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EFFECT OF COMPUTERIZED ACCOUNTING SYSTEM ON AUDIT PROCESS EFFICIENCY IN NATIONAL YOUTH SERVICE CORPS BRANCHES OF NORTHEASTERN, NIGERIA

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Abstract

This study examined the effects of computerized accounting system on audit process efficiency in Nigeria with reference NYSC. The study adopted survey cross-sectional research design and collected data using primary method through self-administered questionnaire from 136 NYSC staff of finance and accounting department, and internal audit department in the six states of northeastern Nigeria. The collected data was analyzed using PLS-Structural Equation Modelling (PLS-SEM). It was found that system quality, self-efficacy and innovativeness have significant positive effect on audit process efficiency of NYSC while information quality was insignificantly related. In line with the findings the study recommended that NYSC should implement a schedule for regular accounting system maintenance and update to ensure the sustenance of optimal performance and compatibility with the evolving auditing requirements. Also, there is need for a comprehensive review of the existing audit process and procedures to identify inefficiencies and bottlenecks that caused its unrelatedness to the quality of accounting information. Finally, government should develop policies and guidelines that promote the adoption and innovative accounting technologies and methodologies within government agencies not only the NYSC.

Keywords: *Computerized accounting system, audit process efficiency, system quality, information quality, self-efficacy and innovativeness.*

INTRODUCTION

The growth of world economy at beginning of the 21st century was marked by significant technological progress and complexity of organizations' financial transactions. Therefore, the level of requirement on the part of users of financial statements has also grown by increasingly seeking to know exactly whether they represent the company's financial position and whether they are free from material distortion due to fraud or error (Melin & Toezay, 2022). This is due to a consequence of adopting the activities and transactions of an entity on the electronic computer, computerized accounting information systems imposed a new reality on the audit profession, and this led to the necessity for the audit profession and auditors to keep pace with this development (Alammari, & Parameshwara, 2023). Accordingly, some of the audit procedures, especially manual procedures, are inefficient and ineffective for the fulfillment of the audit objectives in the computerized accounting environment (Rodrigues et al., 2023). This emerges the inevitable need for examining the success of the Computerized Accounting System (CAS) in the efficiency of auditing process.

Consequently, as digitalization is gaining more attention in every aspect of financial transactions, auditors need to embrace changes quickly and benefit from Information

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Technology (IT) related audit procedures being widely recognized as some auditors are still finding it difficult to perform technology enabled audit tasks (Ismael et al., 2020). In addition, there is an expectation that IT adoption will bring profound changes in the current paradigm of the audit profession by ensuring better reliability and security in the analysis of financial statements (Rodriguez et al., 2023). This is because integral part of today's financial transactions have been computerized and automated with little or no paper documentation (Mbilla et al., 2020). The auditor's use of computer techniques and software provides an outcome of better efficiency and quality with minimal time and cost (Gardi, 2018). Auditors performing attestation services for clients that process financial transactions electronically need to be professionally and technically competent in order to perform an acceptable audit (Ismael et al., 2020). However, computerization of financial accounting has posed challenges to the accounting profession such as technical issues, digital skill gap and increased cyber security risk especially when doing accounting and auditing of companies in the electronic environment (Isa, 2017). This has increased the fraternity (scientific exposure) demand of accountants to improve the service levels and variety of services rendered (Mbilla et al., 2020).

Accordingly, public sector audit and accounting practices in Nigeria are experiencing focal reforms through technology, which aimed at escalating transparency, streamlining accountability and improving overall financial management in line with international standards and practices (Isa, 2017). Therefore, the public sector auditors have a significant interest in these developments, especially in issues related to prudence and integrity, value for money, the stewardship of public assets, the quality of information used for decision making and overall, the efficiency of their audit assignment (Taiwo et al., 2019). As a result, computerized accounting activities that furnished auditors with information need to provide assurance that systems are adequately controlled, secured and functioned as intended (Otia & Bracci, 2022). Thus, high qualitative CAS is presumed to support the auditing process by detecting and fixing errors quickly, and creating a tight and accurate information system that improves the quality of external auditing processes and auditing evidence (Almasria et al., 2021). In this regard, this paper considered system quality, information quality, self-efficacy and organizational innovativeness as the qualitative characteristics of CAS to promote audit process efficiency in Nigerian public sector.

