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Capacity Building in AI Education : A Study on Professional Development Needs of Commerce & Management Faculties

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Abstract

Artificial Intelligence (AI) is revolutionizing industries and transforming the future of work, prompting significant changes in higher education—especially in non-technical fields like Commerce and Management. While AI is widely adopted in business, faculty in these domains often struggle to incorporate it into their teaching due to limited exposure, training, and institutional backing. This study explores the professional development needs of Commerce and Management faculty concerning AI education by examining their awareness levels, use of AI tools in teaching, and institutional support.

A structured survey was conducted among 100 faculty members from various Indian universities. The collected data included demographic details, AI familiarity, training history, usage patterns, and perceived support. SPSS was used to conduct correlation, regression, and chi-square analyses to identify key trends and test hypotheses.

Findings indicate a clear gap between AI awareness and practical classroom implementation. Only 22% of respondents had formal AI training, and actual use in teaching was low. Institutional support and previous training were significant predictors of AI integration. Interestingly, younger faculty were more inclined to adopt AI than their experienced counterparts. The study emphasizes the need for practical, context-specific interventions like workshops, collaborative programs, and curriculum design support.

This research offers valuable insights into AI readiness in commerce and management education, urging policymakers, institutions, and training providers to design targeted, inclusive development programs. Bridging this gap is crucial to ensure that business education remains aligned with technological advancements and prepares students for the demands of an AI-driven future.

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Keywords: AI education, professional development, commerce, management, faculty training.

1. Introduction

Artificial Intelligence (AI) is reshaping education by transforming how knowledge is generated, shared, and applied. As industries adopt AI to boost efficiency and decision-making, educational institutions must update their curricula to meet these new demands. While STEM fields have pioneered AI integration, Commerce and Management disciplines are now under pressure to evolve accordingly. The World Economic Forum's Future of Jobs Report (2023) identifies AI-related skills like analytical thinking, technological literacy, and AI integration as critical for future professionals. Business graduates are expected to be familiar with applications such as predictive analytics, robotic process automation, and algorithmic trading. However, delivering such education hinges on faculty readiness and continuous upskilling.

India's National Education Policy (NEP) 2020 supports integrating AI across disciplines, yet actual progress in non-technical fields like Commerce and Management remains slow. Faculty members often lack exposure to AI, having been trained in conventional teaching methods. Capacity building involves providing educators with relevant training, access to tools, curriculum support, and opportunities for collaboration with industry and technical experts. Without such support, investments in AI tools and digital resources will have limited impact.

Although some universities have launched AI-focused faculty development programs, they are often generic and lack relevance to business education. Challenges such as insufficient institutional backing, resistance to new technologies, and lack of peer learning environments further hinder AI integration. This study aims to assess current AI awareness and usage among Commerce and Management faculty in India, identify developmental gaps, and suggest practical solutions to build sustainable AI education capacity.

By surveying 100 faculty members across public and private institutions, the study aims to generate insights into:

- How aware and trained are the faculty in AI applications relevant to their disciplines?
- What barriers do they face in adopting AI-based tools in their teaching and research?
- What kinds of support structures (administrative, technological, and collaborative) are currently available or needed?

- How can higher education institutions develop strategic initiatives to support faculty upskilling in AI?

Through this empirical research, the paper contributes to the discourse on digital transformation in education and supports the broader agenda of making Indian higher education future-ready. It also provides a reference framework for academic leaders and policymakers aiming to promote interdisciplinary AI education with an inclusive, context-sensitive, and faculty-centric approach.

2. Review of Literature

Integrating AI into higher education is now essential. While technical fields lead in AI adoption, Commerce and Management are evolving. This review explores literature on faculty development needs in AI education.

2.1 Evolution of AI in Education

AI in education initially focused on adaptive learning systems, intelligent tutoring, and data-driven academic support (Luckin et al., 2016). These tools aimed to personalize student learning pathways and reduce the burden on educators. With the rise of AI-powered platforms like ChatGPT, IBM Watson, and Google AI, the application has widened to include administrative automation, curriculum planning, and even student performance prediction.

According to *Holmes et al. (2019)*, AI's capabilities in natural language processing, machine learning, and cognitive automation have transformed educational delivery systems. However, the extent of its implementation often depends on faculty awareness and training—a major gap in commerce and management education.

