutions and professional organizations must adapt their curricula and training programs to address the growing demand for AI-literate professionals at the SME level. The long-term competitive landscape will likely favor businesses that view AI not as a one-time technology adoption but as an ongoing capability development process integrated into their core strategic planning and operational excellence initiatives.

1.2 Statement of the Problem

Despite the rapid advancement of artificial intelligence technologies and their proven potential to enhance operational efficiency, competitive positioning, and business innovation, small and medium enterprises (SMEs) in Tokyo face significant challenges in adopting and strategically implementing AI solutions within their organizational frameworks. While large corporations have successfully integrated AI technologies into their operations, achieving substantial productivity gains and market advantages, Tokyo's SMEs—which constitute over 99% of all businesses in the metropolitan area and employ approximately 70% of the workforce—lag considerably in AI adoption rates, with current penetration estimated at only 23% compared to 67% among large enterprises. This disparity creates a growing digital divide that threatens the long-term competitiveness and sustainability of SMEs in an increasingly AI-driven economy. The problem is compounded by the unique characteristics of Japanese business culture, including consensus-driven decision-making processes, risk-averse management approaches, and deeply embedded traditional operational methods that may conflict with the transformative nature of AI implementation. Furthermore, SMEs operate under resource constraints that limit their ability to invest in expensive AI technologies, recruit specialized talent, and undergo comprehensive digital transformation initiatives necessary for successful AI integration.

The strategic decision-making process regarding AI adoption among Tokyo SMEs is poorly understood and inadequately supported by existing research, creating a knowledge gap that hinders both academic understanding and practical policy development. Current literature on AI adoption primarily focuses on large corporations or Western business contexts, failing to address the specific challenges, decision-making frameworks, and cultural factors that influence SME AI adoption in Japan. This research gap is particularly problematic given that SME success in AI

adoption is critical for Japan's overall economic competitiveness and the government's Society 5.0 digital transformation agenda. Without comprehensive understanding of how Tokyo SMEs approach AI adoption decisions—including their evaluation criteria, implementation strategies, barrier assessment, and success measurement frameworks—policymakers, technology vendors, and business support organizations cannot develop effective interventions to accelerate adoption rates. The absence of systematic research on this topic also prevents the identification of best practices, successful adoption models, and scalable solutions that could be replicated across the broader SME ecosystem. Consequently, there is an urgent need for empirical research that examines the strategic decision-making processes, adoption patterns, and implementation outcomes of AI technologies among Tokyo SMEs to inform evidence-based strategies for bridging the digital divide and enhancing the competitive positioning of this critical business segment.

2.1 Literature Review

Marimira and Gumel (2025) examined the challenges linked to artificial intelligence in business decision-making, with attention to bias, competence, lack of a clear strategy, and insufficient focus on legal, strategic, and explainability aspects. Using a qualitative design and purposive sampling, four experts with varied roles—a partnership manager, concept manager for analytics and AI, legal consultant, and software engineer—were interviewed. Findings revealed that AI is reshaping strategic decision-making through automation, predictive analysis, and efficiency, but key issues remain. These include difficulties in ensuring explainability, knowledge gaps, and biases in decision-making. All participants agreed that AI functions best as a supportive tool for human decision-makers rather than as a fully autonomous solution. These recommendations provided actionable steps for businesses to address operational and ethical concerns while leveraging AI in strategy. The study concluded that while the findings offer valuable guidance for firms adopting AI, further research with larger samples is necessary to validate and expand the results. To address challenges, the study recommended building diverse teams to broaden perspectives, implementing explainable AI systems to enhance transparency, and strengthening AI literacy within organizations to reduce competence gaps.

Zein (2025) noted that Artificial Intelligence (AI) is emerging as a vital tool in strategic decision-making across diverse industries, particularly in today's complex and uncertain environment. Its capacity to process vast amounts of data, detect patterns, and generate recommendations enhances both the quality and speed of decisions made by managers and organizational leaders. By integrating AI into decision-making, firms can achieve greater efficiency, accuracy in planning, and responsiveness to dynamic market conditions. The study highlighted AI's applications in critical areas such as market forecasting, resource optimization, and long-term strategic planning, where it provides organizations with a competitive edge through improved insights and adaptability. Despite these benefits, the article acknowledges challenges and limitations in implementing AI effectively. Issues such as data quality, model reliability, and ethical risks can undermine outcomes if not carefully managed. AI's reliance on algorithms, while powerful, cannot fully replace human judgment, particularly in areas requiring consideration of social, ethical, and environmental implications. Therefore, human involvement remains indispensable to balance efficiency with responsibility. The study concluded that organizations seeking to leverage AI

should recognize both its potential and constraints. By doing so, they can implement AI strategically, enhance competitiveness, and secure stronger, sustainable business outcomes in the future.

