



INTEGRATING ARTIFICIAL INTELLIGENCE INTO THE BUSINESS EDUCATION CURRICULUM IN SELECTED UNIVERSITIES IN LAGOS STATE: CHALLENGES AND PROSPECTS

OLUWO Oluwabunmi Amos Ph.D. & ADEYEMI Adedayo Patrick Ph.D.

Department of Business Education and Entrepreneurship Education
Lagos State University of Education Otto/ Ijannikin
Lagos State

Corresponding Email: oluwooa@lasued.edu.ng

Abstract

This study investigated the integration of Artificial Intelligence (AI) into the Business Education curriculum of selected universities in Lagos State, Nigeria. The study examined the level of AI incorporation, the factors limiting its implementation, students' exposure to AI applications, and the perceived benefits of integrating AI into Business Education programmes. A descriptive survey research design was employed for the study. The study population consisted of 273 respondents, comprising 25 Business Education lecturers and 248 400-level students, from which a sample of 178 respondents was selected. Data were gathered through a researcher-developed instrument titled Artificial Intelligence Integration into Business Education Curriculum Questionnaire (AIIBECQ). The instrument was subjected to expert validation and produced a reliability coefficient of 0.81 using Cronbach's Alpha method. Data collected were analysed using frequency counts, percentages, mean scores, and standard deviation. The results indicated that the integration of AI into Business Education curricula remains limited, although some AI-related concepts have been introduced into existing courses. The study identified inadequate funding, insufficient digital infrastructure, unreliable electricity supply, poor internet access, limited availability of AI resources, inadequate training opportunities, inflexible curriculum structures, and absence of institutional guidelines as key barriers to effective AI adoption. Although students demonstrated awareness and independent use of AI tools, their exposure through formal academic instruction and practical training was inadequate. The findings also showed that respondents recognised the potential of AI to enhance digital competence, improve teaching and learning, develop creativity and problem-solving skills, increase employability, and strengthen curriculum relevance. The study concluded that successful AI integration requires strategic curriculum modification, investment in technological facilities, continuous lecturer training, and stronger institutional support mechanisms.

Keywords: Artificial Intelligence, Business Education, curriculum integration, digital skills, higher education, employability

Introduction

Business Education occupies a strategic position in higher education because it is designed to develop individuals with the knowledge, competencies, practical skills, and professional values required for success in today's business environment. The programme equips students with competencies in accounting, marketing, entrepreneurship, office technology and management, and other business-related disciplines, thereby preparing them for paid employment, self-employment, and effective participation in national economic development. As the business environment continues to evolve through technological innovation and globalization, Business Education is expected to produce graduates who are adaptable, technologically competent, and capable of responding to contemporary workplace demands (David, Okeke, & Ibironke, 2024; Angwaomaodoko, Yunusa, & Abalaka, 2025).

The achievement of these objectives depends largely on the quality and relevance of the Business Education curriculum. A curriculum serves as the blueprint for teaching and learning by specifying educational objectives, course content, instructional approaches, learning experiences, and assessment procedures. For a curriculum to remain effective, it must be reviewed periodically to reflect societal changes, technological advancements, and the evolving needs of industries. The rapid transformation of business processes through digital technologies has created a demand for graduates with competencies in digital literacy, data management, critical thinking, innovation, and technology-supported decision-making. This reality has increased the need for universities to modernize Business Education curricula to align with the changing expectations of employers and the knowledge economy (Ogunode & Ukozor, 2023; UNESCO, 2024).

One technological innovation that has attracted considerable attention in recent years is Artificial Intelligence (AI). Artificial Intelligence encompasses computer-based systems and applications that are capable of performing tasks commonly associated with human intelligence, including learning from data, recognizing patterns, solving problems, interpreting language, and making informed decisions. The increasing adoption of AI across business organizations has also influenced the education sector, where intelligent technologies are now being utilized to improve teaching, learning, research, and institutional administration. Consequently, universities across the world are exploring ways of incorporating AI into academic programmes in order to prepare graduates for an increasingly technology-driven society (UNESCO, 2024; Bali et al., 2024).

Within the context of Business Education, integrating Artificial Intelligence into the curriculum presents significant opportunities for improving educational quality and graduate preparedness. AI technologies can enhance classroom instruction through adaptive learning systems, intelligent tutoring platforms, automated assessment, virtual assistants, learning analytics, and generative AI applications that support both lecturers and students. These innovations encourage personalized learning, increase students' engagement, facilitate timely feedback, and strengthen the acquisition of practical and analytical skills required in contemporary workplaces. In addition, exposing Business Education students to AI-related concepts and applications equips them with digital competencies that are increasingly valued by employers in the modern business world (Onwubuya, Amobi, & Atah, 2025; Atah et al., 2025).