Regarding the system quality, CAS's technical aspect is required to possess some qualitative characteristics that meet the users' requirement in terms of speed in response, reliability and flexibility (Shagari et al., 2017). Therefore, in order to achieve the success of computerized accounting system in enhancing the audit process efficiency, the system quality of the CAS cannot be overemphasized (Rosmawati et al., 2023). Secondly, the attributes of the information provided by the CAS should be qualitative and directly improve how the information can be used in decision making to achieve organizational goals (Fitrianti et al., 2020). Consequently, auditors as part of the users of the CAS information require qualitative information to improve their efficiency of audit services. Furthermore, the self-efficacy of the users was triggered by need for them to be competent enough and have confidence in their ability to carry out the assigned tasks (Almasria et al., 2021). This is because, if the users fail to believe in their ability to use the technology or lack the competency to use it, the objectives of acquiring the technology will not be achieved (Alhattami et al., 2021). Moreover, the ongoing innovativeness and transformation of public institutions triggered by the technological advancement is changing the demands and expectations of auditors from accountants and vice versa (Otia & Beacci, 2022). Therefore, an entity has to be agile and innovative to consider the adjustment in their accounting operations to accommodate its effect on auditing operations (Hay, 2019).

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In Nigeria, public institutions are increasingly incorporating new technologies in their financial transactions to replace the manual ones. Therefore, the most pertinent question to be answered is whether these technologies leveraging actions are just a case-by-case reaction to the pressure of inadequate innovations or it is part of an overall strategy to transform socio-technical aspects of their organization (Taiwo et al., 2019). The NYSC scheme as one of the Nigerian public institutions was established to foster national unity, to provide youth with experience that perhaps improve their employability and the ultimate goal of economic advancement of the nation (Oriakhogba & Fenemigh, 2021). In NYSC, the researcher observed that audit offices are facing difficulties in processing and analyzing a broader data set of financial information from various accounting sections of their units due to the complexity of the accounting system. This limits the auditors' ability to identify informational outliers and also reduce their ability to generate operational insight and focus on financial reporting risk, which posed NYSC's audit section with the constraints of sampling in audit assignment among other challenges. Therefore, audit testing has to move from sample testing to full population testing, and then from historic testing to real-time testing, which raised uncertainties of the accounting technology to the audit efficiency. Hence, it remains unclear the extent to which the computerized changes affect the audit section on the efficiency of their task. In light of the above, the researcher was motivated to investigate the influence of CAS on audit process efficiency of Nigerian public institutions with reference to NYSC. Hence this study set to answer the following research questions: does CAS' system quality have impact on audit process efficiency in NYSC of Nigeria?, does CAS' information quality have impact on audit process efficiency in NYSC of Nigeria?, does CAS' user's self-efficacy have impact on audit process efficiency in NYSC of Nigeria? and does innovativeness have impact on audit process efficiency in NYSC of Nigeria?

Insight from this study is important to administrators, staff and policy makers in providing them with a good understanding of the qualitative characteristics of CAS required in Nigerian public institutions and individual self-efficacy of the staff pertaining CAS usage. It also provides fundamental inputs for policy issues in audit of NYSC as well as giving useful input in understanding public sector employee self-efficacy and innovativeness to use the CAS in the sector. Accordingly, this paper was structured into five different section starting with introduction which provides an overview of the subject matter alongside the triggering problems of the study, the research questions and significant. The second section presents the literature review which discussed conceptual clerifications of the study, the research framework, empirical review and theoretical review. Subsequently, the methodology of the study was discussed in the third chapter which dwelled on research design, population, sampling, method of data collection and method of data analysis. This was followed by the result and discussion of the data collected, which was used to present conclusion and recommendation at the end of the paper.

LITERATURE REVIEW

Conceptual Issues

This segment presents the literature review that supports the conceptualization of the research content. The segment entails the concepts of computerized accounting system, auditing process, system quality, information quality, self-efficacy and the concept of innovativeness. These

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concepts are categorically presented as follows;

Concept of Computerized Accounting System

CAS is also known as IT based accounting systems. It is an electronic based accounting system that has well-structured procedures which are used to collect and record data related to accounting using computers (Alammari & Parameshwara, 2023). These systems influence decision making due to the ability of these systems to accumulate data resulting in decision makers (investors, creditors and manager) having adequate information to facilitate decision making (Ismael et al., 2020). In the same vein, CAS is a financial system that uses specialized automated machines called calculators and computer system in collecting, grouping, analyzing, interpreting and presenting information to its user for decision making (Oloaye & Dada, 2021). As such CAS environment requires data for preparation of financial reports are generated automatically. It captured and processed electronically have the advantages of being processed speedily, accurately, more reliably as well as timely provision of needed information for informed decision-making (Almasria et al., 2021). In this context, CAS is defined as an accounting system consists of processes established to identify, collect, classify, record and report a financial transaction with a view to maintaining accountability for the related assets and liabilities through electronic means.