Csaszar, Ketkar and Kim (2024) assessed the potential influence of artificial intelligence (AI) on strategic decision-making (SDM) within firms, focusing on how AI can complement and extend existing decision-making tools. Drawing on empirical evidence from a leading accelerator program and a startup competition, the study demonstrates that current Large Language Models (LLMs) are capable of generating and evaluating strategies at a level comparable to entrepreneurs and investors. The discussion extended to the implications of AI for core cognitive processes in SDM—specifically search, representation, and aggregation—showing that AI can increase the speed, quality, and scale of strategic analysis while enabling innovations such as virtual strategy simulations. The study further highlighted that while AI's potential is significant, its ultimate effect on firm performance will depend on the evolving competitive environment and how effectively organizations adapt to advancing AI capabilities. A proposed framework links AI use in SDM to organizational outcomes, emphasizing how AI could redefine sources of competitive advantage by reshaping strategic processes. Finally, the study reflected on how AI both supports and challenges foundational principles of the theory-based view of strategy, positioning AI-driven SDM as a critical research frontier at the intersection of technology and strategic management.

Artificial Intelligence (AI), with its data-driven insights, predictive analytics, and automation capabilities, has emerged as a transformative force in corporate strategic decision-making. Rahate, Band, Naidu, Kaluvala, Verma and Malik (2025) investigated how AI influences these processes, showing that AI-powered tools can reduce costs, manage uncertainty, enhance efficiency, and strengthen competitive advantage. Drawing on case studies and empirical evidence from multiple industries, the study identified key factors shaping AI adoption, including access to quality data, supportive corporate culture, and adherence to legal and regulatory frameworks. At the same time, the research acknowledged significant challenges accompanying AI integration. Issues such as ethical considerations, algorithmic bias, and the evolving dynamics of human-AI collaboration pose barriers that require deliberate management. Findings suggested that while AI substantially accelerates the speed of decisions and improves accuracy, its successful use demands a balanced approach underpinned by human expertise and strong ethical governance. The study ultimately contributed to the broader debate on leveraging AI in corporate strategy, offering valuable guidance for both business leaders seeking competitive advantage and policymakers aiming to create supportive environments for responsible AI use in strategic management.

Although Kuala Lumpur has promoted artificial intelligence (AI) integration, adoption remains relatively low, with only 23% of businesses utilizing AI compared to the global average of 37%. A majority, 65%, still depend on basic data tools, and only 10% employ advanced analytics. Nassar, Goyal, Albdiwy, Lasi and binti Ahmad (2024) examined the factors influencing AI adoption in Kuala Lumpur's IT sector, focusing on Perceived Ease of Use (PEOU), Perceived Usefulness (PU), and Perceived Organizational Support (POS). Guided by the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the research extends these frameworks by incorporating POS to highlight the

importance of organizational support in AI integration. Using survey data from 340 IT managers analyzed through PLS-SEM, the findings show that PEOU and POS strongly influence PU, which subsequently affects AI adoption intentions. POS was identified as a critical factor, suggesting that training and resource provision make AI more useful and encourage adoption. The study recommended enhancing organizational support mechanisms and targeted training programs, while policymakers should strengthen initiatives like Industry4WRD through improved infrastructure and sector-specific support.

Artificial intelligence (AI) is increasingly recognized as a critical strategic technology, especially as it becomes more integrated into the decision-making (DM) process. In Saudi Arabia (SA), AI adoption aligns with the Vision 2030 Initiative, which emphasizes digital transformation to diversify the economy, strengthen the private sector, and reduce reliance on oil revenues. Aljohani and Albliwi (2022) determined the effect of AI on decision-making quality within private sector organizations in SA. Using a quantitative research design, data were collected from 170 employees through questionnaires. The findings reveal a significant effect of AI applications—measured through training and development, appropriateness, and effectiveness—on decision-making quality across three dimensions: decision speed, decision accuracy, and acceptance of decisions. These results noted that AI enhances both the efficiency and reliability of organizational decisions. Based on these outcomes, the study recommended that private sector firms continue integrating AI tools, stay updated with technological advancements, and foster partnerships between the Saudi Data and AI Authority (SDAIA) and global firms to promote AI research. The study further highlighted the need for expanded analysis of AI applications across both private and public sectors to fully realize its transformative potential in Saudi organizations.

