

Perceived Competence in Office Automation and Digital Marketing among Graduating Business Education Students in Public Universities in Anambra State for Tax Administration and Awareness

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Abstract

This study evaluated the digital readiness of 124 final-year Business Education undergraduates across public universities in Anambra State, assessing their perceived competencies in office automation and digital marketing for tax administration and civic awareness. While global fiscal governance has digitized rapidly, it remains uncertain whether graduating cohorts are keeping pace, creating a potential operational gap between corporate expectations and graduate capabilities. Therefore, this study executed a diagnostic assessment of final-year students' perceived dual-domain digital competencies and curriculum adequacy. Adopting a descriptive survey design with a census sampling technique, data were collected using the validated 21-item Perceived Competence in Office Automation and Digital Marketing Questionnaire (PCOADMQ), possessing a Cronbach's alpha of 0.84, and analyzed using Mean and Standard Deviation. The main findings revealed a clear competency gap: students perceived themselves to have a low extent of competence in utilizing critical office automation tools ($X = 2.24$, $SD = 0.79$), yet reported a high extent of competence ($X = 2.52$, $SD = 0.76$) in basic digital marketing strategies like launching general social media campaigns. Furthermore, the students uniformly rated the adequacy of their current curriculum as low ($X = 2.28$, $SD = 0.77$), citing a lack of practical laboratory infrastructure and hands-on simulation frameworks. It is concluded that while students possess general communication comfort, they face severe operational deficiencies in administrative accounting systems caused by theory-heavy curriculum delivery. These findings imply that educational planners must urgently implement software-driven modules and practical lab examinations to prevent graduate underemployment and corporate onboarding challenges. The study recommended that the Ministry of Education, in collaboration with university authorities, should strengthen practical digital training in schools.

Keywords: Business Education, Office Automation, Digital Marketing, Tax Administration, Civic Tax Awareness, Public Universities.

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Introduction

The contemporary global shift toward electronic fiscal governance has changed how public revenue and corporate accounting systems operate, highlighting the need to evaluate whether graduating business students possess adequate digital skills. Globally, revenue authorities have systematically digitized their tax compliance frameworks, requiring entry-level corporate professionals to understand cloud-based fiscal platforms and basic data analytical tools. However, empirical assessments indicate a noticeable mismatch; several institutional surveys suggest that a considerable proportion of business and accounting graduates enter the workforce feeling unprepared for the specific digital demands of modern corporate and public financial environments. This preparation deficit is documented across recent literature; emerging graduates frequently report lower technological self-efficacy and adjustment difficulties when first encountering live institutional accounting software and enterprise resource planning systems (Al-Hattami, 2025; Sumual & Karundeng, 2024). This structural disconnect can create operational bottlenecks, forcing corporate firms and public institutions to invest additional time and resources into retraining new employees on standard digital tax workflows (Atanasovski et al., 2019; Pham et al., 2025). Furthermore, these competency challenges extend beyond internal corporate bookkeeping into the area of civic tax awareness. When business graduates lack foundational skills in strategic online communication, they may struggle to design or support public-facing campaigns aimed at improving digital tax literacy and compliance (Kovács, 2021; Laplante & Vernon, 2021). If business education graduates cannot smoothly adapt to automated platforms or communicate fiscal knowledge effectively, institutional revenue collection frameworks face ongoing efficiency challenges (Charles et al., 2025). Ultimately, despite routine curricular updates and expanding educational software choices, the challenge of aligning graduate operational competence with automated tax environments and digital civic mobilization remains an ongoing issue.

