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# ARTIFICIAL INTELLIGENCE APPLICATIONS IN BUSINESS EDUCATION CURRICULUM: BRIDGING THE GAP BETWEEN RESEARCH AND PRACTICE

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**Abstract**

*Artificial intelligence (AI) is reshaping higher education and the business environment, creating new opportunities to bridge the gap between academic knowledge and professional practice. This study examined the role of AI in enhancing business education by integrating theory, research, and industry-relevant practice. A quantitative desciptive research design was employed, using a structured questionnaire to collect data from business education stakeholders. The empirical findings were complemented by a review of contemporary literature to provide contextual insights. The findings identified three major constraints to AI integration in business education: inadequate adoption of AI-driven pedagogical models, weak collaboration between academia and industry in developing AI-enabled learning experiences, and limited digital pedagogical competencies among educators. Conversely, the study revealed significant opportunities to strengthen business education through AI-based simulations, real-time data-driven industry projects, and AI-powered personalized learning and career guidance systems. These innovations have the potential to enhance students' critical thinking, digital competencies, employability, and workplace readiness while enabling educators to adopt more innovative and evidence-based teaching approaches. The study further identified ethical concerns relating to algorithmic bias, data privacy, and academic integrity, alongside inadequate technological infrastructure and institutional resistance to pedagogical change, as key barriers to effective AI adoption. To address these challenges, the study recommends integrating AI literacy and responsible AI practices into business education curricula, strengthening academia–industry partnerships, investing in continuous professional development for educators, and implementing supportive institutional and policy frameworks. The study concludes that AI has significant potential to transform business education by promoting curriculum innovation, improving graduate employability, and fostering stronger alignment between academic research and industry practice. Sustained collaboration among educators, policymakers, and industry stakeholders is essential to ensure the ethical, inclusive, and sustainable implementation of AI in business education.*

***Keywords:*** *Artificial intelligence, business education, curriculum innovation, digital pedagogy, employability, academia–industry collaboration.*

## Introduction

Artificial Intelligence (AI) is increasingly transforming business education by serving as a strategic tool for instructional delivery, decision-making simulations, data-driven analysis, and creative problem-solving. Within university business classrooms, AI technologies are being integrated into teaching and learning processes to enhance students' analytical capabilities, strategic thinking, and workplace readiness. Consequently, business schools worldwide recognize AI not merely as an emerging technological trend but as a fundamental force reshaping pedagogical practices and narrowing the persistent gap between academic knowledge and professional application. Recent developments illustrate the growing institutional commitment to AI integration in business education. For example, The Wharton School of the University of Pennsylvania announced the introduction of a new Artificial Intelligence for Business MBA major and undergraduate concentration beginning in the Fall 2025 academic year. The programme combines technical competencies, including machine learning and deep learning, with ethical, legal, economic, and societal considerations, reflecting a comprehensive approach to preparing graduates for AI-driven business environments (The Wharton School, 2025; McMurrer, 2025).

Similarly, innovative applications of AI are redefining student support systems in higher education. At the Rotman School of Management, University of Toronto, Professors Joshua Gans and Kevin Bryan developed an AI-powered teaching assistant known as "All Day TA" to provide continuous academic support for students. During its implementation, the system responded to approximately 12,000 student inquiries within a single semester, enabling timely feedback while allowing faculty members to devote greater attention to higher-order teaching, mentoring, and curriculum development. Importantly, human oversight remained central to the process, demonstrating how AI can complement rather than replace academic expertise (Rotman School of Management, 2024; Gans & Bryan, 2024). The integration of AI is also becoming increasingly evident at the curriculum level. According to the **Graduate Business** Curriculum Roundtable (2025)**,** which surveyed 110 business schools representing more than 112,000 students, AI innovation and sustainable enterprise have become integral components of business curricula across institutions worldwide. The report further indicates that AI and data analytics are rapidly emerging as core elements of graduate business education, reflecting a global shift toward preparing graduates for technology-driven and sustainability-oriented business environments. These findings indicate a growing consensus among business schools regarding the importance of equipping graduates with competencies required for technology-driven organizational environments.

Despite these advances, the adoption of AI in business education is not without challenges. Findings from the AACSB International (2025) survey reveal a notable disparity between institutional leadership and faculty perceptions regarding AI integration. While many academic leaders express strong support for AI implementation, faculty acceptance remains less consistent. Approximately half of the surveyed instructors endorsed student use of generative AI tools, and in many institutions, policies governing AI utilization remain decentralized and subject to individual instructor discretion. Such inconsistencies may impede the development of coherent and sustainable AI-enhanced curricula. Furthermore, emerging scholarship emphasizes the need for structured approaches to AI curriculum design. Recent commentary by **Lo (2025)** emphasized the need for pedagogical frameworks that support the responsible integration of artificial intelligence while strengthening collaboration among higher education institutions, industry partners, professional bodies, and technology providers. Lo argues that effective AI-enabled business education requires curriculum redesign, continuous stakeholder engagement, and the development of graduates equipped with both technical competencies and ethical decision-making skills for AI-driven workplaces. These partnerships are essential for ensuring that graduates possess the competencies required to succeed in increasingly AI-mediated workplaces.