Concept of Auditing Process Efficiency

Auditing process is an approach or pattern the auditors follow in identifying the area/activity, examination and documentation for the purpose of audit assignment and review (Raji, 2022). Similarly, it is a procedure applied by auditors in examining various books and accounts and other related evidence to satisfy him about the accuracy and authenticity to report the financial health of an entity (Olayiwola et al., 2015). Accordingly, the risks or uncertainties in auditing necessitates the organizations to be extra conscious of the possible risks that intimidate the safety of their systems, the efficiency of the software used in the process of computerized auditing, avoid these risks as well as decrease from its bad impacts as much as possible (Saleem & Oleimat, 2020). In the case of financial audits process, a set of financial statements (statement of financial position or balance sheet, profit and loss account, statement of changes in equity, statement of cash flow and in some cases, notes to the financial statements) are thoroughly investigated and said to be true and fair when they are free of material misstatement (Gardi, 2018). In this context, audit process efficiency involves the effectiveness in all approaches, methods or procedures applied by an auditor in examining the financial statement of an entity that use electronic means in recording their financial report and at the same time the auditors use electronic means in auditing their financial statement.

CAS' System Quality

System quality is concerned with the technical aspect of the system in term of meeting the user requirements and also has some commonly used measures such as reliability, flexibility, response time, maintainability (Delone & Mclean, 1992; 2003). Furthermore, Shagari et al. (2017) defined system quality as degree of technical efficiency of the system, in terms of user interface consistency, ease of use, documentation quality, programming error and maintainability of the system. System quality is concerned with the technical efficiency of the system, regarding user interface consistency, ease of use, programming errors, and the maintainability of the system (Almasria et al., 2021). Some of the system quality construct measurements are reliability, responsiveness, flexibility, usability, and accessibility. When

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operating information system, these all will create user's perception about system whether this system valuable or not for user as primary tasks completion support (Nugroho & Prasetyo, 2018). Operationally, this study denotes CAS' system quality as the desired characteristic of a CAS such as ease of use, system flexibility, system reliability, ease of learning, intuitiveness, sophistication and response time.

CAS' Information Quality

Information quality refers to the quality of the output produce by the system that have some commonly used measures such as completeness, timeliness, accuracy, and relevancy (Delone & Mclean, 1992; 2003). Furthermore, Shagari et al. (2017) defines information quality as the ability of the system to provide timely, accurate, relevant, and complete information to user for effective decision-making. Information quality measures the ability of a system to provide timely, accurate, relevant, and complete output to a user for effective decision-making. The quality of information is directly related to how information can be used in decision making to achieve organizational goals that can help complete tasks more efficiently and effectively (Fitrianti et al., 2020). According to Apridiyanti et al. (2020), information quality includes (1) relevance; information is related to the problem at hand; (2) accuracy; ideally all information should be accurate. But features that contribute to system accuracy will add to the costs of the information system; (3) timeliness; information is available for decision making before a crisis develops or loses opportunities; and (4) completeness; the information generated presents a complete picture of a particular problem or solution.

CAS Users' Self-Efficacy

Self-efficacy is defined as information technology user's evaluation of his/her own ability to achieve a goal or the user's self-belief to achieve that goal using the provided technology (Punjami & Mahadevan, 2021). According to them, self-efficacy is believed to be one of the key factors for successful online learning. The idea of self-efficacy also stems from the social cognitive theory, which outlines how beliefs about self-efficacy can regulate functioning of individuals (Bandura, 1977). Another key self-efficacy is that of an individual being able to communicate electronic information effectively. Interaction and communication provide a critical link between stakeholders in online business environments and these communications may serve to enrich the overall perceived benefits from online transactions (Saba, 2016). Operationally, this study defined self-efficacy as a CAS user's evaluation of his/her own ability to achieve a goal of recording classifying and summarizing economic transaction of an entity using electronic means and reporting it to relevant users effectively. The above definition operationalized in this study was adapted from the study of Punjami and Mahadevan (2021).

