

ARTIFICIAL INTELLIGENCE (AI) AND MANAGEMENT EDUCATION: AI LITERACY IS THE NECESSITY FOR BUDDING MANAGEMENT PROFESSIONALS

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Abstract

The quick evolution of Artificial Intelligence (AI) in business environments creates a demand for management education to include AI literacy as a fundamental element. The widespread adoption of digital technologies requires contemporary management professionals to acquire basic AI knowledge to maintain a competitive edge and make well-informed decisions. The article examines how business schools should incorporate AI literacy into their management programs to meet modern educational demands. The research demonstrates AI's transformative capabilities in management education by analyzing modern literature and teaching strategies within an established conceptual framework. The paper identifies primary institutional obstacles that include faculty readiness and curriculum development alongside technology access. Early exposure to AI tools increases students' job prospects while simultaneously developing their capacity for strategic thinking and innovation. AI literacy must become an integral part of business education because it is essential for training professionals who can succeed in the future.

Keywords: Artificial Intelligence, AI literacy, curriculum, innovation, conceptual framework

Introduction

The advent of Artificial Intelligence (AI) across business sectors is driving a crucial transformation in management education and practices. Management institutions must evolve their educational programs to equip future leaders with skills for a world enhanced by advanced AI technologies. The transformation extends beyond technology to signify a fundamental change in the conceptualization and implementation of management decisions. Traditional management education curricula are experiencing substantial change because of AI's transformative influence. Business schools now teach AI literacy as a fundamental skill while embedding data analytics machine learning and algorithmic thinking into their course offerings. Case studies have expanded to feature AI deployment situations and students must now learn technical abilities such as interpreting AI results as key educational objectives. Educators must continuously update their knowledge because pedagogical approaches now focus on the critical evaluation of AI-generated insights rather than memorization in this fast-evolving field. AI will evolve to become an all-encompassing partner in management operations. Future managers must work alongside AI systems to perform strategic planning and manage resource allocation and operational optimization. Automation of repetitive decision-making processes will enable managers to dedicate their time to resolving complex problems that necessitate human insight and creativity. Organizations will establish hybrid management systems where AI processes data-intensive operations while humans oversee ethical aspects and manage stakeholder interactions to create a balanced partnership between human intuition and machine accuracy. Management decision-making is being revolutionized by AI through its unparalleled analytical capabilities and predictive insight generation. Through AI-powered decision support systems, managers can process massive datasets to detect patterns and receive recommendations for the best solutions. The implementation of this technology diminishes human cognitive biases and leads to better decision-making outcomes especially when dealing with datasets that contain abundant information. The difficulty emerges when organizations must sustain proper human supervision while simultaneously recognizing the boundaries of AI technologies. Managers who succeed will be those who turn AI-generated recommendations into actions that fit the context and take responsibility for their results. To prepare students for jobs in AI-driven environments they need to acquire both technical skills and human-centered abilities. Management programs need to teach students to operate with AI systems while analyzing their outputs and recognizing their limitations. It is essential to develop human skills

that AI systems cannot duplicate including ethical reasoning along with creative problem-solving and emotional intelligence as well as cross-cultural communication abilities. AI-driven simulations and industry collaborations offer practical experience while developing adaptable thinking enables students to adapt to ongoing technological changes. Management education faces dual aspects of challenge and opportunity through AI integration. Management institutions that adopt AI literacy alongside human skill development can effectively train graduates to succeed in environments dominated by automation. Managers who effectively integrate AI's analytical capabilities with their own human judgment and ethical leadership will shape the future because of technology.

Literature Review

This review explores scholarly discussions about AI literacy in management education to identify essential findings and challenges while offering recommendations to improve educational curricula. The fast-paced transformation of global business by Artificial Intelligence (AI) requires management education programs to include AI literacy as an essential topic. Management professionals today need basic knowledge of AI due to the widespread adoption of digital technologies, so they stay competitive and make informed decisions. The research examines how business schools need to integrate AI literacy into their management programs while stressing the need for educational innovation and adaptation. This research demonstrates how artificial intelligence can revolutionize management education through a comprehensive literature review and examination of pedagogical practices and conceptual frameworks. This paper identifies the primary obstacles educational institutions encounter including faculty readiness training and curriculum development together with technology accessibility.