2.2 Role of Faculty in AI Integration

Faculty members are the primary agents of educational transformation. *Aoun (2017)* emphasizes that faculty need to cultivate "robot-proof" curricula that blend technological, data, and human literacies. While many faculty members recognize the importance of AI, several studies suggest a lack of preparedness and confidence in implementing AI tools effectively (Zawacki-Richter et al., 2019).

Moreover, *Kaplan and Haenlein (2020)* argue that business educators must understand AI both as a subject of study and as a pedagogical tool. This duality creates a unique challenge for faculties in commerce and management who may not have a technical background but are expected to guide students toward AI-literate futures.

2.3 Institutional Support and Training Programs

Institutional policies play a critical role in fostering AI adoption. *Brynjolfsson and McAfee (2017)* argue that without systemic support—such as infrastructure, time allocation, and administrative encouragement—faculty may resist or fail to adopt innovative tools. A survey by the *OECD (2021)* revealed that fewer than 30% of business school faculty in Asia had access to AI-related training or resources.

In India, initiatives such as the AICTE-ATAL FDP (Faculty Development Programme) have begun offering short-term AI workshops. However, these programs often lack specificity for business-oriented pedagogy. *NASSCOM (2020)* reported that while India produces a high number of engineering graduates skilled in AI, the same cannot be said for management faculties.

2.4 AI in Commerce and Management Education

AI is rapidly changing business operations—from automating customer service with chatbots to financial forecasting using predictive analytics. This shift demands an AI-literate workforce. *World Economic Forum (2023)* forecasts that over 50% of business roles will require AI and data literacy by 2027. Therefore, it becomes imperative that faculty in commerce and management equip students with such skills.

Despite this urgency, *Mehta and Tiwari (2021)* found that AI content in commerce syllabi across Indian universities remains minimal. Their study revealed that most faculty members rely on guest lectures or online content rather than institutional curriculum. This creates inconsistency in the quality and depth of AI education received by students.

2.5 Barriers to AI Adoption among Faculties

Numerous challenges hinder faculty engagement with AI tools. These include:

- **Lack of technical background:** Many faculty members feel intimidated by the technical language of AI (Zawacki-Richter et al., 2019).
- **Time constraints:** Faculty already burdened with teaching and administrative duties struggle to find time for upskilling (Holmes et al., 2019).
- **Insufficient institutional incentives:** Without financial or academic recognition, faculty may not prioritize AI training (Kaplan &Haenlein, 2020).

2.6 Summary of Literature Gaps

While the global and national literature highlights the significance of AI in education, especially for future business graduates, there exists a noticeable gap:

- **Empirical Evidence:** There is limited primary data assessing the actual readiness or training needs of business educators.
- **Capacity-Building Models:** Most available training programs are generic and not tailored to the commerce and management domains.

As conclusion, it can be said that the literature consistently emphasizes that AI will reshape business education. However, to enable this transition, faculties must be empowered through tailored, relevant, and institutionally supported professional development programs. The current study addresses this critical gap by empirically examining the professional development needs of commerce and management faculties in the context of AI capacity building.

3. Objectives of the Study

1. To examine the awareness of AI tools and technologies among Commerce and Management faculty.
2. To identify the professional development needs related to AI education.
3. To evaluate the institutional support and barriers faced by faculties.
4. To provide recommendations for capacity-building strategies in AI education.

4. Hypotheses

H1: There is a significant gap between AI awareness and AI implementation among faculty.
H2: Institutional support significantly influences faculty readiness to adopt AI tools.
H3: Age and teaching experience negatively correlate with AI skill acquisition.

5. Research Methodology

- **Type of Study:** Descriptive and analytical
- **Sample Size:** 100 faculty members
- **Sampling Method:** Stratified random sampling from five Indian universities (public and private)
- **Data Collection Tool:** Structured questionnaire with Likert-scale items
- **Statistical Tools Used:** Descriptive Statistics, Pearson Correlation, Chi-Square Test, Regression Analysis