Innovativeness

Innovativeness refers to the degree to which a person excited to conduct experiments with the technology and eager standing in the frontline in the effort to try a new product or service based on the latest technology (Nugroho & Fajar, 2017). It also refers to a tendency to become a pioneer and is considered as an important factor affecting the absorption of cognitive perception of convenience and perceived usefulness (Asghar et al., 2021). Equally, it refers to the ability or tendency of an individual, organization or society to generate, adopt and implement new ideas, products, process or technologies. It reflects a willingness to experiment, risk taking and embracing the change to improve efficiency and problem-solving (Damerji & Salemi, 2021). In the context of computerized accounting system, innovativeness refers to the adoption and

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implementation of new technologies such as digital tools in accounting function so as to improve the efficiency, accuracy and transparency of financial management (Taiwo et al., 2019). As such, this innovativeness in computerized accounting enhances accuracy, speed and reliability of financial reporting and auditing processes (Asghar et al., 2021).

Empirical Review

Dewi et al. (2021) assess the success of the use of the technology in public sector. Primary data was collected using questionnaire from respondents in the banks. The analysis technique used is Partial Least Square (PLS). The findings of the study revealed that; system quality have insignificant effect on organizational net benefit through the mediated effect of computerized accounting system use, information quality have significant effect on organizational net benefit through the mediated effect of computerized accounting system use. Finally, service quality also has insignificant effect on organizational net benefit through the mediated effect of computerized accounting system. Similarly, Mkinga and Mandari (2020) evaluated the effectiveness of information system used at the Institute of Finance Management using DeLone and McLean's Model. A total of 391 complete and valid questionnaires were employed in data analysis. SPSS software was used to analyze the hypothesized relationships between the variables. The findings show that system quality, information quality, service quality, system use and user satisfaction are the key desired characteristics in making information system success. That is, they positively and significantly affect the organizational net benefit. Also, Shagari et al. (2017) investigate the interrelationship among the quality measures of information system success, including system quality, information, quality, and service quality, that eventually influence accounting information systems effectiveness. A survey method was used to collect data, and a total of 287 questionnaires were retrieved from respondents in the Nigerian banking sector. The result of the study further revealed that information quality and system quality have significant influences on accounting information systems effectiveness. On the other hand, service quality has insignificant effect on computerized accounting information system efficiency.

Wadiastuti et al. (2019) examined the influence of system quality, information quality, and service quality of the lecturer at Malang State University. Primary data was collected using online questionnaire from 93 active lecturers in the university, which was analyzed using PLS-SEM. The results showed that there was statistically insignificant relationship between system quality, information quality and service quality through a mediation of system use, while statistically significant through a mediation of user satisfaction. Besides, Adwittia and Sferiyanto (2021) examined the implementation of e-procurement application at contractor company using Delone and Mclean model. The study collected data from primary source with the use of questionnaire which was processed and analyzed using SmartPLS 3.0. The results showed that information quality have insignificant impact on organizational net benefit through mediation of system use, while significant through user satisfaction. Service quality was statistically significant through the mediation of system use but statistically insignificant through user satisfaction. Finally, system quality was statistically significant though mediation of system use while statistically insignificant through user satisfaction. Further, Punjami and Mahadevan (2021) investigate the influence of computer and internet self-efficacy, online communication self-efficacy and awareness of COVID-19 on perceived net benefits of the students and their intention towards the online learning. Data from 1023 students of higher education across multiple universities in India were collected and analyzed using SEM through AMOS 24 and mediation analysis through 'PROCESS' macro for SPSS. The findings revealed

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that, computer & internet self-efficacy had a significant negative relationship with net benefit, and partially significant positive relationship with intention whereas, covid19 awareness positively influenced students' net benefit and their intention to use.

Furthermore, Alsughayer (2021) investigated the impact of computer competence, integrity, and ethics of auditors on audit procedures and quality from the perceptions of auditors. The data is collected through 102 questionnaires distributed to auditors in auditing firms in Saudi Arabia. The sample used was amounted to 102 auditors. The findings show that the attributes of competence, integrity, and ethics have significant impact on audit procedures and quality. In addition, Kertarajasa et al. (2020) investigated the effect of computerize accounting competence, experience, independence, due professional care, and integrity of auditors on audit quality with auditor ethics as a moderating variable. The data used in the study was primary data obtained through questionnaires obtained from 97 external auditors in South Sumatra, Indonesia and analyzed using regression analysis technique. The results of the study show that the variables of competence, due professional care, and integrity significantly affect audit quality, positive influence. Experience and independence variables do not significantly affect audit quality.

