

Emerging Technologies and the Future of Accounting Education Practices in Nigeria

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Abstract: This article focuses on emerging technologies and the future of accounting education practices in Nigeria. It examines the effect of artificial intelligence on future accounting education practices and determines the effect of data analytics on future accounting education practices in Nigeria. The study used the descriptive survey design approach. A total population of 2342 students and lecturers combined was used. An adequate sample size of three hundred and thirty (330) was determined and used. The data were analyzed and presented in frequency and percentage tables. Regression statistical tools were used to test the hypotheses using SPSS Version 26. The study's findings revealed that Artificial intelligence has a significant effect on the future of accounting education practices in Nigeria and that data analytics has a substantial effect on the future of accounting education practices in Nigeria. It was concluded that embracing these advancements will improve educational outcomes and contribute to Nigeria's accounting sector's overall growth and competitiveness. It was recommended, among other things, that Nigerian accounting education programs incorporate artificial intelligence and data analytics into their curricula and equip students with essential skills for analyzing data and improving financial decision-making.

Keywords: Emerging technologies; Future, Accounting; Education; Nigeria.

INTRODUCTION

Accounting education practices in Nigeria have evolved over the years, playing a critical role in preparing individuals for financial reporting, auditing, taxation, and financial management careers. Historically, the future accounting education practices in Nigeria have been grounded in traditional teaching methods, focusing on theoretical knowledge and fundamental skills such as bookkeeping, financial reporting, and auditing. Educational institutions, especially tertiary institutions, have developed curricula emphasizing these core principles to produce graduates equipped to meet the demands of the accounting profession in various sectors (Uche, 2002). However, despite the importance of accounting education to Nigeria's economic development, there have been concerns about the adequacy of its curricula in preparing graduates for the dynamic and technologically driven global accounting landscape (Azeez & Babajide, 2018). Nigerian universities and polytechnics continue to adopt conventional pedagogical methods, and many institutions face challenges such as inadequate facilities, limited access to technology, and a shortage of educators skilled in modern accounting technologies. These limitations create a gap between the knowledge imparted to accounting students and the practical skills needed in contemporary accounting environments.

Globally, accounting practices are undergoing a significant transformation due to integrating emerging technologies. Technologies such as artificial intelligence (AI), blockchain, cloud computing, data analytics, and robotic process automation (RPA) are revolutionizing accounting tasks. AI and machine learning algorithms enable accountants to automate routine tasks, analyze large data sets, and make more accurate financial predictions (Agnew, 2020). Blockchain, a decentralized and secure ledger system, is enhancing transparency and reducing fraud in financial transactions. At the same time, cloud computing allows for the real-time processing and storage of economic data, facilitating more efficient collaboration across geographic locations (Cheng, Hsu & Cheng, 2021).

Data analytics has become an essential tool for modern accountants, enabling them to provide more in-depth insights and strategic advice to businesses. By analyzing financial data in real time, accountants can identify trends, forecast future financial outcomes, and make data-driven decisions that improve organizations' financial health (Warren, Moffitt, & Byrnes, 2015). Additionally, RPA is automating repetitive and time-consuming accounting tasks, such as data entry and invoice processing, freeing accountants to focus on more complex and value-added activities.

Adopting these technologies is not just a trend but a necessity for organizations aiming to stay competitive in an increasingly digital world. As businesses across industries embrace these innovations, there is a growing demand for accountants who are proficient in traditional accounting practices and adept at utilizing these technologies. This shift is reshaping the accountant's role, from a financial record-keeper to a strategic advisor who leverages technology to enhance decision-making processes (Smith & Castaneda, 2022).

Given the global shift toward technology-driven accounting practices, there is a pressing need for Nigeria's accounting education system to undergo significant reform. The traditional methods of accounting education, which focus predominantly on manual bookkeeping and financial reporting, are insufficient in preparing students for the challenges and opportunities presented by modern technologies. If Nigerian institutions do not update their curricula to reflect these technological advancements, graduates may struggle to compete in local and international job markets (Azeez & Babajide, 2018).

Furthermore, accounting education incorporating emerging technologies will not only enhance the employability of Nigerian graduates but also contribute to the growth and development of the nation's economy. Accountants with technological skills can play a pivotal role in improving the efficiency and transparency of financial processes in both the private and public sectors, thereby fostering economic stability and growth (Cheng, Hsu & Cheng, 2021).

Reforming accounting education to align with technological trends also involves equipping educators with the necessary tools and knowledge to teach these new skills. Training and development programs for lecturers and instructors are essential to ensure that they can effectively teach emerging technologies such as AI, blockchain, and data analytics. Additionally, Nigerian accounting bodies, such as the Institute of Chartered Accountants of Nigeria (ICAN), must collaborate with educational institutions to develop updated accreditation standards that reflect the integration of these technologies into the accounting profession.

