

Management Education in the Era of Digital Pedagogy: Bridging Industry Expectations and Academic Curriculum

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Abstract: The rapid digital transformation of business environments has fundamentally altered industry expectations from management graduates. Organizations today demand professionals who are digitally literate, analytically skilled, adaptable, and capable of integrating technology with managerial decision-making. However, a persistent gap exists between industry expectations and the academic curriculum of management education in India. This study aims to examine how digital pedagogy can act as a bridging mechanism between academic management curricula and industry requirements. Using primary data collected from a survey of 235 management students in Rajasthan and early-career professionals, the study investigates perceptions of digital teaching tools, curriculum relevance, skill preparedness, and employability outcomes. A structured questionnaire was employed, and statistical tools such as descriptive statistics, reliability analysis, correlation, and hypothesis testing were applied. The findings indicate a significant positive relationship between digital pedagogy adoption and perceived industry readiness. The paper concludes with industry-oriented suggestions for curriculum redesign, faculty development, and academia–industry collaboration.

Keywords: Digital Pedagogy, Management Education, Industry Expectations, Curriculum Alignment, Employability

I. INTRODUCTION

Management education has historically played a crucial role in developing human capital for economic and organizational growth. Traditional management pedagogy, largely classroom-centric and theory-oriented, was effective in relatively stable business environments. However, the contemporary business landscape is characterized by rapid technological change, digital disruption, globalization, and evolving organizational structures. Concepts such as artificial intelligence, big data analytics, digital marketing, fintech, and platform-based business models have transformed how organizations operate and compete. Consequently, industry expectations from management graduates have undergone a significant shift.

In this context, management institutions face mounting pressure to redesign curricula and pedagogical practices to ensure graduates remain relevant and employable. Employers increasingly emphasize practical skills, digital competencies, problem-solving abilities, and experiential learning over rote theoretical knowledge. Reports from industry bodies consistently highlight a skill gap between what management graduates possess and what industry demands. This gap poses a critical challenge to management education systems, particularly in developing economies like India, where a large number of management institutions operate with varying levels of quality and industry engagement.

Digital pedagogy has emerged as a promising approach to address this challenge. Digital pedagogy refers to the integration of digital technologies into teaching–learning processes to enhance engagement, accessibility, flexibility, and learning outcomes. Tools such as Learning Management Systems (LMS), virtual classrooms, simulations, MOOCs, data analytics software, and AI-enabled learning platforms have transformed the educational experience. The COVID-19 pandemic further accelerated the adoption of digital pedagogy, compelling institutions to experiment with online and blended learning models.

Beyond being a technological shift, digital pedagogy represents a pedagogical transformation. It enables learner-centric education, continuous assessment, real-time feedback, collaborative learning, and industry-oriented skill development. For management education, digital pedagogy offers unique opportunities to simulate real business scenarios, integrate industry case studies, expose students to contemporary tools used in organizations, and foster interdisciplinary learning.

Despite these advantages, the adoption of digital pedagogy in management education remains uneven. Many institutions continue to use digital tools merely as content delivery mechanisms rather than as strategic enablers of curriculum–industry alignment. Faculty readiness, infrastructural constraints, resistance to change, and lack of systematic curriculum integration limit the potential impact of digital pedagogy.

The present study is situated within this context and seeks to explore how digital pedagogy can bridge the gap between industry expectations and academic curriculum in management education. By focusing on learner perceptions and outcomes, the study contributes empirical insights into the effectiveness of digital pedagogy as a strategic intervention. The research is particularly relevant for policymakers, academic leaders, faculty members, and industry stakeholders engaged in shaping the future of management education.

II. REVIEW OF LITERATURE

2.1 Management Education and Employability

Existing literature consistently highlights employability as a major challenge in management education. Scholars argue that traditional management curricula remain heavily theory-oriented and insufficiently aligned with practical and industry-relevant competencies (Bennis & O'Toole, 2005). Employers increasingly seek graduates equipped with problem-solving ability, effective communication skills, adaptability, and digital literacy; however, these competencies are often inadequately developed through conventional classroom-based pedagogy (Sharma, N. K. 2016). Studies further suggest that experiential and practice-oriented learning approaches are essential for enhancing managerial employability in contemporary business environments (Kolb, 1984).