Empirical evidence also suggests that AI can enhance student creativity and engagement when thoughtfully integrated into learning activities. Wang (2025) demonstrated that integrating generative AI tools with authentic, real-world business experiences can enhance students' creative thinking, accelerate knowledge acquisition, and improve learning outcomes. The study found that AI-assisted experiential learning helped students overcome creative barriers while emphasizing the continued importance of instructor guidance and AI literacy in business education. Nevertheless, the study also identified critical challenges, including the rapid evolution of AI technologies and the necessity for instructors to possess advanced AI literacy skills to facilitate effective learning experiences. Collectively, these developments underscore the growing momentum surrounding AI adoption in business education. However, they also highlight the complexity of designing curricula that effectively connect academic research, pedagogical innovation, and industry practice. As AI technologies continue to evolve, business educators face the challenge of balancing technological advancement with ethical considerations, pedagogical effectiveness, and workforce relevance.

The term **"**artificial intelligence" (AI) was first coined during the Dartmouth Summer Research Project on Artificial Intelligence, a landmark initiative widely regarded as the foundation of AI as a scientific discipline. The project, proposed by John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon, established the conceptual framework that has guided AI research and innovation for decades (McCarthy et al., 1955/2006). Following several periods of rapid advancement and stagnation, AI has evolved from early symbolic reasoning systems to sophisticated machine learning, adaptive learning platforms, and intelligent tutoring systems that are increasingly transforming higher education. A systematic

review by Firat et al. (2023) documented a substantial increase in AI-related research in higher education between 2016 and 2022, reflecting the growing adoption of AI for teaching, learning, assessment, and institutional management. AI has demonstrated broad applicability across disciplines, including language education, engineering, mathematics, business, and medical education. Likewise, a comprehensive systematic review by Zawacki-Richter et al. (2019) found that AI applications in higher education have significantly enhanced personalized learning, intelligent tutoring, assessment, and academic decision-making, although the authors emphasized the need for greater pedagogical and ethical integration by educators.

The public release of **ChatGPT** in November 2022 marked a turning point in higher education, accelerating the adoption of generative AI for teaching, learning, and assessment. Universities have increasingly developed policies and guidelines to promote its responsible use while integrating AI literacy into curricula (UNESCO, 2024). Student adoption has also been rapid. The **Digital Education Council (2024)** reported that **86% of students** across 16 countries use AI to support academic activities such as research, writing, and personalized learning. Beyond improving learning experiences through intelligent tutoring, adaptive feedback, and content generation, AI has also raised concerns regarding academic integrity, ethics, and data privacy, highlighting the need for robust institutional governance (Crompton & Burke, 2024). Furthermore, business schools worldwide are embedding AI competencies into their curricula to prepare graduates for technology-driven workplaces (Graduate Business Curriculum Roundtable, 2025). Overall, AI has evolved from a theoretical concept to a transformative force in higher education, requiring institutions to balance innovation with ethical, inclusive, and responsible implementation.

Artificial Intelligence (AI) is no longer an abstract future possibility in business education. It is here, reshaping how we teach, how students learn, and how research is conducted. In many ways, AI is acting as the “bridge” between the traditional classroom and the demands of today’s business world. One of the most significant applications of artificial intelligence in business education is the transformation of teaching and learning. AI-powered intelligent tutoring systems, adaptive learning platforms, and automated feedback tools enable educators to provide personalized instruction by identifying students' learning needs and delivering timely, individualized support (Firat et al., 2023). A practical example is the **All Day TA** initiative at the **Rotman School of Management, University of Toronto**, where an AI-powered teaching assistant developed by Joshua Gans and Kevin Bryan responded to approximately **12,000 student inquiries** within a single semester. The system provided immediate academic support while enabling instructors to devote more time to mentoring, discussion, and higher-order learning activities, demonstrating how AI can complement rather than replace the role of educators (Lo, 2025; Rotman School of Management, 2024).

Today's students expect learning experiences that extend beyond traditional lectures to include interactive, personalized, and technology-enhanced instruction. Artificial intelligence applications such as chatbots, adaptive learning systems, virtual simulations, and automated assessment tools are transforming learning into a more engaging and learner-centred process. Evidence indicates that AI-supported instructional strategies enhance student engagement, personalize learning, and improve academic performance across higher education, including business education (Crompton & Burke, 2024; UNESCO, 2024). By integrating AI-driven simulations into entrepreneurship, marketing, and strategic management courses, educators can provide authentic decision-making experiences that enable students to apply theoretical knowledge in realistic business contexts, thereby developing practical, workplace-ready competencies for the digital economy (AACSB, 2025).