PROBLEM STATEMENT

Future accounting education practices in Nigeria face significant challenges in keeping pace with the rapid advancements in emerging technologies. While the global accounting profession has embraced technologies such as artificial intelligence (AI), blockchain, cloud computing, and data analytics, Nigerian accounting curricula remain focused on traditional methods, with limited integration of these modern tools. This gap in technological adaptation poses a serious problem, as graduates may lack the necessary skills to thrive in today's digitally driven accounting landscape. One critical challenge is the outdated curricula in many Nigerian institutions, which fail to adequately prepare students for the demands of contemporary accounting practices. In addition, inadequate infrastructure and limited access to modern technological tools hinder the effective teaching of new accounting technologies. Accounting educators often lack the needed training and exposure to teach these emerging tools, further exacerbating the problem (Azeez & Babajide, 2018).

As the global accounting profession evolves, there is a growing demand for proficient accountants in using modern technology to automate tasks, enhance financial analysis, and improve decision-making processes. With urgent reforms in accounting education, Nigerian graduates may compete in the global job market, leading to reduced employability and a widening skills gap. Therefore, the need to bridge this gap by updating the future accounting education practices in Nigeria to align with emerging technological trends is critical for the profession's future and the nation's economic growth.

The main objective of this study is to examine and evaluate the effect of emerging technology on the future of accounting education practices in Nigeria. The specific objectives are to investigate the effects of artificial intelligence on future accounting education practices in Nigeria and determine the effect impact of data analytics on future accounting education practices in Nigeria. It seeks to explore whether artificial intelligence has an impact on future accounting education practices in Nigeria and if data analytics influences future accounting education practices in Nigeria. It argues that artificial intelligence does not have a significant effect on the future accounting education practices in Nigeria and AI data analytics does not have a significant effect on the future accounting education practices in Nigeria. This study is crucial for reforming the future accounting education practices in Nigeria by emphasizing integrating emerging technologies like AI, blockchain, and data analytics into the curriculum. It provides valuable insights for educational institutions to modernize their programs and align with global industry trends. The research has important policy implications, urging institutions to invest in necessary infrastructure and the government to set regulations that mandate technology adoption in accounting education. Additionally, the study enhances the employability of graduates by preparing them with tech-driven skills, making them competitive in the evolving job market. Ultimately, the findings will guide educational reform and policy decisions aimed at equipping Nigerian graduates for the future of the accounting profession. This study will also serve as a reference for future researchers who are interested in this study area.

CONCEPTUAL REVIEW

Emerging technologies refer to innovations that are in the early stages of development or adoption and have the potential to transform industries, societies, and economies significantly. These technologies often represent advancements that introduce novel capabilities, streamline processes, or disrupt traditional practices. Some notable examples of emerging technologies include artificial intelligence (AI), blockchain, cloud computing, the Internet of Things (IoT), and robotic process automation (RPA) (Brynjolfsson & McAfee, 2017). AI, for instance, enhances decision-making by processing large datasets, enabling automation, and providing insights through machine learning (Agnew, 2020). Blockchain technology revolutionizes data transparency and security by offering decentralized and tamper-proof ledgers, which are particularly impactful in finance and supply chain management (Cheng et al., 2021). Meanwhile, cloud computing facilitates real-time collaboration and data storage, reducing the need for physical infrastructures (Smith & Castaneda, 2022). What makes these technologies "emerging" is their potential to evolve rapidly and reshape industries while still in the developmental or early adoption phases. They often face regulatory uncertainty, scalability, and widespread integration (Schwab, 2016). Nonetheless, they hold immense promise for innovation, efficiency, and economic growth, driving industries like accounting to rethink traditional approaches and embrace digital transformation.

ARTIFICIAL INTELLIGENCE (AI) AND AUTOMATION

Artificial Intelligence (AI) refers to developing computer systems that can perform tasks typically requiring human intelligence. These tasks include problem-solving, decision-making, visual perception, speech recognition, and language understanding (Russell & Norvig, 2016). AI simulates human cognitive functions through machine learning, neural networks, and deep learning algorithms. One of the primary benefits of AI is its ability to process vast amounts of data at unprecedented speeds, enabling quicker and more accurate decision-making in various sectors, such as finance, healthcare, and manufacturing (Brynjolfsson & McAfee, 2017).

Automation, closely related to AI, involves using technology to perform tasks with minimal human intervention. While automation has existed for decades in industries like manufacturing, AI-driven automation enhances its capabilities by making machines more adaptable, intelligent, and autonomous. Automation through AI can range from robotic process automation (RPA), which automates repetitive clerical tasks like data entry, to advanced systems that handle complex operations such as predictive analytics or self-driving cars (Agrawal et al., 2019).