Despite these potential benefits, the successful integration of Artificial Intelligence into Business Education curricula remains a challenge for many universities in Nigeria. Although awareness of AI technologies is increasing, several institutional and infrastructural barriers continue to hinder their effective adoption. Among these challenges are inadequate funding for educational technology, poor digital infrastructure, irregular electricity supply, limited internet connectivity, insufficient AI-related training for lecturers, inadequate technical support, and limited curriculum flexibility. Furthermore, concerns regarding ethical use of AI, data privacy, academic honesty, and institutional policies have raised important questions about the responsible implementation of AI within higher education (Bali et al., 2024; Falebita & Kok, 2024).

Lagos State provides an appropriate context for examining these issues because it serves as Nigeria's commercial, financial, and technological centre. The state is home to several public and private universities offering Business Education and related programmes, while its expanding digital ecosystem presents increasing opportunities for technology-enhanced teaching and learning. Nevertheless, differences in institutional capacity, technological infrastructure, staff expertise, funding, and policy implementation may influence the extent to which Artificial Intelligence is integrated into Business Education curricula across universities within the state. As universities seek to produce graduates who can thrive in an increasingly digital economy, there is a need to assess both the constraints limiting AI integration and the opportunities it presents for improving curriculum relevance and instructional effectiveness (Oladunni-Mohammad, 2024).

Given the growing influence of Artificial Intelligence on business operations and higher education globally, Business Education programmes can no longer rely solely on traditional instructional approaches. Instead, curriculum developers, university administrators, lecturers, and policymakers must embrace innovative strategies that promote the integration of emerging technologies into teaching and learning. Examining the challenges and prospects associated with AI integration is therefore essential for strengthening the quality of Business Education and ensuring that graduates possess the competencies required for the twenty-first-century workplace. It is against this backdrop that this study investigates the integration of Artificial Intelligence into the Business Education curriculum in selected universities in Lagos State, with emphasis on the challenges affecting its implementation and the prospects for enhancing teaching, learning, curriculum relevance, and graduate employability.

Statement of the Problem

The growing adoption of Artificial Intelligence (AI) in business organisations is transforming the nature of work and the skills required of university graduates. Consequently, higher education institutions are expected to continually update their curricula to reflect these technological developments and equip students with the digital knowledge and competencies needed to function effectively in today's technology-driven business environment. As

a discipline that prepares students for careers in business, management, entrepreneurship, and related fields, Business Education needs to incorporate relevant AI knowledge and applications into its curriculum to remain responsive to contemporary workplace demands.

Despite the increasing relevance of AI in education and the business sector, its integration into Business Education curricula in Nigerian universities appears to remain limited. Factors such as inadequate technological facilities, insufficient funding, limited AI competence among lecturers, inadequate staff training, and delays in curriculum review may hinder effective implementation. Consequently, students may graduate without acquiring the practical AI-related competencies and digital skills increasingly demanded in the workplace.

Although Lagos State is recognised as a major centre of commerce, innovation, and technology in Nigeria, limited empirical evidence exists on the extent to which AI has been integrated into Business Education curricula in universities within the state. Existing studies have largely focused on awareness, acceptance, and the use of AI technologies in higher education, with comparatively limited attention given to AI curriculum integration in Business Education programmes. This gap may contribute to a mismatch between university training and emerging labour market expectations, potentially affecting graduates' employability and effectiveness in a technology-driven economy. It is therefore necessary to investigate the extent of AI integration into the Business Education curriculum in selected universities in Lagos State, the challenges affecting its implementation, and the prospects for strengthening the quality and relevance of Business Education.

Objectives of the Study

The main objective of the study was to examine the integration of Artificial Intelligence (AI) into the Business Education curriculum in selected universities in Lagos State, with emphasis on the extent of integration, challenges, and prospects from the perspectives of lecturers and students. Specifically, the study sought to:

1. determine the extent of Artificial Intelligence integration into the Business Education curriculum in selected universities in Lagos State from the perspective of lecturers.
2. identify the challenges affecting the integration of Artificial Intelligence into the Business Education curriculum in selected universities in Lagos State from the perspective of lecturers.
3. determine the level of students' exposure to Artificial Intelligence tools and applications in Business Education programmes in selected universities in Lagos State.
4. examine the prospects of Artificial Intelligence integration into Business Education programmes from the perspective of students in selected universities in Lagos State.

Research Questions

The following research questions were raised to guide the study:

1. To what extent has Artificial Intelligence been integrated into the Business Education curriculum in selected universities in Lagos State from the perspective of lecturers?
2. What challenges affect the integration of Artificial Intelligence into the Business Education curriculum in selected universities in Lagos State from the perspective of lecturers?
3. What is the level of students' exposure to Artificial Intelligence tools and applications in Business Education programmes in selected universities in Lagos State?
4. What are the prospects of Artificial Intelligence integration into Business Education programmes from the perspective of students in selected universities in Lagos State?