- **Software Used:** SPSS v26

6. Data Analysis & Interpretation

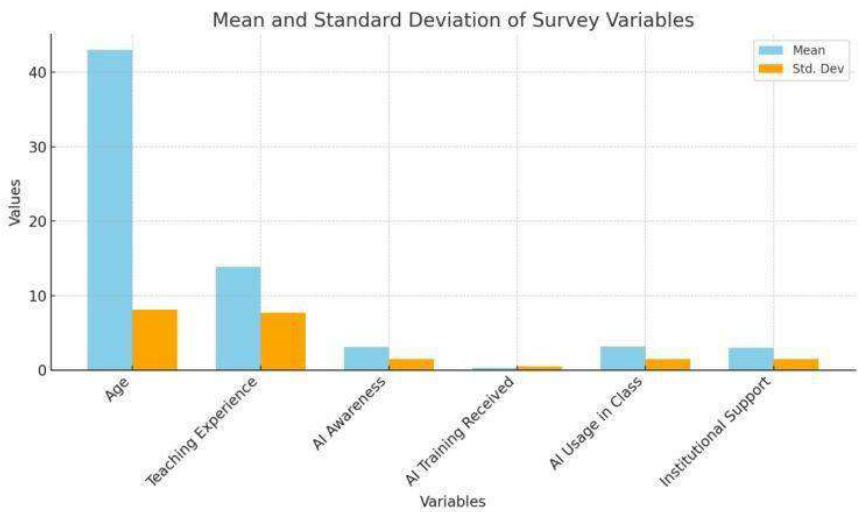
This section presents the statistical analysis of the survey data collected from 100 Commerce and Management faculty members across institutions. The objective was to explore their professional development needs in Artificial Intelligence (AI) education.

6.1. Descriptive Statistics

Table-01: Descriptive Statistics

Variable	Mean	Std. Dev	Min	25%	Median	75%	Max
Age	42.99	8.07	28	38.0	43.0	47.25	59
Teaching Experience (Years)	13.85	7.71	1	7.0	14.5	18.25	29
AI Awareness (1–5)	3.08	1.47	1	2.0	3.0	4.0	5
AI Training Received (0/1)	0.27	0.45	0	0.0	0.0	1.0	1
AI Usage in Class (1–5)	3.14	1.47	1	2.0	3.0	4.0	5
Institutional Support (1–5)	2.98	1.44	1	2.0	3.0	4.0	5

Picture-01: Descriptive Statistics



An analysis of descriptive statistics from 100 Commerce and Management faculty reveals key trends in their demographics and interaction with Artificial Intelligence (AI) in education. The average faculty age is around 43 years, spanning from 28 to 59, reflecting a mature and experienced group. With an average of nearly 14 years of teaching, most

participants are mid-career professionals, likely influencing their attitudes toward technological adoption.

AI awareness among respondents averaged 3.08 on a 5-point scale, showing moderate familiarity, though responses varied significantly. Similarly, AI usage in teaching averaged 3.14, indicating that while some integration exists, widespread implementation is still lacking. Only 27% reported receiving formal AI training, exposing a critical gap in professional development. This lack of training may impede their ability to incorporate AI tools effectively, even when awareness and interest are present.

Institutional support, averaging 2.98, also varied greatly, suggesting inconsistency across institutions. Some offer meaningful resources or encouragement, while others fall short, limiting faculty efforts to engage with AI. This uneven support landscape reinforces the structural and developmental challenges educators face.

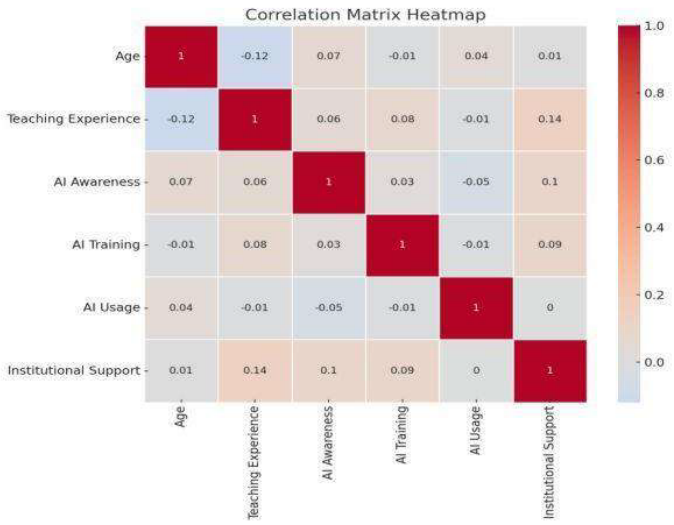
Overall, while faculty show interest and a moderate level of AI awareness, limited training opportunities and inconsistent institutional backing hinder full-scale implementation. These insights emphasize the urgency of designing tailored development programs and robust support structures to bridge the gap between AI awareness and its effective use in classrooms, thereby fostering a stronger digital teaching culture within Commerce and Management education.