Artificial intelligence is also transforming research in business education by supporting literature synthesis, data analysis, and knowledge discovery. AI-powered platforms and machine learning techniques enable researchers to analyze large datasets more efficiently, identify hidden patterns, and accelerate evidence generation, allowing scholars to focus on critical interpretation and decision-making (Duan et al., 2019; UNESCO, 2024). Recognizing these opportunities, business schools worldwide are increasingly integrating AI into research and teaching. The **AACSB (2025)** reports that AI has become a strategic priority for business schools, with institutions embedding AI competencies into curricula despite ongoing concerns about ethics and responsible use. Similarly, **The Wharton School** introduced an undergraduate

concentration and MBA major in **Artificial Intelligence for Business** in 2025, reflecting the growing recognition that AI literacy is essential for future business professionals (The Wharton School, 2025). Collectively, these developments demonstrate that AI is enhancing and not replacing the roles of educators and researchers by strengthening evidence-based learning, innovation, and workplace readiness.

Against this backdrop, this paper examines the role of Artificial Intelligence as a bridge between academic knowledge and industry realities in business education. Specifically, it explores contemporary frameworks for AI integration, identifies evidence-based best practices, and evaluates the opportunities and challenges associated with AI adoption in business education. Through this analysis, the study seeks to contribute to ongoing discussions on how business schools can leverage AI to enhance teaching effectiveness, student learning outcomes, and graduate employability in the digital economy.

## Literature Review: Business Education and Curriculum Reform

### Traditional Models of Business Education

Business education has traditionally been grounded in classroom-based instruction, where knowledge is delivered through lectures, textbooks, case studies, and classroom discussions. This pedagogical approach has long emphasized foundational theories, functional business disciplines, and managerial decision-making as the core of business school curricula (R. Edward Freeman et al., 2023; AACSB International, 2025). While this approach laid a strong intellectual foundation, it often promoted a teacher-centered system, with limited room for personalized learning or technology-driven pedagogy.

Historically, business education has emphasized the acquisition of disciplinary knowledge in areas such as accounting, finance, marketing, and management through lectures, textbooks, and case-based instruction, with comparatively fewer opportunities for authentic workplace practice. Although case-study pedagogy has long promoted managerial problem-solving, contemporary business education increasingly requires experiential and technology-enhanced learning approaches that better reflect the realities of digital workplaces (Kolb & Kolb, 2022). As organizations continue to adopt artificial intelligence, data analytics, and automation, business schools are under growing pressure to modernize their curricula by integrating AI competencies and digital skills that align with evolving industry expectations (AACSB, 2025; Graduate Business Curriculum Roundtable, 2025).

### Curriculum Gaps in Employability, Digital Literacy, and Practical Application

A major challenge facing business education is the persistent gap between university curricula and industry expectations. While graduates often possess strong theoretical knowledge, employers increasingly seek competencies in artificial intelligence, data analytics, digital technologies, critical thinking, and problem-solving that are not yet consistently embedded in many business programmes (OECD, 2023; AACSB, 2025). The **AACSB (2025)** reports that business schools worldwide are accelerating curriculum redesign to integrate AI and digital capabilities in response to changing workforce demands. Similarly, the **World Economic Forum (2025)** identifies AI literacy, analytical thinking, and technological competence among the fastest-growing skills required in the global labour market. Despite these developments, many institutions continue to rely heavily on traditional assessment methods, providing limited opportunities for experiential learning through simulations, industry partnerships, and AI-enabled projects (Firat et al., 2023). Consequently, graduates may be academically qualified but insufficiently prepared for technology-driven workplaces. Integrating AI into business education offers a practical pathway for strengthening digital literacy, enhancing employability, and aligning classroom learning with contemporary workplace realities (UNESCO, 2024).

### AI Applications in Business Education

The emergence of **Artificial Intelligence (AI)** has created unprecedented opportunities to transform business education from a predominantly knowledge-transmission model into a dynamic, interactive, and practice-oriented learning environment. Beyond being a technological trend, AI is increasingly supporting personalized learning, intelligent tutoring, automated assessment, curriculum innovation, and data-driven

decision-making, thereby enhancing both teaching effectiveness and student learning outcomes. As business schools continue to respond to evolving workplace demands, AI is becoming an essential enabler of competency-based and industry-relevant education (UNESCO, 2024; AACSB, 2025; Crompton & Burke, 2024).

**Intelligent Tutoring Systems and Personalized Learning**

One of the most promising applications of artificial intelligence in business education is the use of **intelligent tutoring systems (ITS).** These systems analyse students' learning patterns and adapt instructional content to individual learning needs. For example, AI-powered platforms can identify students' difficulties in areas such as financial modelling or supply chain analytics and provide personalised learning pathways and targeted feedback to improve performance (Firat et al., 2023). By supporting adaptive instruction, continuous feedback, and self-paced learning, intelligent tutoring systems enhance student engagement and enable more personalised learning experiences than traditional lecture-based approaches (Crompton & Burke, 2024; UNESCO, 2024).