Scope of the Study

The study focused on the integration of Artificial Intelligence (AI) into the Business Education curriculum in selected universities in Lagos State, Nigeria, namely the University of Lagos (UNILAG) and Lagos State University of Education (LASUED). It examined the extent of AI integration, challenges affecting its implementation, students' exposure to AI tools, and the prospects of AI integration in Business Education programmes, as perceived by Business Education lecturers and 400-level students. The study also covered AI applications, availability of AI resources, lecturers' competence, students' exposure, institutional support, and infrastructural factors influencing AI integration. Geographically, the study was limited to the selected universities in Lagos State and excluded other institutions and academic programmes outside Business Education.

Concept of Artificial Intelligence

Artificial Intelligence (AI) can be described as the ability of computer-based systems to imitate human intelligence by performing tasks that require cognitive abilities, including learning, reasoning, problem-solving, decision-making, language processing, and recognition of patterns. AI technologies utilise algorithms and data processing techniques to analyse information, identify meaningful connections, and produce outputs that support

human activities. Russell and Norvig (2021) explained that Artificial Intelligence involves the development of intelligent agents capable of perceiving their environment and taking appropriate actions to achieve specific goals.

Over the years, Artificial Intelligence has progressed from simple rule-based systems to more advanced technologies such as machine learning, deep learning, natural language processing, and generative AI. These developments have expanded the application of AI across several sectors, including business, industry, and education. Kaplan and Haenlein (2019) viewed AI as the capacity of machines to interpret external information, learn from available data, and apply acquired knowledge to accomplish specific objectives through adaptive processes.

In the field of education, Artificial Intelligence involves the application of intelligent technologies to support instructional delivery, learning activities, assessment processes, research, and institutional management. AI-based tools, including adaptive learning systems, intelligent tutoring applications, automated feedback mechanisms, and learning analytics platforms, have provided new approaches for improving teaching effectiveness and enhancing students' learning experiences (Holmes, Bialik, & Fadel, 2019). UNESCO (2024) further noted that AI has the potential to transform education by promoting personalized learning, strengthening teachers' instructional capacity, and supporting evidence-based educational decisions, while emphasizing the importance of ethical and responsible utilization.

In Business Education, the relevance of Artificial Intelligence has increased due to the transformation of business practices and the growing demand for technology-oriented skills in the workplace. The integration of AI into Business Education programmes can expose students to emerging technologies applicable in areas such as accounting, marketing, entrepreneurship, business analytics, and office management. This exposure can enhance students' digital literacy, analytical abilities, and readiness for contemporary employment opportunities (Owan et al., 2023). However, effective AI implementation in educational institutions requires adequate technological infrastructure, lecturers' digital competence, institutional support, financial investment, and appropriate ethical frameworks (Baker & Smith, 2019).

Concept of Business Education

Business Education is a specialised field of education that is concerned with developing individuals' knowledge, skills, competencies, and values required for effective participation in the world of business. It integrates theoretical instruction with practical learning experiences in disciplines such as accounting, marketing, entrepreneurship, business communication, office technology and management, among others, to prepare learners for paid employment, self-employment, and meaningful contribution to national economic development. In contemporary higher education, the scope of Business Education has expanded beyond conventional business knowledge to embrace digital competence, innovation, and adaptability, reflecting the evolving demands of today's technology-driven workplace (Ore, Hassan, & Ogungbo, 2022).

The primary purpose of Business Education is to produce graduates who possess the knowledge and practical competencies needed to address business challenges and contribute effectively to organisational performance. With the increasing digitalisation of business activities and the emergence of new technologies, Business Education curricula are expected to incorporate digital skills and technology-based learning experiences that equip students with competencies relevant to modern workplaces. David et al. (2024) observed that the integration of digital technologies into skills acquisition has become indispensable for enhancing the employability of Business Education graduates, as employers increasingly seek individuals with strong technological capabilities.

At the university level, Business Education provides students with the knowledge, professional skills, and entrepreneurial competencies required for careers in diverse business-related fields while fostering innovation and lifelong learning. Consequently, Business Education programmes must undergo continuous curriculum review to accommodate developments in business practices, including automation, Artificial Intelligence, data analytics, and other emerging digital technologies. Recent literature suggests that the relevance and effectiveness of Business Education depend largely on its ability to align curriculum content with contemporary labour market demands and equip graduates with competencies required in the digital economy (Ore, 2023; Olorundare & Kayode, 2023).

In addition to preparing students for employment, Business Education plays a significant role in human capital development by promoting entrepreneurship, enhancing managerial competence, and strengthening decision-making abilities. As organisations increasingly adopt advanced technologies in their operations, there is a growing need for Business Education students to acquire digital literacy and technological competencies that will enable them to function effectively in modern business environments. This underscores the importance of curriculum innovation and the integration of emerging technologies into Business Education programmes (David et al., 2024).

