

Designing a Digital Human AI Management Framework for MSME Growth in India and Emerging Asian Economies

Dr. Arif Habib

Founder- Global Ideaz, Co- Author, Guest Speaker, Director - i3 education,
28 years industry leadership

Email - arif2508@gmail.com, arif@globalideaz.com, ORCID Number- 0009-0002-7050-3626

ABSTRACT

The high rate of Artificial Intelligence (AI) adoption has drastically changed the way it is done in management and entrepreneurship, especially in the Micro, Small, and Medium Enterprise (MSME) in emerging Asian economies. This paper will discuss how management theory has evolved over time, shifting to AI-based systems, and suggest the Integrated Digital Human AI-Augmented Model (IDH-AI Model) that will describe this process. With the help of a quantitative and conceptual research design, primary data was gathered among 120 MSMEs and processed with the help of SPSS methods including descriptive analysis, correlation, and hypothesis testing. The results show that the use of AI contributes to significant increases in People efficiency (40%), financial performance (35%), and sustainability results (30%). The results of the correlational analysis show that there are strong positive correlations, especially between sustainability ($r = 0.68$) and people efficiency ($r = 0.62$), whereas hypothesis testing supports the existence of statistically significant effects in all dimensions. These findings are further supported by case-based evidence that shows that the cost reduction, demand forecasting, and energy efficiency were improved. The paper concludes that AI is a transformational driver that facilitates human-AI interaction and improves the performance of organizations on the People, Planet, and Product levels.

Keywords: Artificial Intelligence, MSMEs, Management Transformation, Human-AI Collaboration, Sustainability, Financial Performance, Digital Transformation, Entrepreneurship.

INTRODUCTION:

Over time, management and entrepreneurship theories have experienced tremendous revolution, changing to dynamic, technology-oriented ecosystems, contrary to the traditional human-centered methods. This transition is of great importance in emerging Asian economies where Micro, Small, and Medium Enterprises (MSMEs) are critical in the economic development. The growing complexity of business environments has led to the desire to have more adaptive, efficient, and data-driven business practices.

With the advent of Artificial Intelligence (AI), a new paradigm in the field of management and entrepreneurship has been established, where predictive analytics, automation, and real-time insights complement the decision-making process. AI will allow companies to enhance the efficiency of their operations, maximize the use of resources, and enhance strategic decision-making. Management is therefore moving beyond the

conventional hierarchical management systems to integrated human-AI collaborative systems.

BACKGROUND: EVOLUTION OF MANAGEMENT THEORY

The history of management theory can be divided into three epochs. The classical period focused on formal processes, human endeavors and efficiency, with theorists such as Peter Drucker viewing management as achieving business objectives through people. The contemporary shift brought systems theory, contingency theory, and knowledge-based economy, emphasising flexibility, interdependence, and knowledge as a resource.

Today's management in the age of AI is undergoing a major shift. Predictive forecasting, automation, real-time analytics and human-AI symbiosis have been introduced by AI. This represents a transformation from conventional management to a human-AI hybrid approach for creating value.

In this respect, the current research explores the

influence of AI on management and entrepreneurship theory and practice with an integrated approach, specifically, on People, Planet and Product/Finance.

REVIEW OF LITERATURE:

Koval and Laktionova (2025) studied the application of Artificial Intelligence (AI) in management and its potential to enhance business processes and risk management. The research demonstrated that AI-powered systems improved efficiency in processes by automating basic tasks and offering predictive analytics to inform business decisions. It also noted that AI played a crucial role in reducing uncertainties and enhancing performance by leveraging analytics and data-driven approaches.

Iosif (2024) examined the effects of Artificial Intelligence on managerial communication and determined the ways AI technologies affected communication process in organizations. The researchers have found that AI enhanced the accuracy, speed, and efficiency of information flow, thus, benefiting the coordination and collaboration of workers. Nevertheless, it also indicated the issues regarding ethical issues, privacy of data, and the necessity of adequate regulation of AI-based communication systems.