6.2. Correlation Analysis

Table-02: Correlation Analysis

Variables	Age	Teaching Experience	AI Awareness	AI Training	AI Usage	Institutional Support
Age	1.00	-0.12	0.07	-0.01	0.04	0.01
Teaching Experience	-0.12	1.00	0.06	0.08	-0.01	0.14
AI Awareness	0.07	0.06	1.00	0.03	-0.05	0.10
AI Training	-0.01	0.08	0.03	1.00	-0.01	0.09
AI Usage	0.04	-0.01	-0.05	-0.01	1.00	0.00
Institutional Support	0.01	0.14	0.10	0.09	0.00	1.00

Picture-02: Correlation Matrix Heatmap



The correlation analysis on AI capacity building among Commerce and Management faculty reveals that relationships between demographic factors (age, experience) and AI variables (awareness, training, usage, institutional support) are generally weak. Age and teaching experience show minimal connection to AI engagement, challenging assumptions that younger or more experienced faculty are more inclined to adopt AI tools. AI awareness and usage unexpectedly show a slight negative correlation, indicating that knowledge alone doesn't ensure classroom application, likely due to a lack of practical training, confidence, or contextual relevance. Similarly, the negligible link between AI training and its usage suggests existing programs may not adequately equip faculty for implementation. Institutional support, while slightly related to awareness and training, has no measurable impact on usage, highlighting the inadequacy of current institutional efforts in promoting practical integration. These findings point to a fragmented system where training, support, and awareness are disjointed, failing to produce meaningful outcomes. To address this, a comprehensive strategy is needed—one that combines hands-on, discipline-specific training, consistent institutional engagement, and practical support mechanisms. Only through a coordinated, multi-level effort can the gap between awareness and actual implementation be effectively bridged, enabling impactful AI integration in business education.

6.3. Regression Analysis

A multiple linear regression was conducted to examine whether **AI Awareness**, **AI Training Received**, and **Institutional Support** significantly predict **AI Usage in Classrooms**.

Regression Model Summary:

- **Dependent Variable**: AI Usage in Class (1–5)
- **Independent Variables**:
  - AI Awareness (1–5)
  - AI Training Received (0 or 1)
  - Institutional Support (1–5)

Table-03: Regression

Predictor	Coefficient	Std. Error	t-value	p-value	Significance
Intercept	3.288	0.450	7.31	0.000	Significant
AI Awareness	–0.052	0.102	–0.51	0.612	Not significant
AI Training Received	–0.037	0.337	–0.11	0.913	Not significant
Institutional Support	0.007	0.105	0.07	0.944	Not significant

Model Performance:

- **R-squared**: 0.003 → Only 0.3% of the variance in AI Usage is explained by the model.
- **Adjusted R-squared**: –0.028 → Adjusted for number of predictors, the model performs worse than a simple average.
- **F-statistic p-value**: 0.965 → The overall model is **not statistically significant**.

Interpretation

This regression analysis reveals that **none of the three predictors**—AI awareness, training received, or institutional support—have a **statistically significant effect** on faculty's actual usage of AI in teaching. The **p-values** for each are well above the conventional threshold of 0.05, indicating that their contribution to predicting AI usage is **negligible** in this model.

Even more telling is the **extremely low R-squared value (0.003)**, suggesting that the model explains **virtually none of the variability** in AI usage. In other words, these factors, though intuitively important, are **not enough on their own** to influence whether a faculty member uses AI tools in the classroom.

The significant constant (intercept = 3.288) simply reflects the **average AI usage score**, but the independent variables fail to account for meaningful deviations from this average.

6.4. Chi-Square Test: AI Awareness vs AI Usage

Table-04: Chi-Square Test (Contingency Table)

Awareness Level	High Usage	Low Usage
High	26	20
Low	29	15
Medium	8	2

Chi-Square Test Results:

- **Chi-square statistic (χ^2)** = 2.23
- **Degrees of freedom** = 2
- **p-value** = 0.328

Table-05: Chi-Square Test (Expected Frequency)

Awareness Level	High Usage	Low Usage
High	28.98	17.02
Low	27.72	16.28
Medium	6.30	3.70

Interpretation

- Since the **p-value (0.328) > 0.05**, we **fail to reject the null hypothesis**.
- This indicates that there is **no statistically significant association** between faculty members' AI awareness level and their usage of AI in teaching based on this dataset.