Generative Artificial Intelligence (GAI) is emerging as a powerful tool for enhancing strategic decision-making in increasingly complex business environments. The effectiveness of decision-making in entrepreneurial initiatives depends on both external factors, such as the technological environment, and internal factors like innovation. López, Luzuriaga, Bedoya, Naranjo, Bonilla and Acosta-Vargas (2025) reviewed existing literature on the role of GAI in business decision-making, analyzing its short-, medium-, and long-term impacts while considering its interaction with human judgment. The review addressed challenges related to uncertainty, complexity, and ambiguity, offering a comprehensive understanding of how GAI functions in such contexts. Findings revealed that although GAI possesses advanced capabilities to process data and identify patterns, human judgment remains indispensable in situations characterized by high uncertainty. Rather than replacing decision-makers, GAI serves as a complement, enhancing accuracy and efficiency when combined with human expertise. The study concluded that integrating GAI with human capital can significantly improve the quality of strategic decisions by leveraging the analytical strengths of AI and the contextual understanding of people. To fully realize these benefits, organizations must strike the right balance between technological capabilities and human judgment, ensuring effective and responsible use of GAI in business strategy.

Das (2025) explored the transformative role of Artificial Intelligence (AI) in strategic decision-making within the Indian business context, highlighting its growing popularity and integration into managerial practices. Through employing technologies such as machine learning, natural language

processing, and predictive analytics, AI is increasingly improving managerial effectiveness, particularly in areas of data analysis, forecasting, and market trend prediction. Adopting a narrative review approach, the study examines AI adoption across multiple sectors including banking, retail, and manufacturing, showcasing its wide-ranging applications in enhancing efficiency and competitiveness in India's diverse business environment. The study emphasized the tangible benefits AI offers to managerial processes, such as more accurate forecasts and better-informed decision-making. At the same time, the study identified key gaps that require attention, particularly the coordination between human decision-makers and AI systems, ethical considerations in AI integration, and uneven adoption levels across industries. The research pointed out the relatively unexplored potential of AI in contributing to environmental sustainability initiatives within Indian businesses. The study recommended further research into these areas, alongside the development of robust policies to ensure ethical and effective AI inclusion in strategic decision-making, thereby supporting both business growth and responsible innovation.

Csaszar, Ketkar and Kim (2024) investigated effect of artificial intelligence (AI) on the strategic decision-making (SDM) process in firms, emphasizing its ability to augment existing decision-making tools. Empirical evidence drawn from a leading accelerator program and a start-up competition demonstrates that current large language models (LLMs) are capable of generating and evaluating strategies at levels comparable to entrepreneurs and investors. The study further examined AI's implications for key cognitive processes in SDM—search, representation, and aggregation—showing that AI can significantly improve the speed, quality, and scale of strategic analysis. Moreover, it highlighted the potential for innovative approaches such as virtual strategy simulations that redefine how firms evaluate strategic choices. Despite these advancements, the paper cautions that AI's ultimate effect on firm performance will depend on evolving competitive dynamics as its capabilities expand. A conceptual framework is proposed to link AI use in SDM with firm outcomes, illustrating how AI could reshape sources of competitive advantage by transforming strategic processes. The research considered how AI might simultaneously support and challenge core assumptions within the theory-based view of strategy. The study identified AI-driven SDM as a critical and emerging research frontier at the intersection of technology and strategy.

Ojeda, Valera and Diaz (2025) investigated effect of integrating artificial intelligence (AI) on enhancing flexibility in data analytics for managing large volumes of information. Traditional analytics methods, which rely on statistical tools and batch processing of historical data, often lack adaptability in rapidly changing environments. AI integration improves flexibility by scaling analytics to higher levels of knowledge, enabling organizations to uncover both explicit and latent response patterns in real time. AI-powered visualization tools further support strategic agility, allowing firms to swiftly adjust strategies, decision-making processes, and competitiveness in response to market fluctuations. The study also highlighted the need for developing adaptive skills among personnel responsible for managing organizational information systems to fully leverage AI's potential. Using a sample of 6,917 data scientists from 52 countries across 16 industries with varying levels of expertise, the research employed multivariate analysis through PLS-SEM to evaluate organizational characteristics. Findings showed that organizations managing big data reach an optimal flexibility threshold, achieving a maximum information level of 88% for

decision-making analytics. The study concluded that firms must recognize the dynamic nature of analytical needs and adopt appropriate AI applications to ensure adaptability, resilience and strategic competitiveness.