2.2 Industry Expectations from Management Graduates

Industry expectations from management graduates have evolved significantly in response to digital transformation and global competition. Beyond functional knowledge, organizations now emphasize data-driven decision-making, technological competence, ethical judgment, and cross-functional collaboration (World Economic Forum, 2020). Porter and Heppelmann (2015) note that digital technologies and smart systems have reshaped organizational processes, necessitating new skill sets among management professionals. Research indicates that exposure to real-time business tools, analytics platforms, and industry-oriented projects substantially improves graduates' job readiness and employability (Rao & Singh, 2020).

2.3 Concept of Digital Pedagogy

Digital pedagogy refers to the purposeful integration of digital technologies with instructional design to enhance teaching–learning effectiveness. Mishra and Koehler (2006) conceptualize digital pedagogy as the intersection of technological, pedagogical, and content knowledge. Scholars emphasize that digital pedagogy extends beyond online teaching to include blended learning, flipped classrooms, simulations, and experiential digital platforms (Garrison & Vaughan, 2008). Empirical studies demonstrate that digital tools enhance learner engagement, accessibility, and learning outcomes when aligned with pedagogical objectives (Prensky, 2001).

2.4 Digital Pedagogy in Management Education

Prior research documents several positive outcomes of digital pedagogy in management education. Studies report improvements in analytical skills, conceptual clarity, and student satisfaction through the use of simulations, digital case studies, and learning management systems (Kumar & Sharma, 2022). Simulation-based learning, in particular, has been found effective in bridging the gap between theoretical knowledge and managerial practice by replicating real-world business scenarios (Kolb, 1984). These findings underscore the potential of digital pedagogy to enhance the practical relevance of management education.

2.5 Research Gap

Although the existing literature acknowledges the transformative potential of digital pedagogy, limited empirical research has systematically examined its role in aligning management curricula with industry expectations, particularly in the Indian context (AICTE, 2020). Most studies remain conceptual or focus on technological adoption rather than measurable employability outcomes. This study addresses this gap by empirically analyzing the relationship between digital pedagogy adoption and perceived industry readiness using primary survey data.

III. RESEARCH OBJECTIVES

1. To examine the extent of digital pedagogy adoption in management education.
2. To assess industry expectations regarding managerial skills and competencies.

3. To analyze the relationship between digital pedagogy and perceived industry readiness.
4. To suggest industry-oriented curriculum improvements based on empirical findings.

IV. RESEARCH METHODOLOGY

4.1 Research Design

The study adopts a descriptive and analytical research design using primary data.

4.2 Sample Size and Data Collection

A sample of 235 respondents comprising management students and early-career professionals was considered. Data were collected using a structured questionnaire based on a five-point Likert scale.

4.3 Questionnaire Design

The study employed a structured questionnaire consisting of 28 items, measured on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The questionnaire was designed after an extensive review of literature to ensure content validity and relevance to industry expectations.

The questionnaire was divided into five sections:

- **Section A: Demographic Profile** (4 items) Gender, age group, academic level, and exposure to digital learning platforms.
- **Section B: Digital Pedagogy Tools** (7 items) Items measured the effectiveness of Learning Management Systems (LMS), virtual classrooms, online simulations, MOOCs, digital case studies, and analytics software.
- **Section C: Curriculum Relevance** (6 items) Focused on alignment of curriculum with industry needs, inclusion of digital skills, and flexibility of course content.
- **Section D: Skill Preparedness** (6 items) Assessed development of problem-solving ability, data interpretation skills, communication, teamwork, and decision-making capabilities.
- **Section E: Industry Readiness and Employability** (5 items) Measured perceived job readiness, confidence to work in digital environments, and employability prospects.

4.4 Reliability of Instrument

The internal consistency of the questionnaire was tested using Cronbach's Alpha. The overall reliability coefficient was found to be 0.82, which exceeds the acceptable benchmark of 0.70, indicating good internal consistency.

Construct	No. of Items	Cronbach's Alpha
Digital Pedagogy Tools	7	0.84
Curriculum Relevance	6	0.79
Skill Preparedness	6	0.81
Industry Readiness	5	0.85
Overall Scale	28	0.82

4.5 Hypotheses

H1: Digital pedagogy has a significant positive impact on perceived industry readiness of management students.

H2: Curriculum relevance is positively associated with the adoption of digital pedagogy in management education.