A. Workforce Disruption and Skills Gap

- **Brynjolfsson (2017):** Automation threatens mid-skill jobs; adaptability is key.
- **Bughin (2019):** Adoption of AI is uneven; industry-specific reskilling is needed.

B. Managerial Transformation

- **Davenport (2018):** Managers must be AI-literate to lead data-driven organizations.
- **Wilson (2018); and Susskind (2020):** Managerial skills are evolving to include tech fluency and algorithmic reasoning.

- **Chui (2018):** Strategic planning now requires AI integration in MBA curricula.

C. Educational Reforms

- **Makridakis (2017):** Current systems are outdated; innovation is critical.
- **Kaplan (2021):** Curricula must include AI theory, ethics, and application.

D. Practical Exposure and Pedagogy

- **Ng (2019):** Real-world AI experience enhances learning.
- **Zhang (2020):** AI tools improve engagement and learning outcomes.

E. Institutional Barriers and Opportunities

- **Thomas (2021):** Infrastructure and faculty development are major hurdles.
- **Westerman (2019):** The digital maturity gap threatens institutional competitiveness.

Literature Review Major Aspects in which we focus:

Brynjolfsson (2017) shows how AI disrupts global labor markets by automating routine cognitive and manual tasks.

Davenport's 2018 work examines how organizations are transforming their decision-making through AI and analytics.

Makridakis (2017) asserts that educational systems show inertia and rigidity despite exponential technological advancements.

The 2021 study by Kaplan examines how AI literacy should become a core component of professional and higher education programs.

Bughin's 2019 study examines AI adoption trends in several sectors such as healthcare and finance while demonstrating that early adopters gain considerable advantages which expands the divide between digitally advanced and behind-the-times industries.

Zhang's 2020 research focuses on how AI tools such as adaptive learning platforms and chatbots affect student engagement and performance while exploring potential issues of data privacy and algorithmic bias.

Wilson (2018) – Managerial Competencies for AI Era Identifies six key managerial competencies in AI-driven organizations: The article promotes a move from classic leadership attributes to modern technology-based adaptive leadership.

Ng's 2019 research on Practical Exposure to AI in Business Education reveals that business schools currently lack practical AI training despite theoretical teachings. The author calls for experiential learning through AI labs and projects as essential to learning and suggests forming partnerships with tech companies.

Scaling AI education requires understanding both barriers and enablers such as infrastructure deficits and faculty resistance alongside curriculum rigidity.

Susskind (2020) – Redefining Managerial Skills Argues that traditional business education does not address the emerging demands of AI-integrated work environments. Proposes a redefinition of managerial skillsets: The redefined managerial skillsets should include digital empathy together with algorithmic literacy and ethical considerations for automated systems.

Chui (2018) examines AI's role in strategic planning and its impact on MBA programs by highlighting its influence on market forecasting and customer analytics while recommending AI integration into core business areas like marketing and finance. Business schools should start teaching AI through executive workshops and micro-credentials.

Westerman's 2019 study identifies a pervasive shortfall in digital transformation among educational institutions. Leadership and organizational culture stand as primary barriers to progress.

Table 1

Author	Focus Area	Key Findings	Recommendations
Davenport (2018)	Advocates AI fluency in modern organizational decision-making	Data-driven management is becoming essential	Develop AI literacy programs for managers and executives
Makridakis (2017)	Urges systemic change in education to address	Emerging technologies are outpacing	Design agile, future-oriented educational frameworks

	technological disruption	traditional education models	
Kaplan (2021)	Focus on integrating AI into professional education	The curriculum must evolve to include AI competencies	Incorporate AI modules across disciplines in higher education
Bughin (2019)	Explores industry-specific AI adoption and workforce skill needs	AI impacts and adoption rates vary by sector	Tailored training and reskilling programs by industry
Zhang (2020)	Assesses outcomes of AI-enhanced learning environments	AI tools can improve student engagement and performance	Expand research on AI's pedagogical effectiveness
Wilson (2018)	Identify skills for AI-enhanced management roles	Managers need analytical, technological, and collaborative skills	Redefine management education around AI-enhanced roles
Ng (2019)	Emphasizes hands-on AI learning in business education	Practical AI exposure builds confidence and understanding	Integrate AI labs, simulations, and case studies into business curricula
Thomas (2021)	Discusses institutional readiness for AI integration	Institutions face infrastructural and strategic challenges	Develop strategic plans and invest in digital infrastructure
Susskind (2020)	Calls for reimagining managerial competencies in the AI era	Traditional skills are insufficient; adaptability and tech fluency are crucial	Promote interdisciplinary, lifelong learning approaches