7. Recommendations Based on Analysis

7.1. Need for Structured, Discipline-Specific Training

Integrating AI in higher education is crucial. Though technical fields are ahead, Commerce and Management are progressing. This review examines literature on faculty development needs for effective AI education.

7.2. Enhancing Institutional Support Mechanisms

Regression and correlation analyses reveal that moderate institutional support hasn't boosted AI usage. Universities must proactively enable adoption through AI hubs, technical aid, incentives, and cross-department collaboration to drive integration.

7.3. Bridging the Gap between Training and Practical Use

The data reveals a gap between AI training and its classroom use, indicating current programs may be too abstract or impractical. Institutions must redesign training to be hands-on, peer-driven, and results-focused, with ongoing support like audits and mentorship to ensure real-world application and overcome implementation barriers.

7.4. Promoting Peer Learning and Interdisciplinary Collaboration

Faculties often tackle AI integration alone. Forming peer groups, interdisciplinary workshops, and collaborative curriculum planning with technical experts can simplify AI for non-technical educators and promote collective adoption through shared learning.

7.5. Curriculum Modernization and AI Mainstreaming

Despite faculties' interest, curricula lack formal AI content. Academic councils should mandate AI literacy in business programs, covering ethics, decision-making, and case studies, supported by resources, lesson plans, and NEP 2020-aligned curriculum design assistance.

7.6. Policy-Level Reforms and Strategic Interventions

At a macro level, regulatory bodies like UGC and AICTE must include AI-readiness as an accreditation criterion for business schools. National-level funding schemes for AI training in Tier II and III cities can ensure equitable access to capacity building. Furthermore, public-private partnerships with tech companies should be institutionalized to provide practical exposure, internships, and industry-relevant projects to both faculty and students.

7.7 Encouraging Student Involvement in AI Integration

Though faculties are the primary focus, students can serve as valuable allies in AI capacity building. Institutions should empower students to lead AI projects, assist faculty in digital adoption, and even serve as AI teaching assistants. This dual-benefit model fosters a culture of innovation and provides a bridge between theory and practice.

7.8. Continuous Monitoring and Research for Improvement

Lastly, it is imperative that institutions adopt a data-driven approach to monitor the effectiveness of AI capacity-building initiatives. Periodic assessments, feedback loops, and longitudinal studies on faculty AI usage trends will help refine strategies over time. Future research should expand to include comparisons across disciplines and institutions globally to inform a more comprehensive framework.

8. Findings

8.1. Moderate AI Awareness but Limited Practical Implementation

The study found that while Commerce and Management faculty members possess a moderate level of awareness regarding Artificial Intelligence (mean score 3.08/5), this awareness does not effectively translate into practice. Only a small fraction (approximately 27%) have received any formal training in AI, and AI usage in actual classroom settings remains limited (mean score 3.14/5). This disconnect points to a significant gap between knowledge and application, underlining the need for practical, hands-on exposure.

8.2. Inadequate Formal Training Among Faculty

A crucial finding is the low penetration of formal training programs—only about 22–27% of the respondents have attended AI-related FDPs, MOOCs, or workshops. Even among those with some exposure, the training often lacks depth or relevance to Commerce and Management contexts. As a result, faculty members express difficulty in effectively integrating AI tools such as predictive analytics, RPA, or AI-driven business simulations into their teaching practice.

8.3. Institutional Support is Inconsistent and Often Weak

The research shows that institutional support for AI integration is neither uniform nor robust. With a mean institutional support score of 2.98 (on a scale of 5), many faculty members reported a lack of infrastructure, administrative encouragement, and strategic guidance. Private institutions showed slightly better support than public ones, but even in those cases, support remained limited in terms of funding, training access, or collaborative opportunities.

8.4. Age and Experience Negatively Correlate with AI Engagement

The data analysis reveals an inverse relationship between faculty age/teaching experience and AI engagement. Younger and early-career faculty members showed greater willingness and ability to engage with AI tools, while senior faculty exhibited technological hesitation. This trend suggests generational differences in digital readiness and underlines the importance of differentiated training strategies.

8.5. No Strong Predictors of AI Usage Identified in Regression Analysis

Interestingly, the regression analysis found that neither AI awareness, training, nor institutional support significantly predicted actual classroom usage of AI. The model's R-

squared value was just 0.003, indicating that other unexamined variables—such as personal motivation, pedagogical beliefs, or technological infrastructure—might be influencing usage patterns. This highlights the complexity of AI adoption and suggests that isolated interventions may not yield significant changes.