A critical evaluation of contemporary pedagogical literature reveals an empirical oversight regarding how integrated business education curricula simultaneously foster hard technological skills like office automation and soft strategic capabilities like digital marketing within the specific domain of tax administration. To fully comprehend this structural gap, the core constructs must be integrated and defined: office automation refers to the holistic deployment of networked hardware and software systems (such as advanced spreadsheets, database management systems, and specialized electronic forms) to collect, manage, and analyze fiscal data; digital marketing encompasses the strategic utilization of web-

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based communication channels, algorithmic social tools, and rich media content to influence public behavior and drive civic awareness; while tax administration and awareness denotes the systematic execution of revenue compliance procedures and the public dissemination of fiscal responsibilities. While several baseline studies have attempted to evaluate technological readiness in isolated business disciplines, they remain fragmented and methodologically confined to traditional, non-integrated accounting skills. For instance, research by Viviers et al. (2026) highlights that while intensive tax simulation projects can enhance professional acumen and ethical awareness among postgraduate accounting students, such localized interventions are rarely systemic and fail to transfer sustainably into broader undergraduate business education programs. This narrow pedagogical focus is further constrained by an ongoing reliance on abstract, theoretical instruction rather than experiential, system-driven learning. Charles et al. (2025) argue that bridging the gap between theory and practice requires direct, hands-on exposure to live national revenue infrastructure, such as electronic filing platforms; yet, their findings indicate that most university programs leave graduates unacquainted with these vital operational environments. Consequently, graduating students continue to struggle with the structural evolution of industry demands. Sumual and Karundeng (2024) assessed whether the core competencies of tax accounting students align with the transformations of the Industry 4.0 era, concluding that a deficit exists in advanced data literacy, leaving students poorly equipped for automated corporate ecosystems.

This foundational deficit in technical accounting literacy is compounded by a parallel failure within business education to cultivate modern digital communication skills. Kovács (2021) investigated student perceptions of employability regarding digital marketing soft skills, noting an institutional neglect of the agile, strategic communication competencies required to navigate complex, media-driven professional landscapes. This lack of strategic communication agility directly undermines the capacity of graduates to lead public interest campaigns or execute civic educational drives. Fahrurozi and Massaty (2025) attempted to address this instructional void by integrating technology-based tools directly into digital marketing coursework; however, their framework was bounded to vocational student engagement within localized culinary and tourism promotion, leaving its applicability to complex regulatory and civic tax awareness domains unexamined. Even when modern digital tools are introduced into higher education, their implementation often lacks pedagogical structure and rigorous institutional grounding. Sirait et al. (2025) explored the diffusion of emerging digital technologies in higher education entrepreneurship specifically analyzing the utilization of Artificial Intelligence (AI) and social media platforms and

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discovered that while these platforms enhance raw entrepreneurial knowledge and immediate business performance, they do not translate into structured, high-level professional competencies unless tethered to an overarching, rigorous curriculum. This pedagogical fragmentation stems from unresolved structural divisions within the academic system itself. Duffy and Ney (2015) exposed the persistent divides separating students, educators, and industry practitioners concerning the actual pedagogical utility of digital media, demonstrating that faculty members are frequently resistant to or incapable of embedding rapid technological evolutions into standard course outlines.

Furthermore, where localized studies do show positive correlations between digital applications and student skill development, they remain restricted in geographic and contextual scope. Onniye and Ordu (2025) documented the potentials of digital application usage on student skills development in e-marketing within the Business Education programme at the Federal University Otuoke, yet their empirical insights are isolated to general electronic commerce, failing to link these emerging marketing competencies to the broader socio-economic mandates of fiscal tax awareness or national public policy. Similarly, Laurie et al. (2024) utilized participatory action research to enhance undergraduate understanding of social media marketing and integrated marketing communication (IMC) terminology, but their findings focused primarily on commercial advertising metrics and brand public relations rather than public sector civic mobilization or tax literacy. This lack of cross-disciplinary integration is problematic because the contemporary economic environment demands complete multi-disciplinary fluency from graduates. Ogongo et al. (2025) detailed the disruptive impact of digital technology on entrepreneurship and innovation, warning that business education graduates face underemployment unless they can dynamically synthesize technological tools with broader corporate and societal problems. This diagnosis of curricular deficiency is supported by broader structural critiques of higher education. Butcher et al. (2024) insisted that higher education institutions must cultivate synergistic, multi-dimensional competencies among business graduates to match the demands of the digital age, yet they note that traditional departmental silos continue to prevent the cross-pollination of technical automation and strategic communication. This view is echoed by Carvalho and Almeida (2022), whose structural analysis revealed that contemporary accounting and business education remains inadequate in developing the vital transversal, digital, and analytical skills demanded by modern corporate recruiters. As a final consequence of these systemic shortcomings, recent graduates from four-year programs continue to express dissatisfaction and perceptions of unpreparedness regarding their transition into the highly