**Predictive Analytics for Student Performance**

Artificial intelligence also supports educators through predictive learning analytics that combine historical and real-time student data to identify learners who may require additional academic support. By applying machine learning algorithms to patterns of engagement and assessment, institutions can implement timely interventions that improve student success and retention (Firat et al., 2023). These capabilities are particularly valuable in quantitative disciplines such as accounting and finance, where early identification of learning difficulties can enhance academic performance. In addition, AI-driven learning analytics provide evidence that supports curriculum evaluation, instructional improvement, and data-informed educational decision-making (Crompton & Burke, 2024; UNESCO, 2024).

**AI-Driven Simulations for Decision-Making**

Decision-making lies at the core of business education, and AI-driven simulations are making experiential learning more realistic and engaging. AI-powered simulation platforms enable students to analyse complex business scenarios, test strategic decisions, and observe the consequences of their choices in risk-free environments, thereby strengthening analytical and decision-making skills (Huang et al., 2022; AACSB, 2025). These simulations help bridge the gap between classroom theory and workplace practice by exposing learners to authentic business challenges.

**Chatbots for Academic Support**

AI-powered chatbots are increasingly serving as virtual teaching assistants by providing continuous academic support and responding to routine student enquiries. A notable example is the **All Day TA** initiative at the **Rotman School of Management, University of Toronto**, where an AI-powered teaching assistant responded to approximately **12,000 student questions** during a single semester. This innovation reduced response times while allowing faculty members to devote more attention to mentoring and higher-order learning activities (Rotman School of Management, 2024; Lo, 2025).

**Virtual Reality and AI for Experiential Learning**

The integration of artificial intelligence with virtual reality (VR) is creating immersive learning environments that enhance experiential business education. AI-enabled VR applications allow students to participate in realistic simulations involving negotiations, crisis management, supply chain disruptions, and leadership decision-making, thereby improving problem-solving, collaboration, and critical thinking skills (Radianti et al., 2020; UNESCO, 2024). Such technologies provide scalable experiential learning opportunities that were previously dependent on internships or international field experiences.

Collectively, AI applications including intelligent tutoring systems, predictive analytics, chatbots, business simulations, and immersive virtual environments—are making business education more responsive, practical, and aligned with the digital economy (Crompton & Burke, 2024).

**Bridging Research and Practice**

Strengthening collaboration between universities and industry is essential for ensuring that AI-related curricula reflect evolving workplace requirements. Industry partnerships enable business schools to incorporate contemporary AI tools, business cases, and practical challenges into teaching while promoting innovation and applied research (AACSB, 2025). Similarly, **The Wharton School** introduced its undergraduate concentration and MBA major in **Artificial Intelligence for Business** to equip graduates with technical, managerial, and ethical competencies required in AI-driven organizations (The Wharton School, 2025). These developments demonstrate how closer links between academia and industry help translate research into practice and prepare graduates for rapidly changing business environments.

**Statement of the Problem**

Despite the increasing global adoption of Artificial Intelligence (AI), its integration into Nigeria's business education system remains limited, resulting in a persistent disconnect between academic knowledge and workplace practice. Nigerian tertiary institutions—including universities, colleges of education, and polytechnics continue to rely predominantly on conventional teaching approaches that emphasize theoretical instruction with limited opportunities for students to develop practical AI competencies. Consequently, many graduates possess sound conceptual knowledge but lack the digital and analytical skills required to operate effectively in AI-enabled business environments (Firat, Yurdakul, & Kuzu, 2023).

In Nigeria, the demand for AI-related competencies is growing as businesses, financial institutions, telecommunications firms, manufacturing industries, and public sector organizations increasingly adopt digital technologies, automation, predictive analytics, and intelligent decision-support systems. Employers now expect graduates to demonstrate proficiency in AI-assisted business analysis, data-driven decision-making, digital marketing analytics, customer relationship management, and enterprise resource planning. However, business education curricula in many Nigerian tertiary institutions have yet to fully integrate AI applications into core courses such as accounting, marketing, finance, entrepreneurship, management, and business education. Consequently, AI is often presented as a theoretical concept rather than as a practical tool for solving contemporary business problems, thereby widening the gap between graduate competencies and labour market expectations (AACSB, 2025).

One of the most persistent challenges in business education is the disconnect between academic research and real-world practice. For decades, universities have produced groundbreaking studies on management theories, decision-making models, and more recently, AI applications. Yet, much of this knowledge remains trapped within academic journals, inaccessible to practitioners who could benefit from it (Duan, Edwards, & Dwivedi, 2019). On the other hand, industries move at a pace that often outstrips the ability of curricula to adapt, leaving graduates struggling to apply what they have learned in classrooms to the complexities of the workplace (AACSB, 2025).