Therefore, Business Education can be viewed as a dynamic and evolving educational programme that combines business knowledge, vocational skills, entrepreneurial competencies, and technological capabilities to prepare individuals for successful careers and lifelong learning. Within the context of this study, Business

Education refers to university programmes designed to equip students with relevant business and digital competencies, including the knowledge and skills required to utilise emerging technologies such as Artificial Intelligence in enhancing workplace performance and improving graduate employability.

The Term Curriculum

The term curriculum can be described as a carefully designed and systematic plan that directs the teaching and learning process within an educational setting. It includes educational objectives, subject content, learning activities, instructional strategies, available learning resources, and assessment methods developed to achieve predetermined educational outcomes. Curriculum provides a framework that guides both teachers and learners by specifying the knowledge, skills, experiences, and competencies expected to be acquired during the educational process.

Tyler (2013) explained that curriculum development involves defining educational objectives, selecting and organising appropriate learning experiences, and assessing the extent to which the desired outcomes have been achieved. Similarly, Ornstein and Hunkins (2018) viewed curriculum as an organised arrangement of knowledge, skills, values, and learning experiences provided to learners through formal education. Thus, curriculum extends beyond a collection of courses or subjects; it represents the complete range of planned educational experiences designed to facilitate learners' development.

In higher education, curriculum plays a significant role in maintaining the relevance of academic programmes by responding to societal changes, technological advancements, and evolving workforce requirements. An effective curriculum should be flexible and continuously updated to accommodate emerging knowledge, innovations, and competencies needed in contemporary society. This is especially relevant to Business Education, where rapid changes in business operations, digital technologies, and workplace expectations require constant curriculum review and improvement.

For the purpose of this study, curriculum refers to the organised components of the Business Education programme, including course contents, teaching methods, learning experiences, and assessment practices through which students develop business knowledge, professional abilities, and technological competencies. Therefore, integrating Artificial Intelligence into the Business Education curriculum involves incorporating AI-related concepts, tools, and practical applications into the programme to equip students with the digital skills required to function effectively in the modern business environment.

Theoretical Framework

Diffusion of Innovation Theory

The Diffusion of Innovation (DOI) Theory was proposed by Everett M. Rogers in 1962 and was subsequently refined in later editions, with the fifth edition published in 2003. The theory explains the process through which new ideas, technologies, or innovations are disseminated and adopted within a social system over time. Rogers (2003) described diffusion as the process by which an innovation is communicated through particular channels over time among members of a social system. The theory has been widely applied to explain the adoption of technological innovations in education, business, healthcare, and other sectors.

Rogers (2003) identified five key attributes that influence the adoption of an innovation: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage refers to the extent to which an innovation is perceived to be superior to the existing practice. Compatibility is the degree to which the innovation aligns with the values, experiences, and needs of potential users. Complexity describes how easy or difficult the innovation is to understand and use, while trialability refers to the opportunity to experiment with the innovation before making a full commitment to its adoption. Observability, on the other hand, relates to the extent to which the results or benefits of the innovation are visible to others. The theory further categorises adopters into five groups: innovators, early adopters, early majority, late majority, and laggards and explains that the adoption process progresses through the stages of knowledge, persuasion, decision, implementation, and confirmation.

The Diffusion of Innovation Theory provides a useful framework for this study because Artificial Intelligence is regarded as an emerging technological innovation that is gradually being incorporated into higher education curricula. The theory suggests that the level of AI integration into the Business Education curriculum is influenced by stakeholders' perceptions of its benefits, compatibility with existing curricular structures, ease of application, and the visibility of its outcomes. It also helps to explain the challenges associated with AI integration, including inadequate technological infrastructure, limited funding, insufficient AI competencies among lecturers, and inadequate institutional support, all of which may delay or hinder its adoption. Furthermore, the theory emphasises that innovations perceived to offer substantial benefits are more likely to gain acceptance and sustained use. Consequently, the recognised potential of Artificial Intelligence to improve teaching effectiveness, enrich students' learning experiences, enhance curriculum relevance, and strengthen graduate employability supports its integration into Business Education programmes. The theory therefore provides an appropriate foundation for understanding

the extent of AI integration, the challenges influencing its implementation, and the prospects for its adoption in Business Education curricula in selected universities in Lagos State.

METHODOLOGY

Research Design

The study adopted a descriptive survey research design, as it was considered suitable for obtaining information from Business Education lecturers and final-year students on the integration of Artificial Intelligence (AI) into the Business Education curriculum in selected universities in Lagos State. The design enabled the researcher to examine the existing level of AI integration, students' exposure to AI applications, factors affecting its implementation, and the perceived benefits of AI integration without manipulating the study variables.