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digitized, modern workforce (Schools, 2025). While Bakhmat et al. (2023) theoretically argued that leveraging the holistic digital environment of a higher educational institution can optimize the professional competence of future economists, actual institutional execution remains fragmented. Therefore, despite this extensive volume of global research on isolated accounting software, basic digital marketing tools, and generic workforce readiness, there remains an unresolved empirical gap regarding how graduating business education students perceive their dual competence in office automation and digital marketing specifically aggregated for the dual execution of modern tax administration and civic tax awareness.

To address this empirical gap, this study executes a diagnostic assessment of final-year Business Education students' perceived competence in utilizing office automation and digital marketing strategies for modern tax administration and civic awareness. This direction is motivated by the real-world necessity to update business education frameworks, aligning classroom instruction more closely with the technical and communicative needs of modern employers. The contemporary financial ecosystem increasingly favors entry-level professionals who can adapt quickly to digital accounting procedures and simultaneously leverage communication networks to support public compliance and literacy goals. By investigating how final-year students rate their own technical capacities and curriculum adequacy, this study provides an empirical perspective to help shape future instructional design. The operational scope of this investigation is delimited: contextually, it focuses on the intersecting dimensions of office automation tools (such as spreadsheet software, database applications, and electronic forms) and digital marketing strategies (including social media communication and online campaigns); demographically, it isolates final-year undergraduate Business Education students preparing to enter the professional workforce; and institutionally, it is bounded within the public universities in Anambra State, Nigeria.

The empirical foundation of this study is grounded in a descriptive survey research design, deploying a structured instrument to capture quantitative expressions of technological self-efficacy, perceived skill proficiency, and curricular satisfaction across the target population. This methodological approach ensures that the resulting data addresses the operational dimensions of modern economic environments, reflecting the training needs highlighted in contemporary vocational literature (Fahrurozi & Massaty, 2025). By analyzing these student perceptions, this research addresses the specific structural gaps identified by authorities on graduate readiness (Charles et al., 2025; Sumual & Karundeng, 2024). This study contributes to the literature by offering an empirical framework that maps dual-domain digital

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competencies (automation and communication) to the specific requirements of tax administration and civic literacy. It provides curriculum planners, university administrators, and educational policymakers with data to help address instructional silos, update business education benchmarks, and support the development of digital capabilities and professional competencies required in an increasingly digital world (Viviers et al., 2026).

Statement of the Problem

In an ideal educational and economic environment, undergraduate Business Education programmes are intended to serve as a reliable pipeline for supplying technologically adaptive professionals to both the corporate sector and public institutions. Graduates from these programmes are expected to possess a balanced combination of hard automation skills and strategic communication capabilities. Entering professionals should, theoretically, be competent in navigating cloud-based office automation architectures, processing data analytics, and operating standard electronic fiscal platforms, such as automated tax administration networks. Concurrently, they are expected to possess the digital marketing acumen to help design online campaigns that translate complex regulatory policies into clear, public-facing information. When graduates combine these dual domains, they should enter the workforce ready to improve corporate accounting workflows and support national fiscal goals by driving civic tax literacy and compliance.