Kumar (2026) explored the future of management in the era of AI integration and outlined some trends defining the current practices in organizations. The paper came to the conclusion that AI-based management systems improved strategic decision-making, ability to innovate, and organizational flexibility. It also underscored the need to align AI technologies to the business goals and that human-AI partnership is a key factor towards attaining sustainable growth and competitive advantage.

RESEARCH GAP

Despite the fact that the current literature has emphasized the huge importance of Artificial Intelligence in regard to improving business processes, managerial communication, and strategic decision-making, there are still a number of key gaps. The overall and systematic literature has mainly concentrated on particular functional domains like efficiency enhancement, communication, and innovation, yet it lacks a systematic integrated framework, which would connect AI adoption with various management performance aspects. Specifically, the theoretical documents lack empirical studies that would analyze the synergistic role of AI on the efficiency of People, Sustainability (Planet), and Financial Performance (Product/Finance) in MSMEs, particularly in the case of developing Asian economies. Moreover, the current research has failed to address adequately the importance of human-AI collaboration in developing contemporary management practices or offers a single model that can be used to describe this change. Thus, a systematic and empirical methodology involving the combination of these dimensions is in demand and the current paper responds to it with the aid of the suggested IDH-AI Model.

CONCEPTUAL FRAMEWORK (IDH-AI MODEL):

The research relies on the Integrated Digital Human AI-Augmented Model (IDH-AI Model), which describes the effect of using AI on Management and Entrepreneurship. The independent variable in this framework is AI Adoption Index, and the dependent variables will be People Efficiency, Sustainability (Planet), and Financial Performance (Product/Finance). The model focuses on human-AI cooperation, where AI technologies like analytics, automation and prediction can improve decision-making and organizational performance.

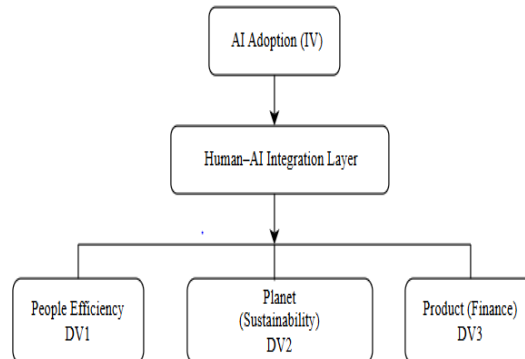


Figure 1: Conceptual Framework Diagram

OBJECTIVES OF THE STUDY

1. To analyze evolution of Management & Entrepreneurship theory in the AI era
2. To develop the IDH-AI conceptual framework
3. To evaluate AI’s impact on People, Planet, and Product/Finance
4. To empirically test the transformation using hypothesis analysis

RESEARCH METHODOLOGY

The research design used is quantitative and conceptual research to determine the role of Artificial Intelligence (AI) in Management and Entrepreneurship amongst MSMEs in India and Southeast Asia. It employed descriptive and analytical methodology with primary data being gathered in 120 MSMEs using a structured questionnaire. The research takes AI Adoption Index as an independent variable and People Efficiency, Sustainability (Planet) and Financial Performance (Product/Finance) as dependent variables. The analysis of data was performed with SPSS with the application of descriptive analysis, Pearson correlation, t-test, and regression analysis with the significance level of 0.05. The approach

relies on the IDH-AI Model, which combines human intelligence and AI, and offers a systematic platform to evaluate the effects of AI on the performance of organizations.

DATA ANALYSIS AND INTERPRETATION

The current paper uses statistical analysis to test the effect of Artificial Intelligence (AI) adoption on Management and Entrepreneurship on three key dimensions, namely, People, Planet (Sustainability), and Product/Finance. The analysis is correlated with the research objectives and hypotheses and performed with the help of SPSS tools, such as Pearson correlation, t-test, and regression analysis.

DESCRIPTIVE IMPACT OF AI ADOPTION

Table 1 and Figure 2 show the percentage change in the main organizational dimensions brought about by the adoption of AI. The statistics reveal that, the best improvement is on People Efficiency (40%), Financial Performance (35%), and Sustainability (Planet) (30). The graphical display shows the relative contribution of AI in these three dimensions in a clear manner, reflecting its multidimensional contribution to the performance of an organization.