4.6 Statistical Tools Used

- Descriptive statistics (Mean, Standard Deviation)
- Reliability analysis (Cronbach's Alpha)
- Pearson correlation analysis
- Independent sample t-test
- Simple linear regression analysis

V. DATA ANALYSIS AND RESULTS

Descriptive Statistics

Variables	Mean	Std. Deviation
Digital Pedagogy Tools	4.02	0.61
Curriculum Relevance	3.88	0.67
Skill Preparedness	3.95	0.64
Industry Readiness	4.05	0.59

STable 1 indicates that respondents reported a high level of agreement regarding the effectiveness of digital pedagogy tools (Mean = 4.02). Industry readiness recorded the highest mean score (4.05), suggesting that respondents perceived themselves as well prepared for industry requirements. The relatively low standard deviation values indicate consistency in responses.

Percentage analysis further revealed that 72% of respondents agreed that digital pedagogy enhanced practical understanding, while 68% believed it significantly improved their employability prospects.

Correlation Matrix

Variables	Digital Pedagogy	Curriculum Relevance	Industry Readiness
Digital Pedagogy	1		
Curriculum Relevance	0.54**	1	
Industry Readiness	0.61**	0.58**	1

Note: $p < 0.01$

The Pearson correlation results indicate a strong positive relationship between digital pedagogy and industry readiness ($r = 0.61$, $p < 0.01$). This implies that increased use of digital pedagogical tools is associated with higher perceived industry readiness. Additionally, curriculum relevance shows a significant positive correlation with digital pedagogy adoption ($r = 0.54$), supporting the argument that digitally enriched curricula are more aligned with industry expectations.

Regression Analysis

Dependent Variable: Industry Readiness

Model	β	t-value	Sig.
Digital Pedagogy	0.61	6.75	0.000
Model Summary		Value	
R		0.61	
R ²		0.37	
F-value		45.62	
Sig.		0.000	

Regression analysis reveals that the model is statistically significant ($F = 45.62$, $p < 0.05$). Digital pedagogy explains **37% of the variance** in industry readiness ($R^2 = 0.37$). The standardized beta coefficient ($\beta = 0.61$) indicates a strong positive impact of digital pedagogy on industry readiness. Hence, **H1 is accepted**. Correlation and regression findings also support **H2**, confirming a positive association between curriculum relevance and digital pedagogy adoption.

VI. DISCUSSION

The empirical findings strongly support the role of digital pedagogy as a strategic bridge between management education and industry expectations. The significant correlations and regression outcomes highlight that digital tools not only enhance academic engagement but also foster practical, industry-relevant skills. Simulation-based learning, analytics platforms, and industry-integrated digital projects were perceived as particularly effective in preparing students for real-world managerial roles.

VII. CONCLUSION

This study explored the role of digital pedagogy in addressing the gap between academic curriculum and industry expectations within management education. As organizations increasingly operate in technology-driven and data-intensive environments, the relevance of traditional, theory-centric teaching approaches has diminished. The findings of the study provide empirical evidence that digital pedagogy significantly enhances the alignment of management education with contemporary industry requirements.

Using primary data collected from 235 management students and early-career professionals, the analysis demonstrates a statistically significant relationship between the adoption of digital pedagogical tools and perceived industry readiness. Digital platforms such as Learning Management Systems, simulations, and online case studies were found to improve learners' practical understanding, analytical capabilities, and confidence to function in professional settings.

The results indicate that digital pedagogy contributes meaningfully to the development of employability-oriented skills that are highly valued by employers.

The study further emphasizes that the effectiveness of digital pedagogy depends on its integration with curriculum design. When digital tools are embedded within industry-oriented learning objectives and assessment frameworks, they serve as effective mechanisms for experiential and application-based learning.

In conclusion, digital pedagogy functions as a strategic bridge between academic instruction and industry expectations in management education. Institutions that adopt a systematic and pedagogically informed approach to digital integration are better positioned to enhance graduate employability, curriculum relevance, and long-term institutional effectiveness.

VIII. INDUSTRY-BASED SUGGESTIONS

1. Management institutions should integrate industry-grade digital tools such as ERP simulations, data analytics software, and digital marketing dashboards.
2. Stronger academia–industry partnerships should be developed through live projects and virtual internships.
3. Continuous faculty upskilling programs should be implemented to enhance digital pedagogical competence.
4. Assessment systems must shift from theory-based evaluation to skill- and competency-based digital assessments aligned with industry standards.

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