The convergence of AI and automation transforms industries by increasing efficiency, reducing human error, and cutting operational costs. In the accounting field, for instance, AI-powered automation is revolutionizing auditing, fraud detection, and financial reporting, allowing professionals to focus on more strategic tasks (Davenport & Kirby, 2016). However, this rapid advancement also presents challenges, including concerns about job displacement, ethical use of AI, and regulatory frameworks needed to govern its application (Schwab, 2016).

DATA ANALYTICS AND BIG DATA IN DECISION-MAKING

Data analytics involves analyzing large data sets to uncover patterns, trends, and insights that inform decision-making processes. Big data refers to the massive volumes of structured and unstructured data generated from various sources, including social media, transactions, sensors, etc. These datasets are too vast and complex to be processed by traditional data management tools (Gandomi & Haider, 2015). The rise of big data has made data analytics essential for organizations seeking to enhance decision-making by leveraging advanced techniques like predictive analytics, machine learning, and statistical modeling.

In decision-making, big data and analytics provide deeper insights into customer behavior, market trends, and operational efficiencies. Organizations use data analytics to improve business strategies, identify growth opportunities, reduce costs, and enhance overall performance (McAfee & Brynjolfsson, 2012). For instance, businesses can use predictive analytics to forecast market demand, manage risks, and optimize pricing strategies. Data-driven decisions are generally more accurate, relying on empirical evidence and patterns derived from real-time data (Chen et al., 2012). Big data analytics also transforms industries like healthcare, finance, and retail by enabling personalized services, fraud detection, and supply chain optimization (Davenport, 2014). In finance, for example, data analytics helps detect irregularities and prevent fraud by analyzing transaction patterns. Similarly, retail companies use big data to customize marketing campaigns, improving customer satisfaction and loyalty (Gandomi & Haider, 2015).

ACCOUNTING EDUCATION PRACTICES

Accounting education practices refer to the methods, frameworks, and instructional strategies used to prepare students for careers in accounting and related fields. These practices encompass teaching core accounting principles such as financial reporting, auditing, taxation, and management accounting, as well as developing skills in critical thinking, ethical decision-making, and communication (Albrecht & Sack, 2000). Traditionally, accounting education has focused on technical competencies and compliance with established accounting standards and regulations, often emphasizing rote learning and mastering accounting systems. However, there has been a growing recognition of the need to modernize accounting education to keep pace with global changes in technology and business environments (Howieson, 2003). Emerging technologies, such as artificial intelligence, data analytics, and blockchain, are reshaping the accounting profession, prompting a shift in education practices to incorporate these tools. Educators are increasingly emphasizing integrating technology, critical thinking, and problem-solving skills into the accounting curriculum to prepare students for the evolving demands of the profession (Jackling & De Lange, 2009). Additionally, there is a focus on developing soft skills such as teamwork, leadership, and adaptability, which are crucial for career success in a dynamic business landscape. Accounting education practices also include experiential learning, such as internships, case studies, and simulations, to give students real-world experience and bridge the gap between theory and practice (Milner & Hill, 2008). By fostering both technical proficiency and broader business acumen, modern accounting education

practices aim to produce well-rounded professionals capable of navigating the complexities of the global economy.

THE FUTURE ACCOUNTING EDUCATION PRACTICES IN NIGERIA

The future accounting education practices in Nigeria are shaped by the country's dynamic socio-economic environment and global developments in the accounting field. Historically, the future accounting education practices in Nigeria have focused on traditional methods that emphasize core accounting principles such as financial reporting, auditing, taxation, and management accounting, primarily driven by professional bodies like the Institute of Chartered Accountants of Nigeria (ICAN) and the Association of National Accountants of Nigeria (ANAN) (Uche, 2007). These institutions play a significant role in setting the standards for accounting education and certifying accountants through rigorous examinations. However, the future accounting education practices in Nigeria face challenges such as outdated curricula, inadequate infrastructure, and a lack of emphasis on technological skills. Despite the growing integration of technology in global accounting practices, many Nigerian institutions still rely on conventional teaching methods, with limited use of modern tools such as data analytics, artificial intelligence, and enterprise resource planning (ERP) systems (Oladipupo & Izedonmi, 2014). This gap between traditional education and modern industry needs underscores the need for reform in Nigerian accounting education.

Moreover, there is a growing call for more experiential learning, such as internships and case studies, to equip students with practical skills and prepare them for the workplace (Adekoya, 2019). Collaboration between academic institutions and industries is necessary to update curricula and ensure graduates possess the relevant skills to thrive in a rapidly evolving global economy. Overall, the modernization of the future accounting education practices in Nigeria is essential to produce graduates who are technically proficient and capable of leveraging technology and innovation to enhance the accounting profession.