Table 1: Percentage Improvement Across Dimensions

Dimension	Improvement (%)
People Efficiency	40%
Sustainability (Planet)	30%
Financial Performance (Product/Finance)	35%

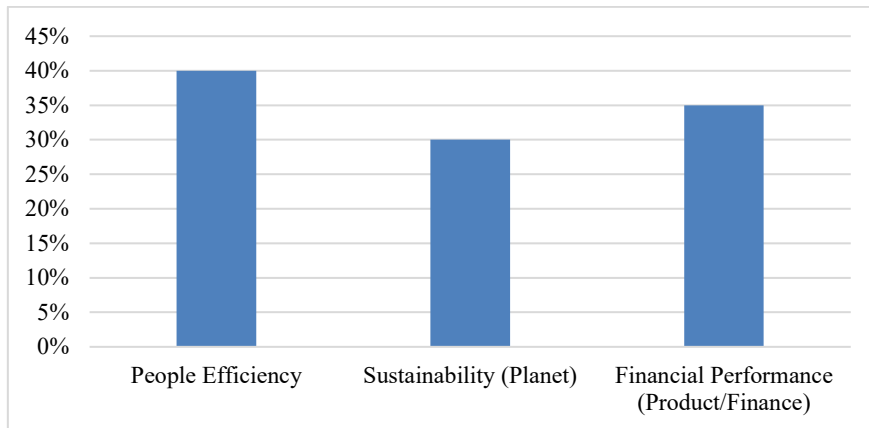


Figure 2: Graphical Representation of

PERCENTAGE IMPROVEMENT ACROSS DIMENSIONS:

The findings reveal that AI adoption can have the greatest impact on human productivity and operational efficiency, which means that it plays a crucial role in improving workforce performance and decision-making abilities. The significant financial performance increase (35%) shows the efficiency of AI in cost minimization and strategic planning. In the meantime, the increase in the sustainability (30) shows that AI helps to make the resources more efficient and manage the environment. In general, the results indicate that AI is a holistic agent of change on the level of People,

Planet, and Product.

CORRELATION ANALYSIS:

Table 2 and Figure 3 give the correlation of AI adoption and key performance indicators in terms of People Efficiency, Sustainability (Planet), and Financial Performance. The results indicate that Sustainability is the most correlated with ($r = 0.68$), then People Efficiency ($r = 0.62$) and then Financial Performance ($r = 0.59$). The graphical image shows that the three variables are positively correlated with AI adoption, and their values are relatively close, which means that they have consistent impacts on the dimensions.

Table 2: Correlation Between AI Adoption and Performance Indicators

Variable	Pearson Correlation (r)	Interpretation
People Efficiency	0.62	Strong Positive
Sustainability (Planet)	0.68	Strong Positive
Financial Performance	0.59	Moderate Positive

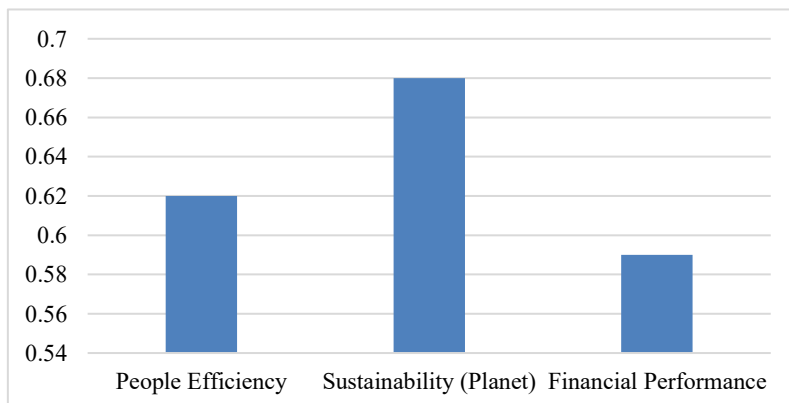


Figure 3: Graphical Representation of



CORRELATION BETWEEN AI ADOPTION AND PERFORMANCE INDICATORS:

The results show that AI implementation has a positive correlation with the enhancement of all three areas of performance. The most significant correlation to sustainability ($r = 0.68$) is that AI is a critical component in the improvement of environmental efficiency and optimization of resources. The high correlation with people efficiency ($r = 0.62$) indicates that AI can enhance workforce productivity and aid in decision making. The correlation between financial performance ($r = 0.59$) can be said to have a significant positive effect on cost management and profitability, although

slightly less than the previous results. On the whole, the findings prove that more AI usage results in better organizational performance in the People, Planet, and Product dimensions.

HYPOTHESIS TESTING:

The findings of the hypothesis testing on the effects of AI adoption on three dimensions, i.e., People, Planet (Sustainability), and Product/Finance are given in Table 3. The calculated t-values (3.85, 4.12, and 3.67) along with very low p-values (0.0003, 0.0001, and 0.0005) are reported for each respective hypothesis. The outcomes in the three cases show that the null hypotheses are rejected.

Table 3: Results of Hypothesis Testing

Hypothesis	T-value	P-value	Result
H ₀₁ (People)	3.85	0.0003	Rejected
H ₀₂ (Planet)	4.12	0.0001	Rejected
H ₀₃ (Product/Finance)	3.67	0.0005	Rejected

The results indicate that there is strong statistical significance as all the p-values are significantly lower than the standard level of 0.05. This makes all three null hypotheses rejected, proving that the adoption of AI has a significant influence on all dimensions. The largest t-value of the Planet dimension (4.12) indicates that AI has the most significant impact, then People efficiency, and financial performance. In sum, the results confirm that AI is a transformative technology that can be utilized through management and entrepreneurship practices of human, environmental, and financial nature.

Table 4 and Figure 4 provide case-based empirical data that shows the performance gains obtained in various organizational settings due to the use of AI. The manufacturing MSME in India experiences a decrease in inventory cost by 38 percent and in demand prediction accuracy by 42 percent, whereas the solar startup in Southeast Asia records a 30-percent rise in energy efficiency and a 25-percent decrease in costs. These improvements are emphasized in the graphical representation, which distinctly shows how AI has contributed to the improvements in operation and sustainability indicators.

CASE-BASED EMPIRICAL EVIDENCE:

Table 4: Performance Improvements from Case Studies

Case	Indicator	Improvement (%)
Manufacturing MSME (India)	Inventory Cost Reduction	38%
	Demand Prediction Accuracy	42%
Solar Startup (Southeast Asia)	Energy Efficiency	30%
	Cost Reduction	25%