In another dimension, Taiwo et al. (2019) examined the effect of innovative technology on internal audit of local governments of Osun state, Nigeria. Primary method of data collection was employed via questionnaire from a sample of 100 auditors using the purposive sampling. Factor analysis was employed to ascertain the content validity while Cronbach Alpha was used to verify the internal consistency of the reliability of the instrument. Analysis of variance (ANOVA) was used to analyze the research hypotheses. The result shows that there was significant effect of innovative technology on internal audit of the local governments in Osun state, Nigeria. Furthermore, Alkaffaf et al. (2018) investigate the impact of technology readiness on individual competencies among accountants to using IT in Iraq. Primary data were collected from respondents who are working as accountants in the Iraqi public service. Regression analysis was employed and found that there is a significant relationship between technology readiness variables (optimism, innovativeness, discomfort and insecurity) and the IT competencies of Iraqi accountants. The study is worthy of review for the current research because the competency of accountant most be considered by the auditors to ensure efficiency of their task.

Theoretical Review

Delone and Mclean Model (Underpinning Theory)

One of the models that is commonly use in Information System (IS) study is the Delone and Mclean success model of 1992. Delone and Mclean proposed an IS success model consisting of six key dimensions which are as follows; (i) system quality (the technical quality of the system) and (ii) information quality (the quality of the out produced), which individually and mutually affect both (iii) system usage and (iv) user satisfaction. Usage and user satisfaction are antecedents of (v) individual impact and lastly the (vi) individual performance affect organizational impact (organizational performance). In 2003, Delone and Mclean refined their earlier model in responses to the criticism of some authors. They proposed a more unified model, which they described as follows; the information quality, system quality, and service quality singularly and mutually affect intention to use and user satisfaction. Furthermore, intention to use affects net benefit. This model has been described by many authors as the most appropriate basis for both theoretical and empirical future research (Shagari et al., 2017).

ISSN: 2795-3831
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However, despite the fact that, Delone and Mclean IS success model is suitable for underpinning the variable of this study, the model was only able to underpinned the constructs related to the system in the study which are; system quality and information quality. Moreover, the dependent variable (auditing process) that can go with organizational impact or net benefit. The model cannot underpin the forth variable of self-efficacy as the model was silent about the self-confidence or belief of the user to operate the technology. This constraint of the model allows the researcher to use Bandura's Social Cognitive Theory to underpin the forth variable of self-efficacy as supporting theory of this study.

Social Cognitive Theory and Self-Efficacy (Supporting Theory)

This study used Social Cognitive Theory (SCT) to explain the mechanisms through which user's computer self-efficacy shape the efficient use of CAS and subsequently enhance audit effectiveness. Social cognitive theory propounded by Bandura in 1977 is a cyclical framework that explains how people's internal states affect how they form their own environments, how their environments shape their behavior, and how their behavior affects their internal states (Saba, 2016). The theory suggests that beliefs about ability are shaped by beliefs about outcomes of performing behavior. Past behavior, beliefs about ability and environment form a context for future behavior and affect each other in a cyclical fashion (Punjami & Mahadevan, 2021). People's selection of attitude toward activity mold their future behavior and experiences, which, through positive and negative outcomes, bring the process into a full circle by informing people's beliefs about their abilities (Bandura, 1997).

Accordingly, social cognitive theory incorporates prior behavior and beliefs about the context, it provides a useful framework for examining post adoption use of technology. For example, in a workplace where users repeatedly are presented with opportunities to use IT, the outcomes of those opportunities will shape users' beliefs, which will, in turn affect their behavior at the next opportunity to use technology (Punjami & Mahadevan, 2021). Considering that self-efficacy in the context of technology provides useful ground to examine how effective the technology would be based on the competent of the user. In this study, self-efficacy is included under this theory because the self-belief of the users of CAS could shape how effective they can use the system to achieve its desired objective, which in the case of this study is auditing process.

METHODOLOGY

The methodology section of this paper include the research design, followed by population, sample size and sampling technique, instrument of data collection, variables measurement, model specification and method of data analysis.

Research Design

The research design adopted for this study is cross-sectional, survey research design. It is a survey because it entails going to the field for data collection, while it is cross-sectional because it involves one time data collection.

Population, Sample Size and Sampling Technique

The population of this study is the total number of internal audit, finance and accounting departments of the NYCS in six (6) states of northeastern geopolitical region of Nigeria, which

ISSN: 2795-3831
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are 132 in number that represents the population of this study. The study adopts census sampling technique which allows it to use the entire population as sampling size which makes the sample size of this study 132, equal with the population.

