IMPACT OF DIGITAL TOOLS ON BUSINESS EDUCATION STUDENTS' ACCOUNTING SKILLS IN STATE OWNED UNIVERSITIES IN EKITI STATE, NIGERIA

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Abstract
This study investigated the impact of the use of digital tools on Business Education students' accounting skills in state-owned universities in Ekiti State, Nigeria. The descriptive survey research design was adopted, and the study's population comprised 221 Business Education students specializing in accounting, drawn from Ekiti State University (EKSU) and Bamidele Olumilua University of Science and Technology, Ikere-Ekiti (BOUSTI). Given the manageable size, the entire population was studied without sampling. A structured questionnaire, designed on a four-point Likert scale, was used as the instrument for data collection. The instrument was validated by experts in Vocational and Technical Education and Test and Measurement, and its reliability was confirmed through a pilot test with a Cronbach Alpha coefficient of 0.82. Data were collected personally by the researcher with the help of trained assistants and analyzed using descriptive statistics (mean, and standard deviation) for the research questions, while Pearson Product Moment Correlation (PPMC) was employed to test the hypotheses at a 0.05 level of significance. Findings revealed that the use of digital tools enhances the accounting skills of Business Education students in state-owned universities. The study concluded that effective integration of digital tools will foster improved competence, efficiency, and practical skill acquisition in accounting education. Based on the findings, it was recommended among others that lecturers should integrate digital tools such as spreadsheet software, accounting software into their teaching methods, universities should invest in modern digital tools such as spreadsheet software, Sage and provide continuous training for both lecturers and students in the use of technology-driven approaches into the teaching and learning of accounting to ensure students are adequately equipped for workplace demands.

Keywords: Acc**o**unting Skills, Digital tools, Business Education, Teaching Methods

Introduction

In recent years, the integration of digital tools into teaching and learning processes has transformed the delivery of accounting education, particularly within Business Education programmes. The integration of digital tools into Business Education has become an essential component of 21st-century learning, particularly in enhancing students' accounting skills. The dynamic shift from traditional teaching methods to technology-driven learning platforms has redefined how Business Education students in Nigerian universities acquire, process, and apply accounting knowledge (Ademiluyi & Olawuyi, 2022). This transformation aligns with global trends where digital competence is a prerequisite for professional excellence

in accounting and related disciplines. Berikol & Killi, (2020) revealed that digital transformation represents the strategic integration of digital tools into all facets of accounting education and professional practice. However, the degree to which these tools contribute to skill acquisition remains a subject of empirical investigation, especially in state-owned universities in Ekiti State. Understanding this relationship requires exploring the nature and extent of digital tool utilization among business education students. This leads to the consideration of how such digital tools directly influence specific skill sets such as accounting competence.

Digital tools refer to the technological resources used in instructional and learning processes. According to Merdekawati et al (2024), digital tools refer to technological applications, platforms, and software systems that facilitate the collection, processing, analysis, storage, and sharing of data in accounting education and practice. These tools enhance efficiency, accuracy, and accessibility of accounting processes by automating tasks, supporting real-time collaboration, and enabling the integration of various financial functions. Examples include cloud-based accounting systems, data analytics platforms, artificial intelligence-powered applications, and digital learning management systems that improve both teaching and professional accounting activities. In recent years, technology has been recognized as a catalyst for improving the quality of teaching and learning in business education. For instance, Aina and Onajite (2017) emphasized that the effective use of technology fosters graduates' contribution to economic growth, while Kee (2024) noted that incorporating digital skills in accounting education strengthens students' readiness for the evolving workforce. Yet, these benefits depend largely on the availability of resources, institutional support, and students' digital literacy levels. This underscores the need to examine not just the availability, but also the functional impact of these tools on Business Education.

Business Education is a branch of vocational education that equips learners with the knowledge, skills, competencies, and attitudes required for effective participation in business, office occupations, entrepreneurship, and for meaningful living in society. It is designed to prepare individuals for both paid employment and self-reliance through the acquisition of practical and theoretical business skills. According to Aina (2018), Business Education is "an educational programme designed to equip learners with the relevant skills, knowledge, competencies, and attitudes needed for gainful employment, entrepreneurial development, and effective participation in business-related activities. With the rapid integration of technology into education, the use of digital tools has become a key driver in enhancing these skills. Digital platforms such as accounting software, and online learning applications improve students' mastery of accounting tasks, data analysis, and record management, thereby strengthening their overall competence. The adoption of digital tools directly influences the quality of skill acquisition in Business Education, ensuring that students are not only academically prepared but also technologically empowered for the relevant digital tools needed in the workplace environment.