CHALLENGES FACING THE FUTURE ACCOUNTING EDUCATION PRACTICES

The future accounting education practices in Nigeria face several significant challenges that hinder its ability to produce graduates equipped for the modern business environment. One of the most pressing issues is the outdated curriculum. Many Nigerian institutions still teach accounting using traditional methods, with limited incorporation of modern technologies such as data analytics, artificial intelligence, and blockchain, reshaping the global accounting profession (Oladipupo & Izedonmi, 2014). This outdated curriculum results in a mismatch between what students are taught and the skills required in the industry. Skill gaps in graduates further exacerbate this challenge. Due to the lack of exposure to modern tools and techniques during their studies, many accounting graduates in Nigeria lack the practical skills to succeed in a rapidly evolving digital landscape (Adekoya, 2019). This gap reduces the employability of graduates and impacts their ability to add value in contemporary workplaces.

Another significant challenge is inadequate infrastructure and resources. Many educational institutions in Nigeria lack the technological tools, software, and facilities to effectively teach modern accounting practices (Ezejiofor & Ezenyirimba, 2020).

Without access to necessary resources, students are unable to gain hands-on experience with the technologies transforming the accounting profession. Finally, resistance to change by educators and institutions poses a barrier to reform. Many educators, having been trained in traditional accounting methods, are reluctant to adopt new teaching strategies and integrate modern technologies into the curriculum (Okafor, 2012). This resistance delays the modernization of the future accounting education practices in Nigeria, further widening the gap between education and industry requirements.

THE FUTURE OF ACCOUNTING EDUCATION IN THE DIGITAL AGE

The future of accounting education is increasingly influenced by rapid advancements in digital technologies. Predictions suggest that technologies such as artificial intelligence (AI), data analytics, blockchain, and automation will transform the accounting profession, shifting the role of accountants from traditional bookkeeping to more analytical and strategic functions (Deloitte, 2018). As such, accounting education must evolve to equip future accountants with the skills and competencies necessary to thrive in the digital age.

Key skills and competencies required for the future accountant include proficiency in data analytics, critical thinking, problem-solving, and digital literacy. Future accountants must be adept at using advanced technologies to analyze large datasets, generate insights, and support decision-making (Kavanagh & Drennan, 2008). Soft skills like communication, leadership, and adaptability will also be crucial as accountants take on more advisory roles in organizations. Professional accounting bodies such as the Institute of Chartered Accountants of Nigeria (ICAN) and the International Federation of Accountants (IFAC) are essential in shaping the future of accounting education. These bodies are responsible for setting professional standards, certifying accountants, and ensuring that accounting curricula align with industry trends and technological advancements (Uche, 2007). By updating professional certification requirements and encouraging continuous education, these organizations help bridge the gap between academia and the evolving demands of the profession.

TECHNOLOGY ACCEPTANCE MODEL (TAM)

The Technology Acceptance Model (TAM) was proposed by Fred Davis in 1989 to explain how users come to accept and use technology. According to TAM, two main factors influence an individual's decision to adopt a new technology: perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness refers to the extent to which a person believes that using a particular system would enhance their job performance, while perceived ease of use refers to the degree to which a person believes that using the system would be free from effort (Davis, 1989). TAM suggests that the higher the PU and PEOU of technology, the more likely users are to accept and integrate it into their activities.

In the context of "Emerging Technologies and the Future of the Future Accounting Education Practices in Nigeria," TAM offers a theoretical framework for understanding how educators and students in Nigeria may adopt digital tools in accounting education. As technological advancements such as artificial intelligence, data analytics, and blockchain increasingly become part of the accounting profession,

accounting educators and students must perceive these technologies as useful and easy to use to integrate them effectively into learning and teaching processes. For instance, if students perceive that learning data analytics will improve their future career prospects (PU) and find that using data analytics software is intuitive and user-friendly (PEOU), they are more likely to embrace such technologies. TAM can also guide educational institutions in Nigeria in developing strategies for fostering a positive attitude towards technology adoption, thus improving the alignment between accounting education and global technological trends.

Arowolo & Olatunji, (2020). The Impact of Artificial Intelligence on the Future Accounting Education Practices in Nigerian Universities. The study involved 500 undergraduate students and 50 lecturers from the departments of accounting. Data was collected using structured questionnaires and interviews. The analysis was carried out using descriptive statistics, including frequency tables and percentages, while inferential statistics were used to determine the impact of AI on accounting education. The researchers employed the Pearson correlation coefficient to examine relationships between variables. The study revealed that artificial intelligence (AI) has the potential to revolutionize future accounting education practices in Nigerian universities by automating repetitive tasks and enhancing the accuracy of financial reporting. However, the study also highlighted significant barriers to integrating AI, including inadequate technological infrastructure, insufficient training for educators, and limited access to AI tools by students.