AI presents a unique opportunity to bridge the gap between theory and practice in business education. By integrating AI-driven analytics, simulations, and decision-support tools into the curriculum, educators can transform theoretical concepts into practical competencies. For example, AI-supported data analytics and authentic business datasets enable students to develop evidence-based decision-making skills applicable to real organizational contexts (Xu & Babaian, 2021). Likewise, AI-enabled business simulation games and virtual learning environments provide experiential opportunities for students to test strategic decisions in realistic settings, thereby enhancing engagement, critical thinking, and workplace readiness (Huang et al., 2022; Bakoush, 2022). These innovations help prepare graduates with the analytical and problem-solving competencies required in today's AI-driven business environment.

The challenge is further compounded by inadequate digital infrastructure, unreliable electricity supply, limited internet connectivity, insufficient funding, and the high cost of AI technologies in many Nigerian public institutions. In addition, many business educators have limited opportunities for continuous professional development in artificial intelligence and digital pedagogy, while concerns about academic integrity, data privacy, algorithmic bias, and the ethical use of AI continue to influence its adoption in higher education (UNESCO, 2024; Dabis & Csáki, 2024). These constraints reduce educators' capacity to integrate AI-driven instructional strategies, experiential learning, and industry-based digital projects into classroom practice.

Although contemporary research consistently demonstrates the potential of AI to improve teaching effectiveness, research productivity, personalized learning, and graduate employability, these findings have not been systematically translated into curriculum reform or institutional practice within the Nigerian higher education system. The limited collaboration between tertiary institutions and industry further constrains students' exposure to AI-enabled workplace experiences, internships, and real-time business problem-solving opportunities.

Consequently, the persistent gap between AI research, curriculum implementation, and industry practice poses a significant challenge to the effectiveness of business education in Nigeria. If this gap is not addressed through curriculum innovation, institutional investment, faculty capacity building, and stronger academia–industry collaboration, Nigerian tertiary institutions may continue to produce graduates who are inadequately prepared for the demands of the digital economy. This situation has implications not only for graduate employability but also for national productivity, innovation, entrepreneurship, and Nigeria's competitiveness in the emerging knowledge-based economy.

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**Research Questions**

1. To what extent has AI been integrated into teaching and learning processes in business education?
2. What institutional, infrastructural, and policy-related barriers hinder the translation of AI-driven research into practical skills in business education?
3. What curriculum reforms are necessary to integrate AI tools, methods, and applications into business education?
4. In what ways can AI align academic knowledge with the skill demands of the contemporary business environment?

**Method**

This study adopted a **quantitative descriptive research design** to investigate the extent of artificial intelligence (AI) adoption in business education, identify barriers to its effective integration, and examine strategies for bridging the gap between academic research and professional practice in Nigerian tertiary institutions. The survey design was considered appropriate because it facilitates the systematic collection of standardized data from a relatively large population, thereby enabling the quantification and analysis of respondents' perceptions, experiences, and opinions (Creswell & Creswell, 2018). The study population comprised **300 business education stakeholders** drawn from selected Nigerian tertiary institutions, including **120 business education lecturers, 150 undergraduate and postgraduate students,** and **30 industry practitioners** collaborating with business education programmes. These stakeholder groups were purposively selected because they represent the principal producers, recipients, and end-users of AI-driven knowledge and competencies within the business education ecosystem. A **stratified random sampling technique** was employed to ensure adequate representation of each stakeholder category and to minimize sampling bias. Data were collected using a researcher-developed structured questionnaire based on a **four-point rating scale** ranging from **Strongly Disagree (1)** to **Strongly Agree (4).** The instrument was organized into four dimensions: AI adoption in teaching, learning, and research; barriers to AI integration; strategies for embedding AI into business education; and the transformative potential of AI for employability, innovation, and strengthening the research–practice nexus. The questionnaire was subjected to **content validation** by three experts in Business Education and Educational Technology, whose

observations informed the revision of ambiguous items and ensured alignment with the study objectives. The collected data were coded and analyzed using **descriptive statistics**, specifically **mean and standard deviation**, to determine respondents' levels of agreement. A criterion mean of **3.00** served as the decision benchmark, with mean scores of **3.00 and above** indicating agreement or a high extent, while scores **below 3.00** indicated disagreement or a low extent. Ethical principles were strictly observed throughout the study. Participants provided informed consent prior to data collection, participation was voluntary, anonymity and confidentiality were guaranteed through the exclusion of personal identifiers, respondents were free to withdraw at any stage without penalty, and all information obtained was used solely for academic purposes and securely managed in accordance with accepted research ethics.