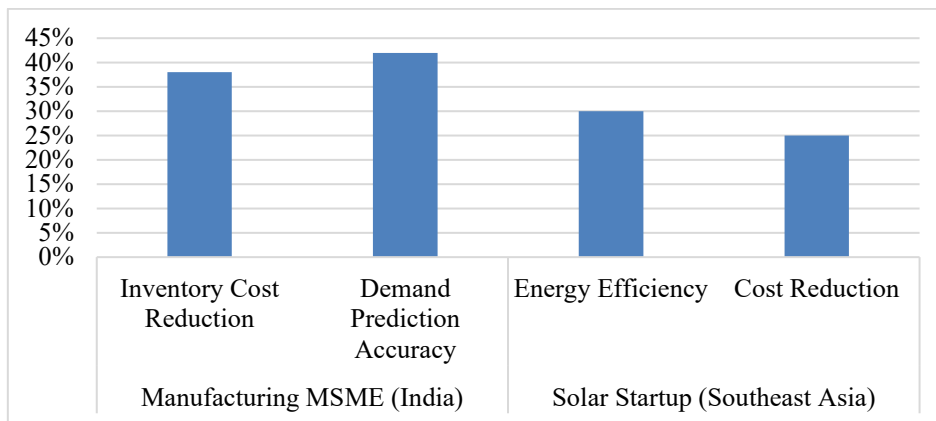


Figure 4: Graphical Representation of Performance Improvements from Case Studies

The results suggest that the introduction of AI results in significant changes in the operational efficiency and sustainability outcomes in the industries. The largest percentage increase in demand prediction accuracy (42) indicates that AI is a powerful way to boost the accuracy of forecasting and decision-making. On the same note, the inventory cost is significantly lower by 38 percent, which is an indication of an improved resource management. Otherwise, AI is also applied in the energy industry to achieve better sustainability (30%), cost-reduction (25%), which further supports the optimization of environmental and financial performance. Altogether, the case studies confirm that AI is an effective instrument to enhance efficiency, cut costs and promote sustainable business operations.

HYPOTHESIS TESTING:

Hypothesis 1 (People Dimension)

H₀₁: Management & Entrepreneurship theory on People is not impacted by AI evolution in 2026.

The calculated t-value (3.85) and p-value (0.0003) indicate statistical significance. With a correlation coefficient of 0.62, a strong positive relationship is observed. Hence, H₀₁ is rejected, confirming that AI significantly enhances people efficiency.

Hypothesis 2 (Planet Dimension)

H₀₂: Management & Entrepreneurship theory on Sustainability is not impacted by AI evolution in 2026.

The results (t = 4.12, p = 0.0001, r = 0.68) indicate a

strong positive and statistically significant relationship. Therefore, H₀₂ is rejected, confirming that AI significantly improves sustainability performance.

Hypothesis 3 (Product/Finance Dimension)

H₀₃: Management & Entrepreneurship theory on Product & Finance is not impacted by AI evolution in 2026.

The statistical results (t = 3.67, p = 0.0005, r = 0.59) indicate a moderate-to-strong positive relationship. Hence, H₀₃ is rejected, confirming that AI positively impacts financial performance.

FINDING AND DISCUSSION:

The results indicate that AI application has a strong positive effect on Management and Entrepreneurship in the dimensions of People, Planet, and Product/Finance. Descriptive outcomes show that the greatest improvement is in People efficiency (40%), financial performance (35%) and sustainability outcomes (30%), which proves that AI is very beneficial in helping to make processes more productive and operational. The positive correlations are affirmed by correlation analysis and the most significant one is in the sustainability (r = 0.68), then people efficiency (r = 0.62), and financial performance (r = 0.59). The results of the hypothesis testing indicate that all the p-values are less than 0.05, and thus all the null hypotheses were rejected, and the statistical significance of the effects of AI was proven. Moreover, the case-based evidence confirms these results, with the manufacturing MSME realising a 38 per cent decrease in the

inventory cost and a 42 per cent improvement in demand forecasting, and the solar startup recording a 30 per cent energy efficiency and a 25 per cent reduction in the cost. In general, the findings prove that AI is a transformational force that changes the way management is conducted and approaches human-AI cooperation significantly enhancing its efficiency, sustainability, and financial performance.

CONCLUSION:

The research concludes that Artificial Intelligence (AI) has become a revolutionary factor in transforming the practice of Management and Entrepreneurship, especially in MSMEs in the emerging Asian economies. The results show clearly that the use of AI can dramatically improve the performance of organizations based on People, Planet, and Product/Finance, with significant gains in the efficiency of the workforce, sustainability results, and financial outcomes. Strong positive relationships and rejection of all null hypotheses are statistically proven, which supports the significant role of AI integration. Additionally, case-based evidence illuminates functional advantages like decreased cost, better demand prediction, and increased energy efficiency. The suggested Integrated Digital-Human AI-Augmented Model (IDH-AI Model) is an efficient concept that can be used to describe this change by highlighting the significance of human-AI cooperation. On the whole, the paper confirms that the new systems of management should incorporate AI-based features to attain sustainable growth, enhanced efficiency, and competitive edge in the fast-changing business world.