Smith & Williams, (2021). Artificial Intelligence and the Future of Accounting Education: A Case Study of U.S. Business Schools. The study included 300 students and 50 faculty members from top-tier business schools with accounting programs. Data was collected through a combination of surveys and focus group discussions. Quantitative data was analyzed using regression analysis to examine the impact of AI adoption on student learning outcomes. Qualitative data from focus groups was analyzed thematically to gain insights into faculty attitudes toward AI in accounting education. The study found that integrating AI into accounting curricula has positively impacted student learning outcomes, particularly in areas such as predictive analytics, risk assessment, and financial modeling. Students exposed to AI tools demonstrated a better understanding of advanced accounting concepts than those in traditional programs. The study also identified a gap between student enthusiasm for AI and faculty readiness to integrate AI into their teaching, with many educators citing a need for proper training and institutional support.

Garrison & Hsu, (2020). Integrating Data Analytics into Accounting Education: Assessing Student Perceptions and Performance. The study involved 300 undergraduate accounting students enrolled in a data analytics course. Data was collected through pre- and post-course surveys and student performance metrics. The analysis employed descriptive statistics to assess changes in perceptions and paired sample t-tests to evaluate performance improvement before and after the course. The study found that integrating data analytics into the accounting curriculum significantly enhanced students' understanding of analytical tools and techniques. Students reported increased confidence in analyzing financial data and making data-driven decisions. Performance metrics indicated a marked improvement in students' problem-solving skills, with average scores rising from 70% to 85% after the course. The

authors concluded that incorporating data analytics into accounting education equips students with essential skills for the modern workplace and fosters a culture of analytical thinking.

Boulton & Turnbull, (2021). Data Analytics Competencies in Accounting Education: A Study of Australian Universities. The study surveyed 250 accounting educators and 200 accounting students. The researchers utilized online questionnaires to gather quantitative data. Statistical analyses, including correlation and regression analyses, were conducted to identify the relationship between educators' competency in data analytics and the perceived relevance of these skills in accounting education. The study revealed a significant gap between the demand for data analytics skills in the accounting profession and the level of competency among educators in Australian universities. While both students and educators acknowledged the importance of data analytics in enhancing accounting practices, educators reported insufficient training and resources to teach these skills effectively. The findings indicated that students who received instruction in data analytics felt better prepared for the job market, highlighting the need for universities to enhance faculty development programs and integrate data analytics into accounting curricula.

The study used the descriptive survey design approach. The primary source of data was the administration of the questionnaire. The study area was Enugu State, Nigeria. Three (3) higher institutions in Enugu State were used. A total population of 2342 of students and lecturers combined was used. The adequate sample size of three hundred and thirty (330) using Freund and William's statistic formula at 5 percent margin of error was determined. Two hundred and eighty-two (282) respondents returned the questionnaire and accurately filled it. That gave 85 percent response rate. The validity of the instrument was tested using content analysis and the result was good. The reliability was tested using the Pearson correlation coefficient (r). It gave a reliability coefficient of 0.820, which was also good. The data were analyzed and presented in frequency and percentage tables. Regression statistical tools was used to test the hypotheses with the aid of SPSS Version 26.

DATA PRESENTATION AND ANALYSIS

Objective One

Table 4.1.1 To examine the effect of artificial intelligence on the future accounting education practices in Nigeria. (N=282)

Options	SA Freq(%)	A Freq(%)	U Freq(%)	D Freq(%)	SD Freq(%)	Mean	Std
AI tools have enhanced the learning process in accounting education by improving	98(34.8)	102(36.2)	42(14.9)	26(9.2)	14(5.0)	3.72	1.13

students' analytical skills.							
The integration of AI technologies in accounting courses prepares students better for real-world accounting practices.	92(32.6)	110(39.0)	33(11.7)	31(11.0)	16(5.7)	3.84	1.10
AI-driven applications, such as automated auditing and financial forecasting, should be a core part of the future accounting education practices in Nigerian institutions.	88(31.2)	115(40.7)	30(10.6)	35(12.4)	14(5.0)	3.87	1.07

Source: Field Survey, 2024.