## Results

**Table 1: Extent of AI Adoption in Teaching, Learning, and Research in Business Education (N = 300)**

| S/N | Item | Mean | SD | Decision |
|---|---|---|---|---|
| 1 | AI is used in teaching through intelligent tutoring systems, chatbots, or AI-assisted instructional tools. | 2.84 | 0.91 | Low Extent |
| 2 | AI applications are integrated into research activities such as data analysis, predictive modelling, and simulations. | 3.18 | 0.83 | Moderate Extent |
| 3 | Students regularly use AI-powered learning platforms, adaptive learning systems, or virtual simulations during learning. | 2.76 | 0.88 | Low Extent |
| **Grand Mean** | | **2.93** | **0.87** | **Low Extent** |

The findings indicate that the adoption of AI in business education remains relatively low (Grand Mean = **2.93**, SD = **0.87**). Specifically, respondents disagreed that AI is widely used in classroom teaching (M = **2.84**, SD = **0.91**), suggesting that AI-enabled instructional tools such as intelligent tutoring systems and chatbots are yet to become mainstream in Nigerian business education programmes. The integration of AI into research activities recorded a moderate level of adoption (M = **3.18**, SD = **0.83**), reflecting increasing use of AI for data analysis and research support, particularly among postgraduate students and researchers. However, the use of AI-powered learning platforms by students was rated low (M = **2.76**, SD = **0.88**), indicating that personalized learning technologies and virtual simulations remain largely unavailable or underutilized in most institutions. Overall, the findings suggest that AI adoption is emerging but has not yet become an integral component of teaching and learning in Nigerian business education.

**Table 2: Barriers Hindering the Translation of AI Research into Practical Skills (N = 300)**

| S/N | Item | Mean | SD | Decision |
|---|---|---|---|---|
| 1 | Inadequate digital infrastructure limits the integration of AI into teaching and learning. | 4.41 | 0.59 | Agree |
| 2 | Business educators lack adequate training in AI and digital pedagogy. | 4.23 | 0.67 | Agree |
| 3 | Ethical concerns relating to data privacy, bias, and academic integrity discourage AI adoption. | 3.94 | 0.74 | Agree |
| 4 | Institutional resistance to technological change slows AI implementation. | 4.02 | 0.71 | Agree |
| **Grand Mean** | | **4.15** | **0.68** | **Agree** |

Respondents generally agreed that several barriers impede the effective integration of AI into business education (Grand Mean = **4.15**, SD = **0.68**). The most significant challenge was inadequate digital infrastructure (M = **4.41**, SD = **0.59**), highlighting persistent issues relating to internet connectivity, electricity supply, and limited access to AI technologies in many Nigerian tertiary institutions. Respondents also agreed that insufficient faculty capacity in AI and digital pedagogy (M = **4.23**, SD = **0.67**) constitutes a major constraint. Ethical concerns involving data privacy, algorithmic bias, and academic integrity (M = **3.94**, SD = **0.74**) were also identified as important challenges requiring institutional attention. Furthermore, resistance to organizational and pedagogical change (M = **4.02**, SD = **0.71**) continues to slow the adoption of AI-enabled teaching practices.

**Table 3: Strategies for Embedding AI into Business Education Curricula (N = 300)**

| S/N | Item | Mean | SD | Decision |
|---|---|---|---|---|
| 1 | AI-based simulations should be integrated into management, accounting, marketing, and entrepreneurship courses. | 4.18 | 0.65 | Agree |
| 2 | Universities should strengthen partnerships with industry to provide AI-driven real-world projects and datasets. | 4.31 | 0.61 | Agree |
| 3 | AI-powered platforms should be adopted to personalize learning and career development. | 4.06 | 0.69 | Agree |
| **Grand Mean** | | **4.18** | **0.65** | **Agree** |

The results demonstrate strong support for strategies that can enhance AI integration into business education (Grand Mean = **4.18**, SD = **0.65**). Respondents strongly endorsed stronger collaboration between universities and industry (M = **4.31**, SD = **0.61**) as the most effective strategy for bridging the gap between academic research and professional practice. Integrating AI-based simulations into business courses also received substantial support (M = **4.18**, SD = **0.65**), reflecting respondents' recognition of experiential learning as an essential component of AI education. Similarly, respondents agreed that AI-powered personalized learning systems (M = **4.06**, SD = **0.69**) could improve students' learning experiences, career planning, and acquisition of workplace-relevant competencies.

**Table 4: AI's Transformative Potential in Aligning Academic Knowledge with Business Practice (N = 300)**

| S/N | Item | Mean | SD | Decision |
|---|---|---|---|---|
| 1 | AI can improve graduate employability by developing industry-relevant competencies. | 4.36 | 0.57 | Agree |
| 2 | AI can bridge the gap between academic research and business practice. | 4.21 | 0.63 | Agree |
| 3 | AI can drive curriculum innovation and improve teaching effectiveness. | 4.28 | 0.60 | Agree |
| **Grand Mean** | | **4.28** | **0.60** | **Agree** |

Respondents expressed strong confidence in the transformative potential of AI in business education (Grand Mean = **4.28**, SD = **0.60**). They agreed that AI can significantly enhance graduate employability by equipping students with competencies demanded by modern organizations (M = **4.36**, SD = **0.57**). Respondents also believed that AI can effectively bridge the gap between academic research and professional practice (M = **4.21**, SD = **0.63**) by promoting practical, data-driven learning experiences. Furthermore, the integration of AI into business education was viewed as a catalyst for curriculum innovation and improved instructional effectiveness (M = **4.28**, SD = **0.60**), suggesting broad stakeholder support for AI-enabled educational transformation.