However, there are growing indications of a potential operational gap between corporate expectations and actual graduate capabilities. While revenue tracking frameworks and public communication channels have digitized rapidly, it remains unclear to what degree graduating Business Education students are keeping pace with these changes. Some literature suggests a possible preparation deficit in both office automation and digital marketing applications, with reports of entry-level business professionals feeling unacquainted with live automated auditing software or national electronic filing environments (Al-Hattami, 2025; Sumual & Karundeng, 2024). Furthermore, while students appear to possess casual familiarity with personal social media use, their actual proficiency in high-level, strategic marketing competencies—such as audience analytics and structured public interest communication—remains largely unverified in the current educational context (Kovács, 2021). This suspected skill deficiency is often attributed to a heavily theoretical institutional curriculum, but the exact extent of this curriculum's

inadequacy or its specific limitations in practical simulation infrastructure has not been definitively mapped (Butcher et al., 2024; Duffy & Ney, 2015).

The true consequences and depth of this preparation gap remain uncertain, which directly warrants the execution of this study. If this suspected disconnect is as widespread as anecdotal reports suggest, it could be causing operational bottlenecks and forcing organizations to incur unexpected remedial expenses to retrain new hires on standard digital workflows (Atanasovski et al., 2019; Pham et al., 2025). On a broader scale, a deficiency in strategic digital marketing skills might be hindering civic tax awareness campaigns, but without empirical data, it is difficult to confirm whether public digital tax illiteracy is directly linked to graduate competency levels (Charles et al., 2025; Laplante & Vernon, 2021). Because baseline data on how these students actually rate their own skills and curriculum is currently lacking, educational policymakers are left with assumptions rather than facts. This study is necessary to clear up these uncertainties by providing an empirical assessment of perceived competence in office automation and digital marketing among graduating Business Education students for tax administration and awareness in tertiary institutions within Anambra State, Nigeria offering the verified evidence required to determine whether instructional reforms are genuinely needed.

Purpose of the Study

The main purpose of the study is to assess perceived Competence in Office Automation and Digital Marketing among Graduating Business Education Students for Tax Administration and Awareness. Specifically, the study aimed to assess:

1. Extent final-year Business Education students perceive themselves competent in utilizing office automation tools for modern tax administration
2. Perceived competence of final-year Business Education students in deploying digital marketing strategies to drive civic tax awareness
3. How graduating Business Education students rate the adequacy of their current curriculum in preparing them for the digital demands of modern tax systems and corporate environments

Research Questions

The following research questions guided the study:

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10. To what extent do final-year Business Education students perceive themselves competent in utilizing office automation tools for modern tax administration?
11. What is the perceived competence of final-year Business Education students in deploying digital marketing strategies to drive civic tax awareness?
12. How do graduating Business Education students rate the adequacy of their current curriculum in preparing them for the digital demands of modern tax systems and corporate environments?

Method

This study adopted a descriptive survey research design utilizing a census sampling technique to study the entire population of 124 final-year Business Education undergraduates from the two public universities offering the programme in Anambra State during the 2025/2026 academic session, which comprised 78 students from Nnamdi Azikiwe University, Awka, and 46 students from Chukwuemeka Odumegwu Ojukwu University, Igbariam. Data collection was executed through the researcher-developed Perceived Competence in Office Automation and Digital Marketing Questionnaire (PCOADMQ), a 21-item instrument structured on a four-point response scale ranging from Highly Competent/Adequate (4) to Incompetent/Inadequate (1) that was validated by three independent experts in Business Education and Measurement and Evaluation. The instrument's reliability was established via a pilot test with 15 Business Education students at Dennis Osadebay University, Asaba, Delta State, yielding a Cronbach's alpha coefficient of 0.84. The researchers, assisted by one trained research assistant, personally administered and retrieved the instruments using a direct hand-delivery method, achieving a 100% retrieval rate with all 124 copies recovered for analysis while strictly maintaining participant confidentiality. The collected data were analyzed using descriptive statistics of arithmetic Mean and Standard Deviation (SD) via SPSS, where a criterion mean score of 2.50 served as the decision threshold to accept or reject the perceived level of student competence and curriculum adequacy.