Table 4.1.1 shows responses of respondents on the effect of artificial intelligence on future accounting education practices in Nigeria. It shows that 34.8% of respondents Strongly Agree and 36.2% Agree that AI tools enhance students' analytical skills, totaling 71% positive responses. A minority of 9.2% Disagree, and 5% Strongly Disagree. The mean score of 3.72 and standard deviation of 1.13 reflect a generally positive view with moderate variability among responses. The high mean suggests strong consensus on AI's effectiveness in enhancing analytical skills, though some variability implies differing levels of enthusiasm. Positive responses are similarly high, with 32.6% Strongly Agreeing and 39% Agreeing, 71.6%. Neutral responses (11.7%) and disagreement (16.7%) are present but form a smaller group. With a mean of 3.84 and a standard deviation of 1.10, responses indicate strong agreement that AI integration prepares students for real-world accounting. The slight increase in mean compared to Question 1 suggests respondents value real-world applicability highly, with low variability in responses, highlighting consistent support for this view. A significant majority (72%) of respondents Strongly Agree (31.2%) or Agree (40.8%) that AI-driven applications should be central to accounting education. Only 5% Strongly Disagree, while neutral responses account for 10.6%. The highest mean of 3.87 and a lower standard deviation of 1.07 indicate a strong consensus that AI-driven

applications are crucial for accounting curricula. This reinforces the belief that incorporating such applications will significantly benefit Nigerian accounting education.

Table 4.1.1 To determine the effect of data analytics on future accounting education practices in Nigeria. (N=282)

Options	SA Freq(%)	A Freq(%)	U Freq(%)	D Freq(%)	SD Freq(%)	Mean	Std
Data analytics courses in accounting programs equip students with essential skills for analyzing large financial datasets.	90 (31.9)	120 (42.5)	45 (15.9)	25 (8.8)	2 (0.7)	3.97	0.97
The use of data analytics tools in accounting education improves students' ability to make data-driven financial decisions.	85 (30.1)	130 (46.0)	40 (14.2)	25 (8.8)	2 (0.7)	3.95	0.95
Including data analytics training in accounting education helps bridge the skill gap in Nigeria's accounting industry.	100 (35.5)	110 (39.0)	40 (14.2)	25 (8.8)	7 (2.5)	4.05	0.93

Source: Field Survey, 2024.

Table 4.1.1 shows the responses of respondents on the effect of data analytics on future accounting education practices in Nigeria. it shows that 90 (31.9%) of the respondents strongly agree, 120(42.5%) agree, 45(15.9%) are undecided, 25(8.8%) disagree and 2(0.7%) strongly disagree that data analytics courses in accounting programs equip students with essential skills for analyzing large financial datasets. A total of 74.4% of respondents either strongly agreed or agreed that data analytics courses significantly enhance students' skills for analyzing financial datasets. The mean score of 3.97 indicates a favorable perception of these courses among participants. The standard deviation of 0.97 shows that responses were relatively consistent, suggesting a strong agreement on the necessity of data analytics courses

in accounting programs. Also, 85(30.1%) strongly agree, 130(46.0%) agree, 40(14.2%) of them were undecided, while 25(8.8%) disagree, 2(0.7%) strongly disagree that the use of data analytics tools in accounting education improves students' ability to make data-driven financial decisions. A combined 76.1% of respondents agreed that the incorporation of data analytics tools in education positively influences students' ability to make informed financial decisions. The mean of 3.95 indicates a positive perception to these tools' effectiveness, while the standard deviation of 0.95 reveals that responses were closely clustered around the mean, highlighting consensus on the benefits of using data analytics tools. The table finally show that 100 (35.5%) strongly agree and 110(39.0%) agree that including data analytics training in accounting education helps bridge the skill gap in Nigeria's accounting industry, 40(14.2%) were undecided, 25(8.8%) disagree and 7(2.5%) strongly disagree. Here, 74.5% of respondents indicated agreement that data analytics training is vital for closing the skill gap in the accounting industry in Nigeria. With a mean of 4.05, this question received the highest positive assessment, emphasizing the perceived necessity of data analytics training. The standard deviation of 0.93 suggests that the respondents had a strong consensus, reinforcing the idea that training in data analytics is crucial for improving the competencies of accounting graduates.

TESTING OF HYPOTHESES

Hypothesis One

H₁: Artificial intelligence has a significant effect on the future accounting education practices in Nigeria.

H₀: Artificial intelligence does not have significant effect on the future accounting education practices in Nigeria.

Table 4.2.1 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.711 ^a	.502	.503	.78	.197

Source: SPSS Version 26

a. Predictors: (Constant), Artificial intelligence

b. Dependent Variable: Accounting education practices

Table 4.2.2 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.36	1	145.36	88.01	.000 ^b
	Residual	141.52	280	.51		
	Total	286.88	281			

Source: SPSS Version 26

a. Dependent Variable: Accounting education practices

b. Predictors: (Constant), Artificial intelligence

Table 4.2.3 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.20	.28		4.29	.000
	Artificial intelligence	.75	.08	.711	9.38	.000

Source: SPSS Version 26

a. Dependent Variable: Accounting education practices

R represents the correlation between the observed and predicted values of the dependent variable. R Square shows the proportion of variance in the dependent variable (accounting education) explained by the independent variable (AI integration). The Adjusted R Square adjusts R Square for the number of predictors in the model, providing a more accurate measure of model fit for larger samples. The F-statistic value (88.01) is used to test if the model is statistically significant. Sig. (p-value) indicates whether the effect of AI on accounting education is statistically significant. We reject the null hypothesis since $p = 0.000$ ($p < 0.05$).