The adoption of digital tools promotes innovation and enhances problem-solving capacities among students. Al-Hattami (2025) highlighted

the role of technological self-efficacy and digital literacy in maximizing the benefits of digital accounting education. Similarly, Oluseyi-Sowunmi and Samuel (2025) found that online learning innovations directly influence student engagement and learning outcomes, which are central to skill mastery. Despite these advantages, disparities as identified by Sawyer and Otamiri (2024) in infrastructure, training, and digital exposure still pose challenges to effective learning. These challenges could potentially influence the extent to which accounting skills are developed, creating the need for an in-depth investigation within the state-owned universities.

State-owned universities are public higher education institutions established, funded, and managed primarily by the government, with the aim of providing affordable and accessible education to citizens while contributing to national development goals. In Ekiti State, Nigeria, an example of such an institution is Ekiti State University (EKSU) and Bamidele Olumulua University, Ikere-Ekiti (BOUSTI) which plays a pivotal role in offering quality education to indigenes and non-indigenes, fostering research, and supporting the socio-economic development of the state. Given these insights, it becomes imperative to study how the use of digital tools influences the accounting skills of business education students in state-owned universities in Ekiti State. Such an investigation will provide empirical evidence between technological adoption and skill acquisition, while also highlighting the challenges that might hinder optimal outcomes.

Statement of the Problem

In recent years, the integration of digital tools into teaching and learning has transformed the way accounting skills are acquired in higher institutions. Business Education students, particularly those specializing in accounting, now have access to various digital tools such as accounting software, spreadsheet applications, cloud-based platforms, e-learning resources among others. These tools have the potential to enhance accuracy, efficiency, and problem-solving abilities in accounting practices. Despite the availability of these tools, there are growing concerns about whether students are effectively using them to develop the necessary competencies required for professional success. Some students may lack adequate exposure to relevant digital tools, while others may face difficulties in applying them to real-life accounting tasks. Moreover, the extent to which these tools actually improve accounting skills remains unclear, especially within state-owned universities in Ekiti State. It appears that students often seem to encounter various challenges such as inadequate training, poor internet connectivity, lack of institutional support, and limited access to updated software. These issues can hinder the potential benefits of digital tools in enhancing accounting skills. This situation raises important questions: What specific digital tools are Business Education students using? How do these tools impact their accounting skills? And what challenges do they face in using them? Addressing these questions is important for designing effective strategies that will enhance students' competency in accounting through the optimal use of digital tools.

Purpose of the Study

The main purpose of this study is to investigate the impact of the use of digital tools on the accounting skills of Business Education students in state-

owned universities in Ekiti State, Nigeria. Specifically, the study seeks to:

1. identify the digital tools used by Business Education students in learning and applying accounting concepts.
2. examine how the use of these digital tools impacts the accounting skills of the students.
3. identify the challenges faced by Business Education students in using digital tools for accounting-related learning activities.

Research Questions

The following research questions were raised to guide the study

1. What are the digital tools used by Business Education students in state-owned universities in Ekiti State?
2. What are the impact of these digital tools on the accounting skills of Business Education students?
3. What challenges do Business Education students face in using digital tools for accounting skill development?

Research Hypotheses

1. There is no significant relationship between the use of digital tools and the accounting skills of Business Education students in state owned universities in Ekiti State.

Methodology

This study adopted the descriptive survey research design, as it seeks to examine the impact of the use of digital tools on Business Education students' accounting skills in state-owned universities in Ekiti State, Nigeria. The population for this study comprised all Business Education students specializing in accounting from the two state-owned universities in Ekiti State. Specifically, this included 194 students from Ekiti State University (EKSU) and 27 students from Bamidele Olumilua University of Science and Technology, Ikere-Ekiti (BOUSTI), that specialized in accounting making a total population of 221 respondents. Due to the manageable size of the population, the entire population was used for the study; hence, there was no need for sampling.

A structured questionnaire was used as the instrument for data collection. The questionnaire was divided into three sections and was designed using a four-point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) to capture respondents' opinions effectively. The validity of the instrument was ensured through face and content validation by three experts. Two in the Vocational and Technical Education Department and one in the Test and Measurement department who reviewed the questionnaire for clarity, relevance, and appropriateness. To determine the reliability of the instrument, a pilot test was conducted using 20 Business Education students from a university outside the study area. The Cronbach Alpha method was employed to compute the reliability coefficient, which yielded a value of 0.82, indicating a high level of internal consistency. The researcher personally administered the questionnaire to the respondents with the help of two trained research assistants to ensure a high return rate. Data collected were analyzed using descriptive statistics such as mean scores and standard deviation to answer the research questions, while inferential statistics was employed to test the hypotheses at a 0.05 level of significance. The decision rule was based on the mean benchmark of 2.50, which represented the cut-off point on the four-point Likert scale used. This implies that mean values

of 2.50 and above were interpreted as agreement (i.e., acceptance of the item), while mean values below 2.50 were interpreted as disagreement (i.e., rejection of the item). This decision rule ensured that the responses were meaningfully categorized for clearer interpretation of the findings.