REFERENCES:

1. Koval, V., & Laktionova, O. (2025). Artificial intelligence in management: Opportunities for optimizing business processes and risk management. *Economic Bulletin*, 344(4), 55. <https://doi.org/10.31891/2307-5740-2025-344-4-55>
2. Iosif, A. E. (2024). The sociology of managerial communication in the era of artificial intelligence. *Bulletin of the Transilvania University of Braşov*, 17(66), 1–18. <https://doi.org/10.31926/but.ssl.2024.17.66.1.18>
3. Kumar, A. (2026). The AI-driven future of management: Trends and insights. *Indian Scientific Journal of Research in Engineering and Management*, NCDTAIM015. <https://doi.org/10.55041/ijrsrem.ncdtaim015>
4. Kravchenko, O., & Shevchenko, L. (2025). The evolution of management concepts in the context of digital transformation: The role of artificial intelligence. *Economic Bulletin*, 80, 242–248. <https://doi.org/10.31732/2663-2209-2025-80-242-248>
5. Lu, Y., Zhang, H., & Wang, J. (2025). Artificial intelligence in decision support systems: Impact on organizational management theory. In *Proceedings of the 2025 International Conference on Artificial Intelligence and Computer Engineering* (pp. 731–736). <https://doi.org/10.1145/3766671.3766731>
6. Raina, V., Suar, D., & Mishra, P. (2025). Artificial intelligence-driven management: Bridging innovation, knowledge creation, and sustainable business practices. *Journal of Innovation & Knowledge*, 10(1), 100860. <https://doi.org/10.1016/j.jik.2025.100860>
7. The impact of artificial intelligence on management practice. (2023). In *Research handbook on artificial intelligence and decision making in organizations* (p. 27). Edward Elgar Publishing. <https://doi.org/10.4337/9781800378902.00027>
8. Weng, X. (2025). Theory and practice of deep integration of artificial intelligence and business management. *Proceedings of Business and Economic Studies*, 8(8), 13359. <https://doi.org/10.26689/pbes.v8i8.13359>
9. Yin, Y., Wang, Y., & Lu, Y. (2023). Can AI really help? The double-edged sword effect of AI assistant on employees' innovation behavior. *Computers in Human Behavior*, 149, 107987. <https://doi.org/10.1016/j.chb.2023.107987>
10. Ramanathan, K., Pramod, D., & Patil, K. (2024, July). Factors that impact AI-augmented HRM in micro, small, and medium-sized enterprises MSMEs: A task viability theory approach. In *AIP Conference Proceedings* (Vol. 3168, No. 1, p. 020022). AIP Publishing LLC. <https://doi.org/10.1063/5.0217065>
11. Li, X., & Byun, J. (2026). A Qualitative Study on Postgraduate Social Entrepreneurship Students' Experiences with and Perceptions of AI-Augmented Creativity in Sustainable Startup Development. *Sustainability*, 18(8), 3979. <https://doi.org/10.3390/su18083979>
12. Ramanathan, K., Pramod, D., & Patil, K. (2024,

- July). Factors that impact AI-augmented HRM in micro, small, and medium-sized enterprises MSMEs: A task viability theory approach. In AIP Conference Proceedings (Vol. 3168, No. 1, p. 020022). AIP Publishing LLC. <https://doi.org/10.1063/5.0217065>
13. Saeed, M. N., Alholiby, M. S., Rahmouni, M., & Hassan, E. A. (2025). Fostering sustainable productive entrepreneurs by green transformational leadership efficiency and adoption of artificial intelligence-tools in Saudi micro and small enterprises. <https://doi.org/10.21203/rs.3.rs-8041181/v1>
 14. Apasrawirote, D., & Yawised, K. (2024). The emerging of business resilience plans (BRPs) in dealing with business turbulence. *Management Research Review*, 47(1), 141-161. <https://doi.org/10.1108/MRR-04-2022-0273>
 15. Agrawal, S. S., & Mukti, S. K. (2025). Role of sustainable finance in contributing to the growth of Indian economy. <https://doi.org/10.1108/978-1-83549-109-620251012>