The Unstandardized Coefficient (B) for AI indicates that for each unit increase in AI integration, the effectiveness of accounting education is estimated to increase by 0.75 units. The t-value (9.38) and p-value (0.000) indicate that the effect of AI on accounting education is statistically significant.

The results indicate a significant positive effect of AI on accounting education, as shown by the p-value (0.000) in both the ANOVA and Coefficients tables. The ANOVA results, particularly the p-value of 0.000, indicate statistical significance, allowing us to reject the null hypothesis. The high R Square value (0.506) suggests that AI integration accounts for about 50.6% of the variability in the effectiveness of future accounting education practices in Nigeria.

Hypothesis Two

H₁: Data analytics has a significant effect on the future accounting education practices in Nigeria

H₀: Data analytics does not have a significant effect on the future accounting education practices in Nigeria

Table 4.2.4 Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.823 ^a	.676	.673	.5	.287

Source: SPSS Version 26

a. Predictors: (Constant), Data analytics

b. Dependent Variable: Accounting education practices

Table 4.2.5 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	181.25	1	181.25	120.45	.000 ^b

Residual	87.22	280	.31		
Total	268.47	281			

Source: SPSS Version 26

- a. Dependent Variable: Accounting education practices
b. Predictors: (Constant), Data analytics

Table 4.2.6 Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.85	.21		4.05	.000
	Data analytics	.68	.06	.823	11.00	.000

Source: SPSS Version 26

- a. Dependent Variable: Accounting education practices

R indicates a strong positive correlation between data analytics and accounting education. R Square (0.676) suggests that approximately 67.6% of the variance in accounting education effectiveness can be explained by data analytics. Adjusted R Square accounts for the number of predictors, offering a more accurate measure for the sample size used. The F-statistic value (120.45) indicates the overall significance of the regression model. Sig. (p-value) of 0.000 indicates that the model is statistically significant ($p < 0.05$), leading us to reject the null hypothesis. The Unstandardized Coefficient (B) for Data Analytics (0.68) suggests that for each unit increase in data analytics training, there is an expected increase of 0.68 units in the effectiveness of accounting education. The t-value (11.00) and p-value (0.000) confirm that the effect of data analytics on accounting education is statistically significant.

The regression analysis reveals a strong positive effect of data analytics on the future accounting education practices in Nigeria. The R Square value of 0.676 indicates that data analytics explains a substantial portion of the variance in the effectiveness of accounting education practices. The ANOVA results, particularly the p-value of 0.000, indicate statistical significance, allowing us to reject the null hypothesis. The coefficients table shows a strong positive relationship, suggesting that integrating data analytics into accounting education is essential for enhancing educational outcomes. Overall, the findings emphasize the critical role of data analytics in preparing students for contemporary challenges in the accounting field.

Summary of Findings

- Artificial intelligence significantly affects the future of accounting education practices in Nigeria. (f-statistics = 88.01, $t = 4.29$, $p = .000 < 0.05$).
- Data analytics has a significant effect on future accounting education practices in Nigeria (f-statistics = 120.45, $t = 4.05$, $p = .000 < 0.05$).

CONCLUSION

In conclusion, this empirical review highlights the significant impact of emerging technologies, specifically artificial intelligence, and data analytics, on Nigeria's future accounting education practices. The findings indicate that these technologies enhance students' analytical skills, improve their ability to make informed financial decisions, and bridge the skill gaps in the accounting industry. As the accounting landscape continues to evolve, integrating artificial intelligence and data analytics into the curriculum is essential for preparing students to meet the demands of a tech-driven workforce. Educational institutions and policymakers must prioritize adopting these technologies in accounting programs to ensure that future accountants are equipped with the necessary skills and competencies to excel in their careers. Embracing these advancements will improve educational outcomes and contribute to the overall growth and competitiveness of Nigeria's accounting sector. Nigerian accounting education programs should incorporate artificial intelligence and data analytics into their curricula, equipping students with essential skills for analyzing data and improving financial decision-making. Educational institutions should establish ongoing professional development initiatives for faculty to effectively teach and integrate emerging technologies, ensuring students receive up-to-date knowledge and skills.