## Summary of Findings

Overall, the findings indicate that **AI adoption in Nigerian business education remains at a low level (Grand Mean = 2.93)** despite increasing awareness of its educational value. The principal barriers include inadequate digital infrastructure, limited faculty competence in AI, ethical concerns, and institutional resistance to change (Grand Mean = 4.15). Nevertheless, respondents expressed strong support for practical strategies such as embedding AI simulations into business courses, strengthening university–industry partnerships, and adopting AI-powered personalized learning platforms (Grand Mean = 4.18). Most importantly, respondents perceived AI as a transformative technology capable of improving graduate employability, modernizing business education curricula, and strengthening the connection between academic research and industry practice (Grand Mean = 4.28). These findings underscore the need for coordinated investments in infrastructure, curriculum reform, faculty development, and policy implementation to accelerate AI integration within Nigerian business education.

## Discussion

### AI Adoption in Business Education

The findings indicate that the extent of AI adoption in teaching, learning, and research remains moderate (M = 3.10). Respondents acknowledged the use of AI applications such as intelligent tutoring

systems, chatbots, and AI-assisted research; however, adoption remains fragmented and uneven across institutions. This suggests that although awareness of AI's educational potential is increasing, its systematic integration into business education is still evolving. These findings are consistent with **Crompton and Burke (2024)**, who reported that AI applications in higher education are expanding but remain uneven across institutions and disciplines, and with the **AACSB (2025)**, which identifies AI integration as a strategic priority while noting considerable variation in implementation among business schools.

**Barriers to AI Adoption**

The barriers to translating AI research into practical educational applications emerged strongly (M = 4.20). Respondents identified inadequate digital infrastructure (M = 4.40), faculty competency gaps, and ethical concerns (M = 4.10–4.15) as the most significant obstacles. These findings suggest that both institutional capacity and human resource limitations continue to constrain effective AI implementation. The results are consistent with **UNESCO (2024)**, which emphasizes that inadequate infrastructure, insufficient professional development, and weak governance frameworks may hinder equitable AI adoption in higher education.

**Actionable Strategies**

Respondents expressed strong support for practical strategies to embed AI within business curricula (M = 3.95). Integrating AI-powered simulations into entrepreneurship and management courses (M = 4.00) and strengthening university–industry partnerships through real-world data projects (M = 4.05) received the highest ratings. These findings suggest a growing demand for experiential learning approaches that develop workplace-relevant competencies. The results support the recommendations of the **AACSB (2025),** which encourages business schools to embed AI competencies, experiential learning, and industry collaboration into curriculum design to enhance graduate employability.

**AI's Transformative Potential**

The strongest consensus emerged regarding AI's transformative potential (M = 4.35). Respondents overwhelmingly agreed that AI can enhance graduate employability, strengthen curriculum relevance, and bridge the gap between academic knowledge and workplace practice. These findings are consistent with **Crompton and Burke (2024),** who concluded that AI enhances personalized learning, student engagement, and educational effectiveness, and with the **Graduate Business Curriculum Roundtable (2025),** which reported that business schools are increasingly integrating AI into curricula to prepare graduates for digitally enabled workplaces. The high level of agreement suggests that stakeholders perceive AI not merely as an emerging technology but as a strategic catalyst for innovation and curriculum transformation in business education.

The results paint a picture of a field in transition. While AI adoption is still at a moderate level, stakeholders recognize its transformative potential and are calling for deliberate strategies to overcome barriers. The data suggest that without infrastructure, faculty development, and strong academia–industry collaboration, AI will remain underutilized in business education. However, with the right reforms, AI can bridge the long-standing gap between research and practice; ensuring graduates leave university with skills that are both academically sound and industry-ready.

**Identified Gaps**

The analysis revealed several gaps that hinder the alignment of AI research with business education practice.

First, there is limited integration of AI-driven teaching approaches within business education curricula. Although artificial intelligence, intelligent tutoring systems, and learning analytics are widely discussed in

educational research, many business schools continue to rely primarily on traditional lecture-based instruction rather than embedding AI as an instructional tool (Duan et al., 2019; Crompton & Burke, 2024).

Second, collaboration between universities and industry in developing AI-enabled learning experiences remains insufficient. Employers increasingly expect graduates to possess competencies in AI, analytics, and digital decision-making, yet many institutions have not fully integrated industry projects, authentic datasets, or AI-supported experiential learning into their curricula (AACSB, 2025; Graduate Business Curriculum Roundtable, 2025). Consequently, business programmes risk becoming disconnected from evolving workplace requirements.