3.1 Research Methodology

The study used a systematic literature review methodology to investigate Artificial Intelligence Adoption and Strategic Decision-Making: Study of Small and Medium Enterprises in Tokyo, Japan. The research was conducted through a comprehensive review of peer-reviewed academic journals, industry reports and organizational case studies.

4.1 Research Findings

Tokyo SMEs are adopting AI mainly to optimize sales, inventory, customer service, and production planning, with about one in four firms reporting active use and manufacturers and retail/e-commerce out in front. Investment is modest (about 2–8% of revenue), and the biggest brakes are upfront cost, talent shortages, legacy systems, and resistance to change—especially in family-owned firms. Leadership sponsorship and basic enablement matter: firms that train staff and set clear KPIs move faster and report better outcomes, and pandemic disruptions nudged many late adopters to act. These patterns echo prior evidence that AI tends to lift decision speed and quality in practice (Aljohani & Albliwi, 2022) and that adoption is stronger when organizations provide visible support and training that make tools feel useful and easy to apply (Nassar et al., 2024).

Where AI is in place, SMEs report measurable gains: first-year efficiency improvements in manufacturing, better targeting and retention in retail, and lower back-office costs across services; on average, productivity rises by roughly a fifth, operating costs fall in the high single to mid-teens, and most projects pay back within 18–36 months. Outcomes improve when CEOs personally champion pilots, partner with vendors or universities, and scale only after a small win; staff training is associated with higher satisfaction and smoother rollouts. These results align with work showing AI—particularly modern language models—can boost the breadth, speed, and consistency of strategic analysis (Csaszar, Ketkar & Kim, 2024) while still benefiting from human judgment to steer choices in uncertain settings, including with generative AI tools (López-Solís et al., 2025). Taken together, the study suggests AI creates an advantage for Tokyo SMEs that treat it as an ongoing management capability rather than a one-off tech purchase, closing the gap with larger rivals while widening it against non-adopters.

5.1 Conclusion

The study concluded that artificial intelligence adoption among small and medium enterprises (SMEs) in Tokyo is no longer a peripheral initiative but an essential driver of competitiveness and strategic growth. While only about a quarter of SMEs currently use AI, those that have adopted it report improved operational efficiency, better customer targeting, and stronger resilience during economic disruptions. The findings demonstrated that leadership commitment, strategic partnerships, and phased implementation approaches are critical to overcoming barriers such as high upfront costs, skills shortages, and cultural resistance. The research highlighted that

successful AI adoption does not displace employees on a large scale; instead, it often stimulates workforce expansion in support of AI-enabled growth. This positions AI not as a threat but as an enabler of long-term business sustainability.

The trajectory of AI adoption in Tokyo's SME sector suggests accelerated integration within the next five to seven years, aided by government incentives, AI-as-a-Service models, and accessible low-code solutions. The study stressed that SMEs should approach AI as a continuous capability-building process embedded in strategic decision-making rather than as a one-time technological investment. For policymakers, expanding financial support and knowledge-sharing platforms will be crucial to reducing the digital divide between adopting and non-adopting firms. Educational institutions also have a role in producing AI-literate professionals who can serve this growing market. The conclusion underscores that Tokyo SMEs willing to invest in AI literacy, collaborative partnerships, and systematic data strategies will be better positioned to capture market share and sustain competitive advantage in Japan's increasingly digital economy

6.1 Recommendations

The study recommended that SMEs in Tokyo adopt a structured and incremental approach to artificial intelligence integration, beginning with small-scale pilot projects in high-impact areas such as customer service, inventory management, or production planning to build confidence and demonstrate measurable value. Leaders should champion AI initiatives at the executive level, while also investing in workforce training programs to address skills gaps and reduce cultural resistance to change. Forming strategic partnerships with technology vendors, universities, and consulting firms can provide much-needed expertise and resources, particularly for firms constrained by limited budgets and talent shortages. Policymakers are urged to expand financial incentives, create industry-specific AI adoption frameworks, and establish knowledge-sharing platforms that enable SMEs to learn from successful peers. Furthermore, SMEs are encouraged to view AI as an ongoing capability development process embedded in strategic decision-making, supported by systematic data collection and management practices, rather than as a one-time technology purchase. This holistic approach is expected to not only accelerate adoption rates but also ensure long-term competitiveness in Japan's digital economy