Population of the Study

The target population for this study comprised all Business Education lecturers and 400-level Business Education students in the selected universities in Lagos State during the 2026 academic session. The study involved a total of 273 respondents, consisting of 25 Business Education lecturers and 248 final-year Business Education students. The distribution of the population across the selected universities is presented as follows:

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Table 1: Population Distribution of Respondents

University	Lecturers	400-Level Students	Total
University of Lagos (UNILAG)	06	139	145
Lagos State University of Education (LASUED)	19	109	128
Total	25	248	273

Source: Departmental offices of the two Universities (2026).

Sample and Sampling Technique

The study employed a combination of census and proportionate sampling techniques. The census sampling technique was used for the Business Education lecturers due to their manageable population size, resulting in the inclusion of all 25 lecturers in the study. For the 400-level Business Education students, Yamane's formula was used to determine the sample size, from which 153 students were selected from the population of 248 students. Proportionate sampling was further applied to ensure fair representation of students across the selected universities. Consequently, the total sample size for the study comprised 178 respondents, consisting of 25 lecturers and 153 400-level Business Education students. This sampling approach ensured adequate representation and enhanced the reliability of the study findings.

Instrument for Data Collection

The instrument used for data collection was a researcher-developed questionnaire titled Artificial Intelligence Integration into Business Education Curriculum Questionnaire (AIIBECQ). The instrument was developed in line with the study objectives, research questions, and related literature. It consisted of five sections, with Section A covering respondents' demographic information, Sections B and C designed for lecturers to assess the extent of AI integration and its challenges, while Sections D and E focused on students' exposure to AI tools and the prospects of AI integration. The questionnaire adopted a four-point Likert scale, with Sections B and D rated as Very High Extent (4), High Extent (3), Low Extent (2), and Very Low Extent (1), while Sections C and E used Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1).

Validity of the Instrument

The instrument was validated through face and content validation by three experts, including two lecturers in Business Education and one lecturer in Educational Measurement and Evaluation. The experts assessed the instrument to ensure that the items were clear, relevant, properly worded, and adequately aligned with the objectives and research questions of the study. The recommendations and corrections provided by the experts were used to refine the instrument before its final administration.

Reliability of the Instrument

The reliability of the instrument was established through a pilot study conducted at Olabisi Onabanjo University involving 55 final-year Business Education students and 7 Business Education lecturers. The choice of

the institution was based on its similarity in programme structure and characteristics with the selected universities. Data obtained from the pilot study were analysed using the Cronbach's Alpha reliability technique and the reliability coefficient index obtained was 0.81, indicating that the instrument was reliable and suitable for the study

Method of Data Collection

An introductory letter was obtained from the Department of Business Education and presented to the Heads of the selected Business Education Departments for permission to conduct the study. The researcher, with the assistance of trained research assistants, administered the questionnaires to Business Education lecturers and 400-level students. Respondents were informed of the purpose of the study and assured of confidentiality. Completed questionnaires were retrieved after two weeks.

Method of Data Analysis

The data obtained from the study were analysed using descriptive statistical methods. Frequency counts and percentages were employed to summarise the demographic information of the respondents, while mean and standard deviation were used to provide answers to the research questions. A criterion mean of 2.50 was adopted as the decision rule for interpreting respondents' responses.

Answers to the Research Questions

Research Question 1: Extent of Artificial Intelligence Integration into Business Education Curriculum

Table 2: Extent of Artificial Intelligence Integration into Business Education Curriculum

S/N	STATEMENT	VHE	HE	LE	VLE	MEAN	ST.D.	DECISION
1	Artificial Intelligence concepts are included in the Business Education curriculum of my institution.	11	3	4	7	2.72	1.25	High Extent
2	AI-related topics are taught as part of existing Business Education courses.	14	5	4	2	3.24	1.01	High Extent
3	Students are exposed to AI applications relevant to accounting, marketing, entrepreneurship, and office management.	3	5	7	10	1.96	1.14	Low Extent
4	AI-based tools are incorporated into classroom teaching and learning activities.	2	4	5	14	1.76	1.09	Low Extent
5	The curriculum provides opportunities for students to develop AI-related skills.	3	6	4	12	2.00	1.20	Low Extent
6	Lecturers use AI-supported technologies to enhance instructional delivery.	5	3	6	11	2.08	1.25	Low Extent
7	AI applications are used to support assessment and feedback processes in Business Education.	10	3	7	5	2.72	1.25	High Extent
8	The Business Education curriculum has been reviewed to accommodate emerging AI technologies.	3	6	5	11	2.04	1.17	Low Extent
9	Students receive practical experiences in the use of AI tools for business-related tasks.	6	6	3	10	2.32	1.28	Low Extent
10	The current level of AI integration in Business Education programmes is adequate for preparing students for modern workplaces.	7	5	4	9	2.40	1.30	Low Extent