Results

Research Question 1: What are the digital tools used by Business Education students in state-owned universities in Ekiti State?

Table 1: Digital tools used by Business Education Students

S/N	Items	Mean	SD	Decision
1	I use spreadsheet software (e.g., Microsoft Excel, Google Sheets) for recording and analyzing accounting data.	2.03	0.84	Disagree
2	I use accounting software (e.g., QuickBooks, Sage, Tally ERP) for practicing accounting concepts.	1.91	0.81	Disagree
3	I use presentation tools (e.g., Microsoft PowerPoint, Google Slides) to present accounting reports.	2.08	0.89	Disagree
4	I use online learning platforms (e.g., Google Classroom, Moodle) for accessing accounting lectures and materials.	2.09	0.86	Disagree
5	I use data visualization tools (e.g., Power BI, Tableau) to prepare and interpret accounting charts and reports.	1.91	0.82	Disagree

The result in Table 1 shows the mean ratings of digital tools usage among Business Education students in state-owned universities in Ekiti State. The findings revealed that the mean scores of all the items were below the decision rule benchmark of 2.50. Specifically, spreadsheet software had a mean score of 2.03, accounting software 1.91, presentation tools 2.08, online learning platforms 2.09, and data visualization tools 1.91. Based on the decision rule, this implies that students disagreed with the frequent use of these digital tools. Although online learning platforms (M = 2.09) and presentation tools (M = 2.08) had relatively higher mean values compared to other tools, they still fell below the acceptable cut-off point, indicating low utilization. This result therefore suggests that Business Education students in state-owned universities in Ekiti State generally do not make adequate use of digital tools for their learning activities.

Research Question 2: What are the impact of these digital tools on the accounting skills of Business Education students?

Table 2: Impact of digital tools on accounting skills

S/N	Items	Mean	SD	Decision
1	The use of spreadsheet software (e.g., Microsoft Excel, Google Sheets) has improved my ability to organize and analyze financial data.	2.15	0.98	Disagree
2	Accounting software (e.g., QuickBooks, Sage) has enhanced my speed and accuracy in preparing financial statements	2.06	0.95	Disagree
3	Online collaborative platforms (e.g., Google Drive, Microsoft Teams) have improved my ability to work with others on accounting tasks.	2.19	0.97	Disagree
4	Digital simulation tools and tutorials have deepened my understanding of complex accounting concepts.	2.10	0.94	Disagree
5	The use of online databases and financial information resources has improved my ability to make informed accounting decisions.	2.05	0.92	Disagree

The analysis in Table 2 reveals that Business Education students generally disagreed that digital tools significantly impacted their accounting skills, as all the mean scores ranged between 2.05 and 2.19, below the benchmark of 2.50. This implies that the students' accounting skills development has not been effectively enhanced through the use of spreadsheet software, accounting packages, online collaborative platforms, simulations, or financial databases.

Research Question 3: What challenges do Business Education students face in using digital tools for accounting skill development?

Table 3: Challenges in Using Digital Tools for Accounting Skills Development

S/N	Items	Mean	SD	Decision
1	I experience frequent internet connectivity problems when using online accounting platforms.	3.05	0.89	Agree
2	I lack adequate training on how to use digital tools for accounting tasks.	2.96	0.92	Agree
3	I have limited access to computer laboratories or digital resources in my institution.	2.96	0.93	Agree
4	I find it difficult to afford personal access to licensed accounting software (e.g., QuickBooks, Sage, Peachtree).	3.08	0.87	Agree
5	I receive insufficient guidance from lecturers on integrating digital tools into accounting assignments	2.94	0.91	Agree

The findings in Table 3 indicate that students faced significant challenges in using digital tools for accounting skill development. All items had mean scores above the 2.50 benchmark, suggesting agreement among respondents. The major challenges identified include internet connectivity issues (M = 3.05), high cost of licensed accounting software (M = 3.08), inadequate training (M = 2.96), limited access to computer laboratories (M = 2.96), and insufficient guidance from lecturers (M = 2.94).

Test of Hypotheses

Table 4: Pearson Product Moment Correlation between Use of Digital Tools and Accounting Skills

Variable	N	Mean	SD	r-cal	P-value
Use of Digital Tools	221	2.00	0.84	0.421	.000
Accounting Skills	221	2.11	0.95		

P<0.05

The Pearson Product Moment Correlation analysis revealed a moderate positive and statistically significant relationship between the use of digital tools and the accounting skills of Business Education students in state-owned universities in Ekiti State ($r = 0.421$, $p < 0.05$). This indicates that students who make greater use of digital tools tend to demonstrate higher levels of accounting skills. Since the p-value is less than 0.05, the null hypothesis that "there is no significant relationship on the use of digital tools and the accounting skills of Business Education students in state-owned universities in Ekiti State" is rejected. Therefore, the study concludes that digital tools usage significantly impacts students' accounting skills.