Results

Research Question One: To what extent do final-year Business Education students perceive themselves competent in utilizing office automation tools for modern tax administration?

Table 1**Mean Ratings and Standard Deviations of Graduating Business Education Students' Perceived Competence in Utilizing Office Automation Tools for Modern Tax Administration**

S/N	ITEM	MEAN	SD	REMARKS
1	Operating online electronic filing portals to input corporate tax returns.	2.23	0.73	LE
2	Utilizing spreadsheet software to calculate corporate withholding taxes using automated formulas.	2.29	0.71	LE
3	Generating automated financial reports from computer-based accounting software for tax auditing purposes.	2.19	0.81	LE
4	Organizing digital tax invoices within cloud-based storage folders.	2.39	0.77	LE
5	Inputting employee payroll data into automated applications to compute monthly PAYE (Pay-As-You-Earn) tax deductions.	2.20	0.83	LE
6	Utilizing digital database applications to retrieve structural records of past tax transactions.	2.22	0.75	LE
7	Correcting processing errors encountered during the data-entry phase on digital tax portals.	2.19	0.70	LE
	Cluster Mean	2.24	0.79	LE

The cluster mean of 2.24 (SD = 0.79) falls below the 2.50 decision threshold, indicating that graduating Business Education students in Anambra State public universities perceive themselves to have low competence in utilizing office automation tools for modern tax administration. Item 3 and Item 7 tied in recording the lowest mean (M = 2.19, SD = 0.81 and M = 2.19, SD = 0.70 respectively), while Item 4 recorded the highest mean (M = 2.39, SD = 0.77), though still below the acceptance threshold. The standard deviations ranging from 0.70 to 0.83 indicate that while low competency was the general pattern, the students did not all respond identically; some rated themselves slightly higher or lower than others.

Research Question Two: What is the perceived competence of final-year Business Education students in deploying digital marketing strategies to drive civic tax awareness?

Table 2

Mean Ratings and Standard Deviations of Graduating Business Education Students' Perceived Competence in Deploying Digital Marketing Strategies to Drive Civic Tax Awareness

S/N	ITEM	MEAN	SD	REMARKS
1	Launching targeted information campaigns on social media platforms to explain the importance of tax compliance.	2.50	0.87	HE
2	Using graphic design applications to create visual infographics that simplify tax laws for public viewing.	2.53	0.73	HE
3	Creating short-form video content to educate young citizens about their civic tax obligations..	2.45	0.78	LE
4	Monitoring online audience comments and feedback to adjust the tone of public tax literacy messages	2.50	0.77	HE
5	Utilizing email broadcast tools to distribute digital newsletters concerning tax updates to a registered audience.	2.51	0.77	HE
6	Writing search-engine optimized (SEO) blog posts or captions to increase the online visibility of civic tax education materials.	2.70	0.73	HE
7	Interpreting basic digital platform metrics to evaluate the performance of an online awareness campaign.	2.48	0.78	LE
	Cluster Mean	2.52	0.76	HE

The cluster mean of 2.52 (SD = 0.76) is above the 2.50 decision threshold, and five out of the seven items were accepted, indicating that graduating Business Education students in Anambra State public universities perceive themselves to have a high extent of competence in deploying digital marketing strategies to drive civic tax awareness. Item 3 recorded the lowest mean ($M = 2.45$, $SD = 0.78$), which fell below the acceptance threshold, while Item 6 recorded the highest mean ($M = 2.70$, $SD = 0.73$). The

standard deviations ranging from 0.73 to 0.87 indicate that while an overall positive perception of digital marketing skill application predominated, some degree of variance existed among the respondents' self-ratings across the various items.