Source: Field survey 2026

The findings presented in Table 1 reveal that the integration of Artificial Intelligence (AI) into the Business Education curriculum is generally at a low extent. Although some aspects, such as the inclusion of AI concepts (Mean = 2.72), teaching of AI-related topics within existing courses (Mean = 3.24), and the application of AI tools for assessment and feedback (Mean = 2.72), were rated as high, most indicators showed limited integration. Areas such as students' exposure to AI applications (Mean = 1.96), incorporation of AI tools into classroom activities (Mean = 1.76), development of AI-related skills (Mean = 2.00), lecturers' use of AI-supported technologies (Mean = 2.08), and curriculum revision to accommodate AI innovations (Mean = 2.04) recorded low extent. This implies that AI integration within Business Education programmes is largely limited to awareness and theoretical exposure, with insufficient emphasis on practical application and competency development.

This finding is consistent with the position of Holmes, Wayne, Bialik, Maya, and Fadel, Charles (2019), who reported that while educational institutions are beginning to introduce AI concepts, many still face difficulties in achieving meaningful integration into teaching and learning processes. Similarly, Zawacki-Richter, Olaf et al. (2019) found that AI adoption in higher education remains at an early phase, with limited incorporation into curriculum structures and instructional practices.

The limited exposure of students to AI applications and the inadequate use of AI tools during classroom activities suggest that learners have fewer opportunities to develop practical AI competencies. This supports the findings of Chiu, Thomas K. F. et al. (2023) and Kasneci, Enkelejda et al. (2023), who identified factors such as inadequate resources, limited teacher preparedness, ethical concerns, and weak institutional support as major obstacles to effective AI adoption in education.

Furthermore, the low level of curriculum adjustment and AI skill development opportunities aligns with Luckin, Rose et al. (2022), who emphasised that educational curricula must undergo continuous review to reflect emerging technologies and prepare learners for future workplace demands.

In summary, the findings indicate that AI integration in Business Education programmes is still evolving. While introductory AI content has gained some attention, greater efforts are required in curriculum restructuring, practical AI application, lecturer capacity building, and institutional support to ensure that graduates acquire the technological skills necessary for success in contemporary business environments.

Research Question 2: Challenges Affecting Artificial Intelligence Integration into Business Education Curriculum

Table 3: Challenges Affecting Artificial Intelligence Integration into Business Education Curriculum

S/N	STATEMENT	SA	A	D	SD	MEAN	ST.D.	DECISION
1	Inadequate funding limits the effective integration of Artificial Intelligence into Business Education programmes.	11	7	4	3	3.04	1.06	Accepted
2	Poor digital infrastructure affects the adoption of AI technologies in my institution.	10	7	3	5	2.88	1.17	Accepted
3	Unstable electricity supply hinders the effective use of AI tools for teaching and learning.	16	3	4	2	3.32	1.03	Accepted
4	Limited internet connectivity affects AI integration in Business Education programmes.	14	5	4	2	3.24	1.01	Accepted
5	Many lecturers lack adequate knowledge and skills for effective AI integration.	3	2	4	16	1.68	1.07	Rejected
6	Insufficient training opportunities limit lecturers' ability to use AI technologies.	9	7	3	6	2.76	1.20	Accepted
7	Limited availability of AI resources and facilities affects AI implementation.	13	4	3	5	3.00	1.22	Accepted
8	The existing Business Education curriculum lacks sufficient flexibility for AI integration.	11	4	5	5	2.84	1.21	Accepted
9	Concerns about ethical issues and academic integrity affect AI adoption in education.	9	4	5	7	2.52	1.42	Accepted
10	Lack of institutional policies and guidelines slows down AI integration in Business Education programmes.	12	3	4	6	2.96	0.96	Accepted

Source: Field survey 2026

The findings presented in Table 2 indicate that the integration of Artificial Intelligence (AI) into Business Education programmes is constrained by several factors. The major challenges identified include inadequate funding (Mean = 3.04), inadequate digital infrastructure (Mean = 2.88), unstable electricity supply (Mean = 3.32), poor internet connectivity (Mean = 3.24), limited training opportunities for lecturers (Mean = 2.76), insufficient AI resources and facilities (Mean = 3.00), inflexible curriculum structure (Mean = 2.84), ethical concerns (Mean = 2.52), and absence of institutional policies and guidelines (Mean = 2.96). Conversely, the issue of lecturers lacking adequate knowledge and skills was not considered a significant challenge, as it recorded a mean score of 1.68 and was rejected.