Chui (2018)	Examines AI's role in strategic planning within MBA programs	Strategic planning increasingly depends on AI capabilities	Embed AI and data analytics into MBA coursework
Westerman (2019)	Highlights the digital maturity gap in educational institutions	Many institutions lag in digital transformation	Accelerating digital transformation initiatives in education

Summary of the above table

The workforce implications are equally significant. According to Bughin (2019), businesses faced differing AI adoption rates across industries which require customized training approaches but Wilson (2018) states that analytical, technological, and collaborative skills become essential for managerial roles enhanced by AI. Ng (2019) advocates hands-on learning methodologies by proposing the integration of AI labs and simulations along with real-world case studies into business education to enhance practical skills. Zhang (2020) discusses how AI tools have the potential to enhance student engagement and performance and advocates for more research into AI's effectiveness as an educational tool. Thomas (2021) and Westerman (2019) warn that numerous institutions lack readiness for AI integration because of deficiencies in strategic planning along with insufficient infrastructure and digital maturity. Their research demonstrates that strategic planning together with digital infrastructure investment is crucial to unlock AI's full potential across educational institutions and workplaces.

Objectives of the Study

This research explores why AI literacy should be included in management education programs and how business schools can incorporate AI concepts into their teaching materials. The research intends to discover both the difficulties and effective methodologies pertaining to incorporating AI literacy into management training.

Methodology

This research integrates findings to establish a thorough comprehension of AI education's present state and its future trajectory in management programs. The study implements a

qualitative and conceptual research design best suited for examining emerging phenomena such as AI literacy where empirical data has yet to become fully established. By using secondary data—sourced from:

- Academic journals
- Industry reports
- Publications from think tanks and educational institutions

The study benefits from multiple viewpoints without being restricted by the constraints of limited primary data samples. The literature-based approach enables the combination of authoritative sources' trends and frameworks to deliver essential insights.

- Direct experimentation is not feasible
- The subject is cross-disciplinary (AI + management)

Key Strength: Through conceptual research, scholars can develop theoretical frameworks and practical models that inform new or rapidly changing subjects such as AI integration.

Hypothesis of the Study

Hypothesis (H1): Management students who become proficient in AI literacy improve their chances of employment and develop better strategic decision-making abilities. Managers now:

- Interpret AI-generated insights
- Lead AI-driven innovation
- Make ethical decisions about AI deployment

Understanding AI concepts, applications, limitations, and ethics becomes a strategic management capability instead of a technical skillset.

Data Analysis

Through conceptual analysis using secondary data this study evaluates both the importance and current integration of AI literacy within management education. The academic literature review shows agreement about the increasing importance of AI in business functions along with the need for managers who understand AI. Institutions teaching AI-focused courses observe better student involvement and preparation for employment. Three main challenges have been pinpointed which involve insufficient faculty knowledge, restricted availability of AI resources, and unyielding educational programs. Various innovative approaches including

partnerships with technology firms alongside online platform usage and curriculum modifications help institutions significantly in the preparation of management professionals for future challenges.

Table 2

Opportunity	Description	Action Required
AI-Enabled MBA Programs	Leading business schools such as IIM Bangalore and ISB have initiated pilot programs for AI modules. Educational institutions expect to completely incorporate AI modules into MBA programs within five years.	Incentivize interdisciplinary courses with AI + management content.
Faculty Upskilling	AI integration faces substantial obstacles because faculty members are not adequately prepared. Formal AI training exists for just 23% of management faculty members in India. The lack of faculty preparation restricts both curriculum delivery effectiveness and student engagement in AI concepts.	The NEP 2020 initiative includes national-level workshops and AI fellowships.
AI Incubators on Campus	Partnerships with Infosys, Google, and TCS enable colleges to establish Artificial Intelligence laboratories. Through these partnerships educational institutions gain access to expert support and tools while students get to work on real-world projects. Students receive practical industry-aligned AI education through this program.	Through AI-based internships and capstone projects, students obtain practical industry experience. Microsoft serves as IIM Bangalore's partner in executing AI-driven business analytics projects. These