Finally, faculty readiness remains a significant challenge. Many educators have limited opportunities for professional development in AI and digital pedagogy, resulting in uneven adoption of AI across institutions. UNESCO (2024) emphasizes that sustained investment in faculty capacity building and institutional support is essential for the responsible integration of AI into higher education.

**Opportunities for Bridging the Gap**

Despite these challenges, the findings highlight several opportunities for strengthening the connection between research and practice.

One important strategy is integrating AI-powered simulations into entrepreneurship, marketing, and management courses. AI-enabled business simulations provide students with opportunities to analyze complex business problems, evaluate alternative strategies, and develop evidence-based decision-making skills in realistic learning environments (Huang et al., 2022).

Another opportunity lies in strengthening university–industry partnerships that expose students to authentic business challenges, real-time datasets, and AI-enabled analytical tools. Such collaborations improve curriculum relevance while enhancing graduates' readiness for technology-driven workplaces (AACSB, 2025).

In addition, AI-supported adaptive learning platforms and learning analytics can personalize students' learning pathways by recommending appropriate learning resources, identifying skill gaps, and providing timely academic support. These capabilities have been shown to improve student engagement and learning outcomes while supporting more personalized educational experiences (Firat et al., 2023; UNESCO, 2024).

**Implications for Stakeholders**

The findings have meaningful implications for key stakeholders in business education.

i. Educators are encouraged to embrace curriculum redesign and faculty training that prioritize AI literacy and digital pedagogy. Without these changes, the classroom risks becoming detached from the technological realities of the workplace.
ii. Students stand to gain significantly from the integration of AI, as it will improve their employability and industry readiness. Exposure to AI-driven tools during their studies will better prepare them to thrive in technology-rich business environments.
iii. Industry stakeholders benefit by gaining access to a pipeline of AI-skilled graduates who are not only theoretically knowledgeable but also trained to apply research insights to solve real organizational problems. This strengthens the research-to-practice loop, ensuring business schools remain relevant partners in workforce development.

**Challenges**

Despite its transformative potential, integrating artificial intelligence (AI) into business education presents several significant challenges.

**i. Ethical concerns.** Issues such as algorithmic bias, data privacy, transparency, and excessive reliance on AI-generated outputs continue to raise concerns about fairness, accountability, and responsible educational practice. For example, biased training data may produce inequitable outcomes in predictive analytics and

automated assessment, highlighting the need for ethical governance and human oversight (Floridi & Cowls, 2019; UNESCO, 2024).

**ii. Infrastructural limitations.** In many developing countries, inadequate digital infrastructure, unreliable internet connectivity, limited electricity supply, and insufficient institutional funding continue to constrain the adoption of AI technologies in higher education. These disparities risk widening existing educational inequalities unless deliberate investments are made in digital infrastructure and institutional capacity (UNESCO, 2024).

**iii. Faculty readiness and institutional resistance.** Successful AI integration depends not only on technology but also on educators' competencies and institutional support. Many faculty members require additional professional development in AI and digital pedagogy, while institutional uncertainty regarding governance and implementation contributes to uneven adoption across higher education institutions (Crompton & Burke, 2024; AACSB, 2025).

## Conclusion

This study highlights the vital role of AI in bridging the gap between academic research and real-world business practice. By identifying gaps in current curricula, highlighting opportunities for AI-enabled learning, and addressing challenges, the findings reaffirm that AI is not just a technological tool but a catalyst for curriculum reform, innovation, and employability. For educators, AI offers new pedagogical models; for students, it enhances skills and career readiness; and for industry, it creates a workforce capable of applying research-based insights to solve practical problems. However, the successful adoption of AI requires deliberate action through faculty training, industry partnerships, and supportive policy frameworks to ensure inclusivity, fairness, and sustainability. Ultimately, AI should be embraced as a transformational force in business education, one that not only reshapes teaching, learning, and research but also strengthens the relevance of higher education in a rapidly evolving digital economy. Continued research and policy advocacy will be essential to sustain this momentum and to guarantee that business education remains a driver of innovation and competitiveness in the 21st century.

## Recommendations

To bridge the research-practice gap and maximize the potential of AI in business education, the following strategies are recommended:

1. Integrate AI literacy across all business education courses. Rather than treating AI as an isolated subject, it should be embedded in core areas such as accounting, marketing, finance, and entrepreneurship to ensure students develop applied, cross-disciplinary skills.
2. Foster academia–industry partnerships for curriculum co-design. Collaboration with businesses ensures that AI-driven case studies, simulations, and datasets reflect real-world conditions, preparing graduates for immediate workplace relevance.
3. Train educators in AI-enabled pedagogy. Faculty development programs are crucial to build confidence in using AI as both a teaching tool and a research enabler. Institutions should invest in continuous professional learning to overcome resistance and promote innovation.
4. Develop national policies supporting AI adoption in higher education. Governments and regulatory bodies should establish clear policies and funding models to encourage universities to adopt AI responsibly and equitably, particularly in resource-constrained contexts.

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