Instrument of Data Collection

The main instrument of primary data collection is questionnaire, which is similar to what was used in this study. Structured five-point Likert questionnaires were administered by the researcher to obtain data from respondents on the relationship between CAS proxies and auditing process of NYSC.

Variables Measurement

Variables measurement is the specification of how the researcher wishes to define, measure and explain the variables in research, which is peculiar and distinct to the present study. In this context, the variable measurement is presented in Table 1 as follow:

Table 1: Operationalization of Variables

S/N	Constructs	Source
1	**Audit Process Efficiency** Audit process involves all approaches, methods or procedures applied by an auditor in examining the financial statement. It is measured in terms of comprehensiveness, guidance, appropriateness, ethics, complexity and planning	Kombo (2013); Gardi (2018); Almasria et al. (2019)
2	**CAS System Quality** CAS's system quality is the desired characteristic of the system measured in terms of ease of use, user friendliness, system reliability, security and less effort	Nguyen et al. (2021); Apridiyanti et al. (2020)
3	**CAS Information Quality** CAS's information quality is the excellence of output produced by the CAS in terms of reliability, accuracy, understandability, currency and relevance.	Nguyen et al. (2021); Apridiyanti et al. (2020)
4	**CAS's Self-Efficacy** Self-efficacy is a CAS user's evaluation of his/her own ability to achieve the intended objective. It is measured in terms of confidence, knowledge, skills, communication effectiveness and inquisitiveness.	Punjani and Mehadevan (2021); Saba (2016)
5	**Innovativeness** CAS innovativeness is the degree to which users are eager and in the frontline in an effort to try a new product or service. The construct is measured by imitation, being the first adopter, someone help, keeping up, challenge and advancement.	Buyle et al. (2018); Nugroho and Fajar (2017)

Source: researcher's compilation

ISSN: 2795-3831
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Model Specification

$APE = \beta_0 + \beta_1 SYQ_i + \beta_2 INQ_i + \beta_3 SE_i + \beta_4 INN_i + \mathcal{E}$

Where: APE = Audit Process Efficiency; SYQ = System Quality; INQ = Information Quality; SE = Self-Efficacy; INN = Innovativeness and $\mathcal{E}$ = error term.

Techniques of Data Analysis

The analysis for this study was conducted using Statistical Package for Social Sciences (SPSS version 23) for data checking, cleaning, analysis of missing value and demographic information of respondents. For validity, reliability and testing the research hypotheses, the study used the inferential statistical technique, which is Partial Least Square-Structural Equation Modelling (PLS-SEM).

RESULTS AND DISCUSSIONS

Demographic Information of Respondents

Demographic information of the respondents is presented in this section, which comprises gender, age, educational qualification and years of working experience of the respondents within NYSC were presented. However, out of 132 questionnaires distributed to the respondents in the study area, only 119 were duly completed and returned which represent 90.2% and considered acceptable by Hair et al. (2013). The demography was presented in Table 2 as follows:

Table 2: Demographic Information of the respondents

Demographic Variables	Frequency	Percentage%
Gender		
Male	83	69.7
Female	36	30.3
Age Range		
18 - 25 years	6	5.0
26 to 35 years	41	34.4
35 to 45 years	44	37.0
Above 45 years	28	23.6
Educational qualification		
HND/BSC	82	68.9
MSc/MBA	34	28.6
PhD	3	2.5
Years of Experience		
Less than 5 years	12	10.1
5 to less than 10 years	57	47.8
10 to less than 15 years	31	26.1
15 years and more	19	16.0
Total	**119**	**100.0**

Source: field survey 2024

Based on Table 2, out of 119 respondents, 83 of them representing 69.7% are men, while the remaining 36 respondents representing 30.3% are women, which means men are the majority

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respondents in the survey. Regarding the age category, the table revealed that only 6 respondents representing 5% are at the age range of 18 to 25 years, up to 41 respondents representing 34.4% are within the age range of 26 to 35 years. In addition, 44 respondents representing 37.0% are within the age range of 35 to 45 years and finally, the age range of above 45 years with only 28 respondents representing 23.6% frequency. Furthermore, concerning educational qualification, majority of the respondents have the educational certificate of either HND or BSc with 82 respondents representing 68.9% followed by respondents with either MBA or MSc with 34 respondents representing 28.6% while only 3(2.5%) respondents have PhD. Lastly, the outputs revealed that majority of the respondents have between 5 to 10 years working experience with 57 respondents rating 47.8% followed by the respondents with 10 to 15 years with 31 respondents while there are 19(16%) respondents with between above 15 years of service. However, only 12 respondents were found to be working with NYSC for less than 5 years in the survey.