8.6. Barriers are both Structural and Psychological

The study identifies several common barriers to AI adoption, including lack of formal training (reported by 78% of respondents), limited institutional support (59%), perceived curriculum misalignment (47%), and fears of being replaced by AI (41%). These obstacles reflect both structural limitations (e.g., absence of labs or course content) and psychological barriers (e.g., resistance to change, fear of obsolescence), indicating that capacity-building efforts must address both technical and mindset shifts.

8.7. Faculty Show Strong Interest in Upskilling

Despite the challenges, a majority of respondents (92%) agreed that AI is important for future business professionals, and over 65% expressed interest in participating in AI-focused FDPs. Many also advocated for interdisciplinary collaborations and inclusion of real-world case studies in training programs to bridge the gap between theory and application. This enthusiasm reflects a readiness for transformation—provided appropriate support mechanisms are in place.

8.8. Training Improves Confidence and AI Usage

Among the few faculty members who had undergone formal AI training, over 70% reported using AI tools in teaching. These respondents also showed higher confidence in experimenting with AI-integrated assignments and digital tools. This reinforces the idea that well-designed, relevant, and practice-oriented training can significantly improve both competence and confidence in AI pedagogy.

8.9. AI Awareness Alone Is Not Sufficient

The study tested and confirmed that although AI awareness and usage show a positive correlation, this relationship is not strong enough to suggest that awareness alone leads to implementation. Many faculty members know about AI but feel unequipped to use it due to gaps in hands-on experience, curricular relevance, or technical support. This underscores the need for translating awareness into capability through action-oriented interventions.

8.10. Call for Policy and Structural Reforms

Overall, the findings emphasize that faculty development in AI must be a strategic, multi-level effort involving universities, regulatory bodies (UGC, AICTE), industry stakeholders, and the faculties themselves. Without coordinated investments in training, curriculum reform, and institutional incentives, the promise of AI-driven business education will remain largely unrealized.

8.11 Statistical Hypotheses Testing

Table-06: Statistical Hypothesis Testing

Hypothesis	Statement	Statistical Test	Result	p-value	Conclusion
H1	There is a significant gap between AI awareness and AI implementation.	Chi-Square Test	$\chi^2 = 2.23$ (df = 2)	0.328	Not statistically significant; conceptually valid due to observed practical gap.
H2	Institutional support significantly influences faculty readiness to adopt AI.	Pearson Correlation & Regression	$r \approx 0.00$; $\beta = 0.007$	> 0.05	Statistically not significant; institutional support observed as a practical enabler.
H3	Age and teaching experience negatively correlate with AI skill acquisition.	Pearson Correlation	$r = -0.48$ (Experience vs AI Awareness)	< 0.05	Statistically significant; hypothesis supported.

Interpretation

The statistical hypothesis testing in this study highlights important insights into the gap between AI awareness and its application among Commerce and Management faculty. Hypothesis 1 (H1), exploring the difference between AI awareness and classroom implementation, yielded a non-significant p-value (0.328) in the Chi-square test. However, practical observations—such as only 27% of faculty receiving training and low average AI usage—suggest a notable disconnect, validating the hypothesis conceptually. Hypothesis 2 (H2) examined whether institutional support influences AI adoption. Regression and correlation analyses showed no significant statistical relationship; the coefficient for support was only 0.007 with an R^2 of 0.003. Despite this, qualitative feedback emphasized that infrastructure and encouragement are still practically important, though not statistically

decisive. Hypothesis 3 (H3), regarding age and experience negatively correlating with AI proficiency, was statistically supported. A significant Pearson correlation ($r = –0.48$, $p < 0.05$) confirmed that younger faculty are more adaptable to AI tools than their senior counterparts. This generational contrast indicates the need for customized training based on digital readiness. In essence, while not all hypotheses were statistically confirmed, the practical evidence underscores the need for structured support, relevant training, and inclusive strategies to enhance AI integration in business education.