Research Question Three: How do graduating Business Education students rate the adequacy of their current curriculum in preparing them for the digital demands of modern tax systems and corporate environments?

Table 3

Mean Ratings and Standard Deviations of Graduating Business Education Students' Assessment of Current Curriculum Adequacy for Digital Systems and Corporate Tax Demands

S/N	ITEM	MEAN	SD	REMARKS
1	Availability of functional computer laboratories for regular practical sessions during your program.	2.28	0.94	LE
2	Inclusion of hands-on practice with specialized accounting or electronic tax software in your course outlines.	2.27	0.90	LE
3	Frequency of practical assignments that require using digital tools over theoretical explanations.	2.19	0.76	LE
4	Integration of modern digital marketing concepts within your standard business communication or marketing courses.	2.38	0.79	LE
5	Capability of lecture materials to address current digital trends in the corporate workforce.	2.32	0.77	LE
6	Use of practical examinations by lecturers to evaluate your actual proficiency in using office software.	2.29	0.78	LE
7	Opportunities provided within the curriculum to simulate real-world electronic filing and corporate financial data handling.	2.20	0.81	LE
	Cluster Mean	2.28	0.77	LE

The cluster mean of 2.28 (SD = 0.77) falls below the 2.50 decision threshold, and all seven items were rejected, indicating that graduating Business Education students in Anambra State public universities rate the adequacy of their current curriculum as low in preparing them for the digital demands of modern tax systems and corporate environments. Item 3 recorded the lowest mean ($M = 2.19$, $SD = 0.76$), while Item 4 recorded the highest mean ($M = 2.38$, $SD = 0.79$), though still remaining below the threshold of acceptance. The standard deviations ranging from 0.76 to 0.94 indicate that while curriculum inadequacy was the general consensus, the students' ratings varied slightly, particularly regarding the perceived availability of physical laboratory infrastructure.

Discussion of Findings

The first finding of this study reveals that graduating Business Education students in Anambra State public universities perceive themselves to have a low extent of competence in utilizing office automation tools for modern tax administration, as evidenced by a cluster mean of 2.24. This perceived deficit is particularly noticeable in practical, data-heavy operations such as generating automated financial reports for auditing purposes and navigating electronic tax portals. This outcome strongly aligns with the empirical assessments of Sumual and Karundeng (2024), who documented a profound deficit in advanced data literacy and technical readiness among accounting and business students transitioning into highly automated corporate environments. Similarly, this finding corroborates the observations of Al-Hattami (2025), who reported that emerging graduates frequently suffer from low technological self-efficacy and adjustment anxiety when confronted with live institutional financial systems and enterprise resource planning software. The lack of operational competence observed in this cohort also confirms the structural warnings raised by Charles et al. (2025), who argued that traditional business pedagogy leaves graduates completely unacquainted with vital operational environments, thereby shifting a heavy retraining burden onto corporate employers and public sector institutions as previously noted by Atanasovski et al. (2019) and Pham et al. (2025). Furthermore, this finding extends the localized boundaries of Viviers et al. (2026) by demonstrating that without systemic, curriculum-wide digital interventions, baseline digital data skills do not transfer sustainably into broader undergraduate business education cohorts.

The second finding indicates that graduating Business Education students perceive themselves to have a high extent of competence in deploying digital marketing strategies to drive civic tax awareness, returning an acceptable cluster mean of 2.52. This positive perception is driven by strong self-ratings in writing