Discussion of Findings

The findings of this study revealed that Business Education students in state-owned universities in Ekiti State make limited use of digital tools in their accounting learning. Tools such as spreadsheet software, accounting software, presentation tools, online platforms, and data visualization applications were not frequently employed by students, as the mean scores for their usage fell below the decision rule of 2.50. This suggests that while students are aware of these tools, their adoption is irregular and inconsistent, often restricted to "sometimes" or "rarely." This result aligns with the observations of Sawyer and Otamiri (2024), who highlighted infrastructural and training gaps as major barriers to digital adoption in higher education. It also reflects the argument of Ademiluyi and Olawuyi (2022), that although digital resources have the potential to transform accounting education, the extent of their integration remains inadequate in many Nigerian universities.

With respect to the impact of digital tools on accounting skills, the findings indicated that students perceived minimal benefits. Items relating to improved speed, accuracy, collaboration, and deeper understanding of accounting concepts did not record high agreement among the respondents. This implies that students are yet to fully experience the transformative benefits of digital accounting education. The finding contrasts with Berikol and Killi (2020), who emphasized that digital integration enhances efficiency, innovation, and overall competence in accounting practice. The discrepancy suggests that the poor utilization of tools in State-owned universities in Ekiti State may be undermining the potential positive outcomes. Thus, the limited adoption of digital tools appears to be a critical factor inhibiting skill development.

The analysis of challenges revealed that students face multiple barriers in integrating digital tools into their academic activities. These include frequent internet connectivity issues, inadequate training, limited access to computer facilities, high cost of software, and insufficient guidance from lecturers.

This aligns with the findings of Oluseyi-Sowunmi and Samuel (2025), who reported that digital learning outcomes are contingent upon institutional support and lecturer engagement. The persistence of such barriers highlights the systemic nature of digital adoption challenges within Nigerian public universities, further explaining the low level of impact observed in this study.

The hypothesis testing revealed a statistically significant relationship between the use of digital tools and the accounting skills of Business Education students ($r = 0.421$, $p < 0.05$). This implies that the more effectively students use digital tools, the higher their level of accounting competence. The strength of the positive relationship confirms earlier studies such as Al-Hattami (2025), who identified digital literacy and technological self-efficacy as strong predictors of skill acquisition in accounting. Therefore, the problem is not the lack of potential impact, but rather the poor utilization and access to these tools by students in Ekiti State universities.

The findings suggest that while digital tools hold significant potential for improving accounting skills among Business Education students, systemic challenges such as inadequate training, poor infrastructure, limited access, and lack of lecturer support continue to hinder their effective adoption. Unless these barriers are addressed, the integration of digital tools in accounting education will remain below optimal levels, thereby limiting students' preparedness for the demands of the modern accounting profession.

Conclusion

This study investigated the relationship between the use of digital tools and the accounting skills of Business Education students in state-owned universities in Ekiti State. The findings revealed that while students are aware of the importance of digital tools such as spreadsheet applications, accounting software, and online collaborative platforms, their effective usage remains limited due to several challenges. These challenges include inadequate training, poor internet connectivity, insufficient access to computer laboratories, and lack of licensed accounting software. The Pearson Moment Correlation analysis showed a significant positive relationship between the use of digital tools and the accounting skills of Business Education students. This implies that increased and effective integration of digital tools enhances students' competencies in financial data organization, preparation of financial statements, teamwork, and decision-making in accounting contexts. However, the insufficient utilization of these tools hinders students from fully developing essential accounting skills required in today's digital-driven work environment. Therefore, it can be concluded that while digital tools have the potential to significantly improve accounting skills, the challenges limiting their use must be addressed for Business Education students to maximize their benefits and remain relevant in the dynamic accounting profession.

Recommendations

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

1. Lecturers should integrate digital tools into their teaching methods and assignments, providing students with sufficient guidance on how to apply these tools in solving real accounting problems.
2. Universities should invest in reliable internet facilities, functional computer laboratories, and

adequate access to modern accounting software such as Sage, Quick book, spreadsheet software to support students' learning.

3. Regular training workshops and seminars should be organized to improve students' proficiency in using spreadsheet applications, accounting software, and digital platforms for accounting tasks.
4. Universities, in collaboration with software providers, should provide students with affordable or free access to licensed accounting software such as QuickBooks, Sage, and Peachtree, as it's integration will enhance students' competencies and exposure to it's effectiveness in interpreting financial data.

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