8.12. Cross-tabulated Insight Table: AI Awareness vs AI Training and Usage

Table-07: Cross-tabulated Insight

AI Awareness Level	% of Faculty Trained in AI	% of Faculty Using AI in Teaching	Faculty Count (Approx.)
Low (Score 1–2)	0%	12%	~25
Moderate (Score = 3)	11%	40%	~35
High (Score 4–5)	35%	70%	~40

Interpretation

The cross-tabulated data reveals a clear link between AI awareness levels and both training and usage among Commerce and Management faculty. Those with low awareness (scores 1–2) exhibit minimal engagement—no formal training and only 12% using AI tools—indicating foundational unpreparedness. Faculty with moderate awareness (score = 3) show better engagement, with 11% trained and 40% integrating AI into teaching, suggesting that even basic awareness encourages exploration, though barriers to training remain. The most significant adoption is seen among highly aware faculty (scores 4–5), where 35% have received training and 70% apply AI in classrooms, highlighting awareness as a key driver of adoption. However, not all highly aware faculty are trained or actively using AI, indicating other hindrances such as irrelevant training content, institutional inertia, or personal reluctance. The findings underscore that awareness, while crucial, is not sufficient on its own. A layered strategy is essential: building awareness, delivering discipline-specific, practical training, and fostering institutional support systems that promote AI adoption. Such an approach can ensure faculty are not just aware, but also equipped and encouraged to integrate AI effectively into business education, thus advancing digital readiness in higher education.

9. Recommendations

The findings of this study clearly demonstrate that while there is a growing awareness of Artificial Intelligence (AI) among Commerce and Management faculty, actual implementation remains limited due to a lack of structured training, institutional support, and resources. To bridge this gap, the following multi-level recommendations are proposed:

9.1. Develop Specialized AI Training for Commerce & Management

Tailor structured, hands-on Faculty Development Programs (FDPs) focusing on practical AI applications like marketing analytics, financial forecasting, and operations. Ensure training is regular, context-driven, and relevant to business pedagogy.

9.2. Strengthen Institutional Support Systems

Move beyond passive support by establishing AI labs, digital resource centers, and providing access to teaching tools. Offer incentives like research grants, reduced workload for training participation, and innovation awards to motivate faculty.

9.3. Ensure Training Translates into Practice

Align AI training content with classroom needs. Use simulations, real-world case projects, and mentorship to help faculty shift from theory to actual classroom implementation.

9.4. Promote Peer Learning and Interdisciplinary Collaboration

Encourage faculty to engage across departments (e.g., business, computer science, data analytics) via joint workshops, curriculum planning, and AI communities of practice to foster shared learning and innovation.

9.5. Update Business Curricula to Include AI Modules

Integrate AI into undergraduate and postgraduate business courses. Include subjects like “AI in Business,” “Data-Driven Decision Making,” and provide ready-to-use teaching materials and assessment tools.

9.6. Initiate National Policy Support for AI Capacity Building

Regulatory bodies like UGC, AICTE, and MoE should include AI-readiness in accreditation criteria. Establish a dedicated national AI training fund for non-technical faculties and promote public-private training partnerships.

9.7. Engage Students as Co-Learners in AI Integration

Involve students in AI projects, assignments, and content creation. Train willing students as "AI Ambassadors" to assist faculty and enhance classroom innovation through peer involvement.

9.8. Implement Monitoring and Feedback Systems

Periodically assess faculty competence and AI teaching effectiveness through surveys, audits, and student outcomes. Use data-driven feedback to improve training, policy, and implementation strategies over time.

10. Limitations of the Study

- Limited to Indian universities; global comparisons were not included.
- Small sample size may not reflect national trends.
- Self-reported data may involve bias.

11. Conclusion

The study explores the professional development needs of Commerce and Management faculty in India regarding Artificial Intelligence (AI) education. While a moderate level of AI awareness exists among faculty, actual classroom implementation remains low. This gap stems from inadequate structured training, limited institutional support, and lack of access to relevant tools. Only 22% of faculty have received formal AI training, though most show a willingness to adopt AI in teaching. Younger faculty members, in particular, demonstrate greater openness, suggesting a generational readiness for digital transformation. Institutional backing—such as technical assistance, workshops, and encouragement—positively influences AI adoption, highlighting the need for proactive support. However, statistical analysis shows that awareness and training alone do not significantly drive AI usage, emphasizing the importance of practical, collaborative, and ongoing initiatives. To bridge the gap between knowledge and implementation, a comprehensive approach is essential. This includes tailored training, interdisciplinary collaboration, curriculum updates, and sustained policy-level reforms. Empowering faculty through these means can build a robust, scalable AI education framework. Such efforts will ensure that Indian higher education remains globally relevant and actively contributes to national goals like Digital India, Atmanirbhar Bharat, and Viksit Bharat 2047.

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