NOTES ON CONTRIBUTOR

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REFERENCES

- Adekoya, A. A. (2019). The future accounting education practices in Nigeria: The need for curriculum modernization. *Journal of Accounting and Financial Studies*, 7(2), 45-57.
- Agnew, J. (2020). The impact of artificial intelligence on the accounting profession: A global perspective. *Journal of Emerging Technologies in Accounting*, 17(2), 63-78.
- Agrawal, A., Gans, J., & Goldfarb, A. (2019). *Prediction machines: The simple economics of artificial intelligence*. Harvard Business Review Press.
- Albrecht, W. S., & Sack, R. J. (2000). Accounting education: Charting the course through a perilous future. *Accounting Education Series*, 16, 1-72.
- Arowolo, O. S., & Olatunji, K. A. (2020). The impact of artificial intelligence on the future accounting education practices in Nigerian universities. *Journal of Accounting and Technology*, 5(1), 34-48.

- Azeez, B., & Babajide, M. (2018). The future accounting education practices in Nigeria: Challenges and the way forward. *Nigerian Journal of Accounting and Finance*, 10(2), 45-57.
- Boulton, R. E., & Turnbull, S. (2021). Data analytics competencies in accounting education: A study of Australian universities. *International Journal of Accounting and Business Education*, 10(2), 145-160.
- Brynjolfsson, E., & McAfee, A. (2017). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.
- Chen, H., Chiang, R. H. L., & Storey, V. C. (2012). Business intelligence and analytics: From big data to big impact. *MIS Quarterly*, 36(4), 1165-1188.
- Cheng, R., Hsu, K., & Cheng, Y. (2021). Blockchain technology and its implications for accounting education. *Journal of Accounting Education*, 39(1), 21-32.
- Coyne, J. G., & McMickle, P. L. (2017). Can blockchains serve an accounting purpose? *Journal of Emerging Technologies in Accounting*, 14(2), 101-111.
- Dai, J., & Vasarhelyi, M. A. (2017). Toward blockchain-based accounting and assurance. *Journal of Information Systems*, 31(3), 5-21.
- Davenport, T. H. (2014). *Big data at work: Dispelling the myths, uncovering the opportunities*. Harvard Business Review Press.
- Davenport, T. H., & Kirby, J. (2016). *Only humans need apply: Winners and losers in the age of smart machines*. Harper Business.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Deloitte. (2018). *Preparing future-ready professionals: The impact of technology on the future of work*. Deloitte Insights.
- Ezejiofor, R. A., & Ezenyirimba, E. R. (2020). Challenges of the future accounting education practices in Nigerian universities: The way forward. *International Journal of Academic Research in Accounting, Finance, and Management Sciences*, 10(1), 64-74.
- Gandomi, A., & Haider, M. (2015). Beyond the hype: Big data concepts, methods, and analytics. *International Journal of Information Management*, 35(2), 137-144.
- Garrison, A. R., & Hsu, J. (2020). Integrating data analytics into accounting education: Assessing student perceptions and performance. *Journal of Accounting Education*, 52, 100-112.
- Howieson, B. (2003). Accounting practice in the new millennium: Is accounting education ready to meet the challenge? *The British Accounting Review*, 35(2), 69-103.
- Jackling, B., & De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education: An International Journal*, 18(4-5), 369-385.
- Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300.
- McAfee, A., & Brynjolfsson, E. (2012). *Big data: The management revolution*. Harvard Business Review, 90(10), 60-68.

- Milner, M., & Hill, A. (2008). Accounting education: An international comparative study of approaches and innovations. *Journal of Accounting Education*, 26(4), 271-283.
- Moyano, J. P., & Ross, O. (2017). KYC optimization using distributed ledger technology. *Business & Information Systems Engineering*, 59(6), 411-423.
- Okafor, C. A. (2012). The resistance to change in the Nigerian educational system. *Journal of Educational Development*, 9(1), 92-103.
- Oladipupo, A. O., & Izedonmi, F. I. O. (2014). A study of the perception of accounting students on the implementation of international financial reporting standards in Nigeria. *Journal of Research in National Development*, 12(2), 164-174.
- Russell, S., & Norvig, P. (2016). *Artificial intelligence: A modern approach* (3rd ed.). Pearson.
- Schwab, K. (2016). *The fourth industrial revolution*. Crown Business.
- Smith, J., & Williams, P. (2021). Artificial intelligence and the future of accounting education: A case study of U.S. business schools. *Journal of Accounting and Emerging Technologies*, 12(2), 67-82.
- Smith, T., & Castaneda, D. (2022). The changing role of accountants in the era of artificial intelligence. *International Journal of Accounting and Finance*, 15(4), 79-94.
- Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.
- Uche, C. U. (2002). Professional accounting development in Nigeria: Threats from the inside and outside. *Accounting, Organizations and Society*, 27(4-5), 471-496.
- Uche, C. U. (2007). The accounting profession in Nigeria. *Accounting, Organizations and Society*, 32(6), 541-561.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Warren, J. D., Moffitt, K. C., & Byrnes, P. (2015). How big data will change accounting. *Accounting Horizons*, 29(2), 397-407.