The result suggests that financial constraints and inadequate technological infrastructure remain significant obstacles to effective AI adoption in Business Education. Limited funding affects institutions' ability to acquire AI tools, improve digital facilities, and provide the necessary support for sustainable implementation. This finding is in line with Zawacki-Richter, Olaf et al. (2019) and Chiu, Thomas K. F. et al. (2023), who reported that inadequate resources, weak infrastructure, and insufficient institutional investment limit the effective application of AI in educational environments.

Similarly, the acceptance of challenges related to internet access, availability of AI facilities, and training opportunities indicates that successful AI integration requires adequate technological support and continuous capacity development. This agrees with Kasneci, Enkelejda et al. (2023) and Tlili, Ahmed et al. (2023), who

emphasised that digital infrastructure, professional training, and institutional readiness are essential for promoting effective AI use in teaching and learning.

The findings further reveal that curriculum limitations, ethical issues, and lack of clear institutional guidelines affect AI adoption. This supports Luckin, Rose et al. (2022), who highlighted the need for continuous curriculum improvement and policy frameworks to address emerging technological changes in education. Overall, the findings show that overcoming these challenges through increased investment, improved infrastructure, lecturer development, curriculum restructuring, and effective AI policies is necessary for successful AI integration into Business Education programmes.

Research Question 3: Exposure to Artificial Intelligence Tools and Applications

Table 4: Exposure to Artificial Intelligence Tools and Applications

S/N	STATEMENT	VHE	HE	LE	VLE	MEAN	ST.D.	DECISION
1	I have knowledge of the concept and applications of Artificial Intelligence.	86	29	22	16	3.21	1.06	High Exposure
2	I have used AI-powered tools for academic activities.	83	35	14	21	3.18	1.11	High Exposure
3	I have been taught about AI applications relevant to Business Education.	41	30	45	37	2.49	1.12	Low Exposure
4	I have used generative AI tools such as ChatGPT to support learning activities.	89	26	21	17	3.22	1.07	High Exposure
5	I have received practical training on the use of AI tools in business-related tasks.	21	34	47	51	2.16	1.03	Low Exposure
6	I am familiar with AI applications used in accounting, marketing, entrepreneurship, or office management.	70	39	20	24	3.01	1.14	High Exposure
7	My lecturers encourage the use of AI tools for academic learning.	59	23	40	32	2.72	1.19	High Exposure
8	AI technologies are available and accessible within my institution.	29	37	28	59	2.24	1.20	Low Exposure
9	I participate in learning activities involving AI-based technologies.	56	42	31	24	2.85	1.11	High Exposure
10	Business Education programme has provided sufficient exposure to Artificial Intelligence.	30	42	25	56	2.30	1.21	Low Exposure

Source: Field survey 2026

The findings presented in Table 3 show that respondents possess good knowledge of AI concepts and applications (Mean = 3.21), frequently use AI-powered tools for academic tasks (Mean = 3.18), and commonly employ generative AI tools such as ChatGPT to support their learning (Mean = 3.22). They also reported being familiar with AI applications in business-related disciplines (Mean = 3.01), participating in AI-related learning activities (Mean = 2.85), and receiving encouragement from lecturers to use AI for academic purposes (Mean = 2.72). These results indicate that students are increasingly integrating AI into their learning experiences.

However, lower mean scores were recorded for formal instruction on AI in Business Education (Mean = 2.49), practical training in AI applications (Mean = 2.16), institutional availability of AI technologies (Mean = 2.24), and the adequacy of AI exposure provided by the Business Education programme (Mean = 2.30). These findings imply that while students actively engage with AI independently, structured institutional support and curriculum integration remain insufficient.

These findings are consistent with recent studies. UNESCO (2023) observed that university students are increasingly adopting generative AI tools for learning and academic tasks, although many institutions are yet to fully integrate AI into teaching and learning. Similarly, the International Association of Universities (2024) reported that while students' familiarity with AI continues to grow, many higher education institutions still face challenges related to curriculum development, infrastructure, and practical AI training. Kasneci et al. (2023) also noted that generative AI has become an important learning resource but emphasized the need for formal guidance to promote responsible and effective use. Likewise, the OECD (2024) highlighted that inadequate infrastructure and limited staff preparedness continue to hinder effective AI integration in higher education. In Nigeria, Ayanwale et al. (2024) similarly found that although undergraduates frequently use AI tools for academic purposes, institutional support and formal AI training remain inadequate.

Overall, the findings suggest that Business Education students have embraced AI technologies largely through personal initiative, while universities still need to strengthen curriculum integration, practical training, and access to AI resources to improve students' preparedness for the digital workplace.

Research Question 4: Prospects of Artificial Intelligence Integration into Business Education Programmes.