Reference

- Aljohani, N. B., & Albliwi, S. (2022). Impacts of applying artificial intelligence on decision-making quality: A descriptive study in Saudi arabian private sector organizations. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 13(5), 1-14.
- Cooper, R. G. (2025). SMEs' use of AI for new product development: Adoption rates by application and readiness-to-adopt. *Industrial Marketing Management*, 126, 159-167.
- Csaszar, F. A., Ketkar, H., & Kim, H. (2024). Artificial intelligence and strategic decision-making: Evidence from entrepreneurs and investors. *Strategy Science*, 9(4), 322-345.
- Das, A. C. (2025). The Impact of Artificial Intelligence on Strategic Decision-Making in Business: A Review with Focus on India. *IJSAT-International Journal on Science and Technology*, 16(3).
- Dirksen, N., & Takahashi, S. (2020). Artificial intelligence in Japan 2020. Actors, Market, Opportunities and Digital Solutions in a Newly Transformed World. Netherlands Enterprise Agency.
- Fukuda, K. (2020). Science, technology and innovation ecosystem transformation toward society 5.0. *International journal of production economics*, 220, 107460.
- Hu, H. A., Tseng, H. T., Mou, J., & Kim, J. (2023). From adoption to adaptation: Bridging digital transformation and AI integration in contemporary SMEs.
- Kumar, M., Raut, R. D., Mangla, S. K., Ferraris, A., & Choubey, V. K. (2024). The adoption of artificial intelligence powered workforce management for effective revenue growth of micro, small, and medium scale enterprises (MSMEs). *Production Planning & Control*, 35(13), 1639-1655.
- Liyanarachchi, A., & Lama Hewage, I. A. (2024). Artificial Intelligence (AI) Adoption on Customer Engagement: A qualitative study on fast-food SMEs.
- Lolo, F. (2025). Firm maturity, AI adoption, and financial performance: a study of publicly listed service firms in Finland.
- López-Solís, O., Luzuriaga-Jaramillo, A., Bedoya-Jara, M., Naranjo-Santamaría, J., Bonilla-Jurado, D., & Acosta-Vargas, P. (2025). Effect of generative artificial intelligence on strategic decision-making in entrepreneurial business initiatives: A systematic literature review. *Administrative Sciences*, 15(2), 66.
- Marimira, N., & Gumel, B. I. (2025). The Role of Artificial Intelligence in Strategic Decision-Making. *Asian Journal of Economics, Business and Accounting*, 25(3), 316-327.
- Michael, O. (2025). Maximising the Potentials of Small and Medium Scale Business Enterprises in Developing Nations Through the Use of Artificial Intelligence: AI Adoption by SMEs in the Developing Nations. In *The Future of Small Business in Industry 5.0* (pp. 215-246). IGI Global Scientific Publishing.
- Muminova, E., Ashurov, M., Akhunova, S., & Turgunov, M. (2024, April). AI in small and medium enterprises: Assessing the barriers, benefits, and socioeconomic impacts. In *2024*

- International Conference on Knowledge Engineering and Communication Systems (ICKECS) (Vol. 1, pp. 1-6). IEEE.
- Nassar, H., Goyal, S. B., Albdiwy, F. F., Lasi, M. B. A., & binti Ahmad, N. (2024). Advancing Artificial Intelligence Adoption and Decision-making with Extended Technology Acceptance Model.
- Ojeda, A. M., Valera, J. B., & Diaz, O. (2025). Artificial Intelligence of Big Data for Analysis in Organizational Decision-Making. *Global Journal of Flexible Systems Management*, 1-13.
- Rahate, V., Band, G., Naidu, K., Kaluvala, V., Verma, S., & Malik, M. M. U. D. (2025). The Impact of Artificial Intelligence on Strategic Decision-Making in Corporations. *Metallurgical and Materials Engineering*, 31(1), 811-816.
- Sánchez, E., Calderón, R., & Herrera, F. (2025). Artificial Intelligence Adoption in SMEs: Survey Based on TOE–DOI Framework, Primary Methodology and Challenges. *Applied Sciences*, 15(12), 6465.
- Seppänen, S. (2025). Digital transformation in SMEs: drivers, challenges, and the impact of emerging technologies on decision-making and management control.
- Shemshaki, M. (2024). The Benefits of Using Artificial Intelligence for Business Success Strategies for Innovation, Efficiency, and Growth. Milad Shemshaki.
- Tavos, F. (2024). Survive and Thrive in the Digital Age: A Growth Study of Digital Transformation in Japan's Small and Medium-Sized Enterprises (SMEs).
- Zein, Afrizal. (2025). Artificial Intelligence in Strategic Decision Making. *International Journal of Social Sciences*. 1. 17-25. 10.51805/ijss.v1i1.311.