Indicator Reliability, Internal Consistency Reliability and Convergent Validity

Table 3: Indicator Loadings, Composite Reliability, and AVE of Latent Constructs

Latent construct	Items	Item Loading	Composite Reliability	AVE
Audit Process Efficiency	APE1	0.496	0.820	0.539
	APE2	0.489		
	APE3	0.760		
	APE4	0.737		
	APE5	0.635		
	APE6	0.793		
System Quality	SYQ1	0.524	0.809	0.565
	SYQ2	0.687		
	SYQ3	0.584		
	SYQ4	0.800		
	SYQ5	0.772		
Information Quality	INQ1	0.742	0.894	0.584
	INQ2	0.753		
	INQ3	0.714		
	INQ4	0.806		
	INQ5	0.754		
	INQ6	0.813		
Self-Efficacy	SE1	0.768	0.865	0.562
	SE2	0.782		
	SE3	0.684		
	SE4	0.705		
	SE5	0.803		
Innovativeness	INN1	0.814	0.856	0.545
	INN2	0.742		
	INN3	0.792		
	INN4	0.666		
	INN5	0.664		

Source: Researcher's compilation with PLS-SEM 4.0

Basically, Hair et al. (2016) proposed 0.70 and above as the threshold of accepting indicator reliability or outer loadings of each latent construct. However, it is claimed that an indicator

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with the loading of 0.4 could be retained if its deletion would reduce the composite reliability. In this regard, the study retained the entire 27 items without deleting items, since none of the items has the loading below the threshold. Furthermore, internal consistency was assessed using composite reliability in SmartPLS based on the criteria that it should be 0.60 or more (Hair et al., 2013). Furthermore, convergent validity, which measures the extent of agreement among multiple items measuring a particular concept and the most commonly used measure of convergence validity is the Average Variance Extracted (AVE), with a minimum threshold of 0.5. Accordingly, Table 3 presents the results of indicator reliability, internal consistency reliability and convergent validity.

The items' loadings as presented in Table 3 ranges from 0.489 (APE2) to 0.814 (INN1), which means the values of the loadings are within the threshold discussed earlier. The items with less than 0.70 were retained because their deletion reduced the composite reliability of the latent constructs. Moreover, the composite reliability of all the latent constructs is displayed in the table ranged from 0.809 to 0.894, which exceeded the minimum threshold of .60 for exploratory research, confirming that all the latent constructs had strong internal consistency. Average variance extracted values ranged from 0.539 to 0.584, which were also above the minimum threshold of 0.50, indicating that the constructs had strong convergence validity.

Discriminant Validity

Discriminant validity is the extent to which a particular latent construct differentiates itself from other constructs and it is computed to ensure that the scale used to measure a different construct is certainly measuring a distinct one (Saderst et al., 2021). Therefore, using Fornell-Larcker criterion, the discriminant validity of the variables was established through a comparison of the square roots of AVEs and the inter construct correlations between constructs. The outcome demonstrates that the measurement model of this study has achieved good discriminant validity.

Table 4: Discriminant Validity

	APE	INN	INQ	SE	SYQ
APE	**0.824**				
INN	0.565	**0.784**			
INQ	0.591	0.539	**0.764**		
SE	0.664	0.683	0.612	**0.750**	
SYQ	0.647	0.586	0.542	0.614	**0.782**

Source: researcher's compilation in PLS-SEM 4.0

Given the values of the above table, the first value of the audit process efficiency square root extracted variance is 0.824, which is greater than all the values of the shared variance between audit process efficiency and innovativeness, information quality, self-efficacy and system quality. For innovativeness, information quality, self-efficacy and system quality, the root extracted variance were 0.784, 0.764, 0.750 and 0.782, were highly greater than the values obtained on its relationship of other constructs.

PLS-SEM Results of the Significance of Path Coefficients

The significance and relevance of PLS-SEM structural model were evaluated based on the t-statistics and p-values obtained using 10,000 bootstrapped samples in Smart PLS-4.