Table 5: Prospects of Artificial Intelligence Integration into Business Education Programmes

S/N	STATEMENT	SA	A	D	SD	MEAN	ST.D.	DECISION
1	Integrating Artificial Intelligence into Business Education will improve students' digital skills.	89	32	12	20	3.24	1.00	Agree
2	AI integration will enhance students' readiness for employment in modern workplaces.	92	23	14	22	3.22	1.08	Agree
3	Artificial Intelligence can improve the quality of teaching and learning in Business Education.	97	30	16	10	3.40	0.89	Agree
4	AI tools can provide students with better opportunities for practical learning experiences.	93	31	13	16	3.31	0.96	Agree
5	AI integration can improve students' problem-solving and decision-making abilities.	92	33	13	10	3.40	0.87	Agree
6	Artificial Intelligence can enhance students' creativity and innovation skills.	93	33	16	11	3.36	0.90	Agree
7	AI integration will make Business Education programmes more relevant to current industry demands.	96	32	15	10	3.40	0.88	Agree
8	Artificial Intelligence can support personalised learning among Business Education students.	89	28	15	21	3.21	1.03	Agree
9	AI knowledge will increase graduates' competitiveness in the labour market.	94	31	16	12	3.35	0.91	Agree
10	Universities should prioritise the integration of Artificial Intelligence into Business Education curricula.	84	27	24	18	3.16	1.05	Agree

Source: Field survey 2026

The findings in Table 4 revealed that respondents agreed that Artificial Intelligence (AI) has strong prospects for improving Business Education programmes, as indicated by the grand mean of 3.31, which is above the acceptance benchmark of 2.50. Respondents believed that AI integration would enhance students' digital skills, improve teaching and learning, promote personalised and practical learning experiences, strengthen problem-solving and creativity, increase employability, and make Business Education more responsive to industry needs.

The finding that AI integration improves students' digital competence is consistent with Abubakar et al. (2024), who reported that AI adoption in Nigerian higher education enhances students' digital literacy and learning outcomes. Likewise, the perception that AI improves graduates' employability and labour market competitiveness agrees with Sam-Eleyi and Egajivwie (2025), who found that AI equips Business Education students with competencies required for today's technology-driven workplace.

Furthermore, the respondents' views that AI enhances teaching quality, supports personalised learning, and provides practical learning opportunities align with the findings of Atah et al. (2025), who concluded that AI-powered instructional tools improve curriculum delivery, learner engagement, and academic performance. Similarly, the finding that AI fosters students' creativity, innovation, and problem-solving skills supports Aditya et al. (2024), who observed that AI-assisted learning promotes higher-order thinking and workplace-relevant competencies. Overall, the findings suggest that integrating AI into Business Education curricula would better prepare graduates for the evolving demands of the digital economy.

Conclusion

This study concludes that the adoption of Artificial Intelligence within the Business Education curriculum of selected universities in Lagos State is still developing and has not reached a substantial level of implementation. Although some AI-related topics have been incorporated into existing Business Education courses and students have independently embraced AI tools for academic activities, comprehensive curriculum integration remains limited. The study revealed that challenges such as inadequate financial resources, insufficient digital infrastructure, unstable power supply, poor internet accessibility, limited availability of AI facilities, inadequate training opportunities, rigid curriculum structures, ethical concerns, and weak institutional policies continue to hinder effective AI adoption. Despite these limitations, respondents acknowledged the significant opportunities associated with AI integration, including improved teaching and learning processes, enhanced digital skills, increased creativity and problem-solving abilities, improved graduate employability, and greater alignment of Business

Education programmes with current workplace requirements. Consequently, successful integration of AI into Business Education requires purposeful curriculum enhancement, improved institutional commitment, continuous investment in technological resources, and regular professional development for lecturers to equip graduates with the competencies needed to succeed in the evolving digital economy.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Universities that offer Business Education programmes should undertake regular curriculum reviews to integrate Artificial Intelligence concepts, relevant applications, and practical learning activities into appropriate courses.
2. University authorities and relevant government agencies should increase financial support for the improvement of digital infrastructure, reliable internet services, stable electricity supply, and the provision of AI-enabled resources necessary for effective teaching and learning.
3. Continuous capacity-building initiatives, including workshops, seminars, and training programmes, should be organised to enhance Business Education lecturers' knowledge, confidence, and practical competence in the use of Artificial Intelligence technologies.
4. Business Education students should be given adequate opportunities for hands-on training and guided practice with AI tools applicable to areas such as accounting, marketing, entrepreneurship, business analytics, and office technology to strengthen their workplace readiness.
5. Universities should establish comprehensive policies and ethical frameworks that guide the appropriate use of Artificial Intelligence in academic activities, including teaching, learning, assessment, and research.
6. Stronger partnerships should be developed among universities, technology organisations, professional associations, and industry stakeholders to support access to AI resources, provide practical learning opportunities, promote industry-based training, and ensure that Business Education curricula remain relevant to changing workplace demands.

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