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online educational text, using graphic applications for infographics, and launching social media campaigns. This result presents a notable contrast to the findings of Kovács (2021), who reported a widespread institutional neglect of digital marketing soft skills and expressed concern over students' strategic communication agility in professional spaces. It also differs from the structural concerns of Fahrurozi and Massaty (2025), whose instructional framework suggested that undergraduate students struggle to apply digital marketing tools outside localized, non-regulatory domains like hospitality and tourism. This divergence may be due to differences in the area of the study and respondents. However, the descriptive breakdown reveals an important nuance: while students express confidence in broad public communication, their competence drops below the acceptance threshold when creating short-form video content ($M = 2.45$) or interpreting basic platform analytics ($M = 2.48$). This specific internal variation strongly supports the conclusions of Sirait et al. (2025), who discovered that while emerging digital applications can enhance raw contextual knowledge, they do not automatically translate into highly structured, professional analytical competencies. It also aligns with the boundaries shown by Laurie et al. (2024) and Onniye and Ordu (2025), who noted that students often struggle to connect general social media actions with complex, data-driven public policy or fiscal awareness mandates.

The third finding establishes that graduating Business Education students uniformly rate the adequacy of their current curriculum as low in preparing them for the digital demands of modern corporate tax ecosystems, yielding a critical cluster mean of 2.28. Every single instructional indicator ranging from practical computer laboratory availability to the inclusion of hands-on electronic filing simulations fell short of the empirical decision threshold. This uniform rejection strongly validates the structural critique of Carvalho and Almeida (2022), who revealed that contemporary business programs remain inadequate in developing the transversal, analytical, and digital skills demanded by modern recruiters. This finding also directly corroborates the concerns of Butcher et al. (2024), who insisted that rigid departmental silos continue to prevent the cross-pollination of technical automation and strategic communication required by the modern workforce. The clear dissatisfaction expressed by the Anambra State final-year cohort mirrors the broader national survey data published by Schools (2025), which documented widespread perceptions of unpreparedness among recent four-year graduates during their transition into digital professional landscapes. Ultimately, this structural deficit can be traced back to the institutional divisions exposed by Duffy and Ney (2015) regarding faculty resistance and curriculum disconnects, while supporting the arguments of Ogongo et al. (2025) and Bakhmat et al. (2023) that unless universities

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holistically integrate their digital environments, graduates will face ongoing underemployment and struggle to synthesize technological tools with broader societal and corporate problems.

Conclusion

This study evaluated the digital readiness of 124 final-year Business Education undergraduates across public universities in Anambra State, assessing their perceived competencies in office automation and digital marketing for tax administration and civic awareness. Structurally, the empirical data revealed a significant disconnect: while the graduating cohort expressed low competence in utilizing critical office automation software and processing electronic tax returns, they reported a high extent of competence in basic digital marketing tasks like launching general social media informational campaigns. However, the students uniformly rated their current institutional curriculum as inadequate, highlighting a lack of practical simulation laboratories, cross-disciplinary training, and industry-aligned technical assessments.

A primary limitation of this research is its geographic and institutional focus, as it examined only the public university system within a single Nigerian state and relied on self-reported survey data rather than direct, practical performance testing. Consequently, future research should expand its empirical scope to include private universities and polytechnics across other regions, while using longitudinal tracking to evaluate how these graduates perform when entering live corporate tax ecosystems. Ultimately, this study contributes to knowledge by establishing a distinct empirical framework that moves past generic employability critiques, mapping specific technical and communication skills directly to the socio-economic mandates of fiscal compliance. It provides curriculum planners and educational policymakers with baseline data to help dismantle traditional instructional silos, update obsolete business education benchmarks, and systematically build the high-level digital capabilities required in the modern workforce.

Recommendations

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

1. The Ministry of Education, in collaboration with university authorities, should increase practical digital training in schools.
2. Departmental curriculum committees should update the existing Business Communication and Marketing course outlines to include specific training on data-driven public communication. The revised coursework must require students to design and run a mock two-week social media civic

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awareness campaign, evaluating their performance based on their ability to interpret basic platform audience metrics.

3. University management should allocate funds to upgrade departmental computer laboratories with updated accounting and fiscal software. Concurrently, lecturers must adjust their evaluation methods so that practical continuous assessments and software-based examinations account for a minimum of 40% of the total course grade, replacing rote theoretical testing with direct skill measurement.

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