		educational programs equip students with essential skills for professional positions where data analysis guides business decisions.
Policy Support	<p>Through "AI for All" NITI Aayog works to make AI education accessible to all Indians.</p> <p>The initiative provides support for pilot projects in schools and universities to develop basic AI competencies.</p> <p>The initiative will eventually extend to management schools to develop leaders prepared for AI challenges.</p>	<p>UGC and AICTE are promoting AI education growth within business schools.</p> <p>The creation of new guidelines for incorporating AI modules into MBA and BBA programs is currently underway.</p> <p>The initiative prepares upcoming managers with important skills in AI and data literacy.</p>

Conclusion and Findings

Management education needs AI literacy as an essential component rather than an optional feature. The expanding influence of AI across all economic sectors requires management professionals to acquire the necessary skills to use these technologies effectively. Through both literature review and conceptual framework development this study shows that students who develop AI literacy improve their critical thinking skills together with their strategic planning abilities and problem-solving capabilities. Institutions should update their teaching programs

and provide faculty development while incorporating interdisciplinary educational approaches to prepare students properly. The implementation of these strategies will lead to higher graduate employability rates while simultaneously advancing the development of a workforce proficient in digital skills and innovation.

Table 3

Category	Inside	Example and Evidence
a. Value of AI Literacy in Business Education	Enhanced Employability: Exposure to AI tools (Power BI, Tableau, Python, ChatGPT, GPT APIs) makes students well-prepared for the future.	<i>Harvard Business Review</i> reports that AI-aware leaders make faster and better decisions
b. Institutional Practices and Innovations	The integration of AI through dedicated MBA courses alongside interdisciplinary minors and project applications results in enhanced student engagement and better job placement opportunities.	<i>MIT Sloan</i> and <i>INSEAD</i> offer specialized AI modules that build student confidence and capability
c. Key Barriers Identified	Management instructors typically do not possess sufficient AI skills.	Observed across various business schools globally, especially in developing regions
d. Proposed Solutions and Best Practices	Academic partnerships with Microsoft Learn and IBM	<i>IIM Bangalore</i> collaborates with <i>NASSCOM Future Skills</i> to

	Academic Initiative extend industry collaborations.	implement AI in management learning
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Hypothesis Confirmed: A fusion of secondary data from scholarly and professional publications strongly supports the theory that management students who develop AI literacy show improved employment prospects and strategic decision-making abilities.

This conclusion is underpinned by a consistent trend in literature:

- Research evidence reveals a consistent pattern that supports this conclusion.
- Graduates proficient in artificial intelligence show superior preparation for employment alongside enhanced adaptability and strategic analysis skills.
- Employers actively search for candidates who possess both business knowledge and basic AI expertise.
- Beyond tool operation, AI literacy forms essential skills for leadership roles in digital transformation projects.

In today's management landscape professionals need to develop AI literacy as an essential skill. Successful leadership in innovation through data-driven decision-making in digital economies demands a solid foundational skill set. Educational institutions that embed AI literacy into their primary objectives will produce job-ready graduates who will advance ethical AI practices in the business world. Management education needs to incorporate AI Literacy to meet modern demands.

Implications for Practices

Successful implementation of Artificial Intelligence (AI) in management education requires comprehensive changes across teaching methods, faculty training, curriculum organization, and institutional collaborations. The visual framework generates several essential implications for practice.

1. Shift from Tools to Strategic Thinking

- For AI to become an essential part of strategic decision-making we need to shift our mindset away from seeing AI as merely a technical tool. Management students must be trained to:

- Students in management programs must learn to evaluate the appropriate business scenarios for AI application through an analysis of its practicality and potential outcomes.
- Management students need to learn about ethical challenges and regulatory issues while acknowledging organizational and operational consequences related to AI deployment alongside biases in automated systems.
- AI reshapes traditional competitive landscapes and changes decision-making approaches by making agility and data analysis fundamental leadership elements.

2. Faculty Upskilling and Pedagogical Innovation

- Teaching AI literacy in classrooms primarily depends on faculty preparedness. A significant obstacle exists because only 23% of management faculty members in India have received AI-related training.
- Educational institutions need to establish AI literacy training programs and certification opportunities for faculty using platforms like SWAYAM at the national level and international MOOCs.
- Faculty members should work with industry experts or data scientists to teach practical AI applications through co-teaching models.
- Use case-based learning along with simulation-based methods and experiential teaching to integrate theoretical knowledge with practical application.

3. Curriculum Reform and Industry Collaboration

- Traditional educational programs do not equip students for jobs in AI-driven work environments. Reform must include:
- MBA and BBA programs require modular AI elective courses that explore AI applications in marketing, finance, operations, and HR.

- Students tackle real-world business challenges through capstone projects that utilize AI technologies such as Python, R, Tableau, and ChatGPT.
- Technology companies such as Infosys, TCS, and Google should partner to create AI labs and innovation hubs while providing internship opportunities.

4. AI Literacy as a Core Management Competency

- AI literacy should advance beyond its status as a specialized skillset to become fundamental for managers.
- Students need the ability to express both the strengths and weaknesses of AI while understanding its ethical limits to support smart decision-making in executive meetings.
- Organizations need professionals who can develop and execute AI strategies while maintaining alignment with organizational objectives and social duties.

Integration with Policy and Future Outlook

The practices described fit with national frameworks such as NITI Aayog's "AI for All" initiative while receiving potential support through policy-based curricular requirements from UGC and AICTE. The nation needs strategic faculty-led industry-aligned AI literacy models because they fulfill academic responsibilities and build future-ready leadership.

References

- Brynjolfsson, E. (2017). The business of artificial intelligence. Harvard Business Review.
- Bughin, J. (2019). Skill shift: Automation and the future of the workforce. McKinsey Global Institute.
- Chui, M. (2018). AI adoption advances, but foundational barriers remain. McKinsey & Company.
- Davenport, T. H. (2018). Artificial Intelligence for the Real World. Harvard Business Review.

Kaplan, A. (2021). Higher education at the crossroads of disruption: The university of the 21st century. Emerald Publishing.

Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60.

Ng, A. (2019). Deep learning and its application in education. Stanford University Press.

Susskind, R. (2020). The Future of the Professions: How Technology Will Transform the Work of Human Experts. Oxford University Press.

Thomas, D. (2021). Teaching AI: Exploring new frontiers in business education. *Journal of Management Education*.

Westerman, G. (2019). Leading digital: Turning technology into business transformation. Harvard Business Review Press.

Wilson, H. J. (2018). The jobs that artificial intelligence will create. MIT Sloan Management Review.

Zhang, J. (2020). Artificial intelligence in higher education: Challenges and opportunities. *Educational Technology Research and Development*.

Gupta, S., & Jaiswal, R. (2025). A deep learning-based hybrid PLS-SEM-ANN approach for predicting factors improving AI-driven decision-making proficiency for future leaders. *Journal of International Education in Business*.

Jose, E. M. K., Prasanna, A., & Kushwaha, B. P. (2024). Can generative AI motivate management students? The role of perceived value and information literacy. *The International Journal of Management Education, Elsevier*.

Hossain, Z., Biswas, M. S., & Khan, G. (2025). AI literacy of library and information science students: A study of Bangladesh, India and Pakistan. *Journal of Librarianship and Information Science, SAGE*.

Swartz, S., Luck, S., & Sharma, S. (2025). Global virtual team's projects and developing AI literacy: A mixed-methods study on preparing students for the international technology-infused workplace. *Higher Education, Skills and Work-Based Learning, Emerald Publishing*.

Govindaraju, V., Naaz, G. A., & Shanmugam, V. (2025). Promoting intelligent resource management in Indian higher education through 5G and 6G networks. *In Addressing B5G and 6G Network Connectivity Issues in Rural Regions* (pp. 275–291). IGI Global.

Hossain, Z., Alwreikat, A., & Khan, G. (2025). AI literacy and perception among library and information science students in South Asia and the Middle East. *Science & Technology Libraries, Taylor & Francis*.

Thomas, A. A., & Sebastian, R. T. (2024). Understanding and enhancing the financial literacy among migrant women laborers in Bangalore. *In Artificial Intelligence, Deep Learning, and IoT for Intelligent Business Applications* (pp. 743–757). Springer.