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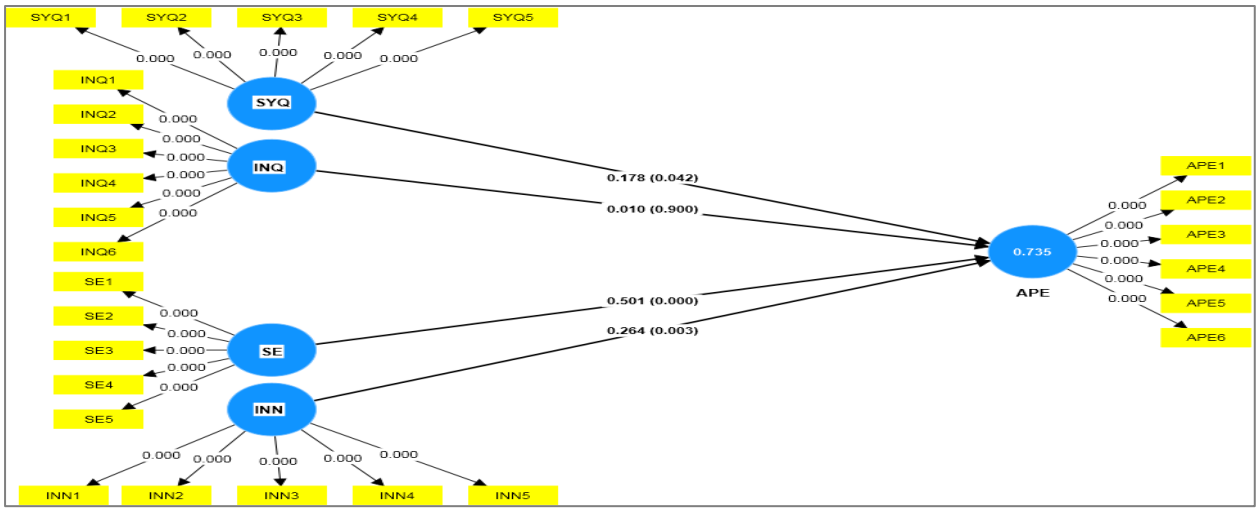

Figure 2: PLS-SEM Structural Model

Table 5: Structural Estimates

Hypotheses	Relationship	β	T statistics	P values	Decision
H1	**SYQ -> APE**	0.178	2.029	0.042	Accepted
H2	**INQ-> APE**	0.010	0.125	0.900	Rejected
H3	**SE -> APE**	0.501	5.291	0.000	Accepted
H4	**INN -> APE**	0.264	2.996	0.003	Accepted

Note: Significant at the *p < 0.05 level; ** p < 0.01 level; and ***p < 0.001.

Discussion of Findings and Hypotheses Testing

Discussion of studies' result presents the implication of the finding as well as the justification of the findings with previous studies. The first objective of the study investigates the effect of CAS' system quality on audit process efficiency in NYSC. Evident from the PLS-SEM result, it was revealed that, there is significant positive relationship between system quality and audit process efficiency in the study area based on the coefficient and p-value of 0.178 and 0.042 respectively. This implies that the study is able to accept the first hypothesis, which predicted a significant positive relationship between system quality and audit process efficiency in NYSC. In this regard, increase in CAS' system quality will lead to increased audit process efficiency in NYSC and vice versa. Accordingly, the result is supported with the finding Andarwati et al. (2018), which analyzed the effect of computerized accounting system quality and top management support on the satisfaction of SME's managements as the end users and found significant positive effect of system quality on the end users' satisfaction. It is also justified with Bahari and Mahmud (2018) investigated the effect of system quality, information quality and service quality on organizational and individual impact and found a significant positive relationship between system quality and organizational impact, which was considered in this study to surrogate audit process efficiency.

Secondly, the analytical result found an insignificant relationship between information quality and audit process efficiency in NYSC based on the coefficient of 0.010 and p-value of 0.900. Based on that, the second null hypothesis, which predicted a significant relationship between information quality and audit process efficiency in NYSC cannot be accepted and is therefore rejected. Based on the result, audit process efficiency is not affected by the degree of CAS information quality since the relationship is not significant. This result is supported and justified

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by the finding of Wadiastuti et al. (2019), which examined the influence of system quality, information quality, and service quality of the lecturers' performance at Malang State University and found insignificant effect of information quality. Similarly, the result agrees with Adwittia and Sferiyanto (2021), which examined the implementation of e-procurement application at contractor company using Delone and Mclean model. The study found an insignificant effect of information quality on the organizational net benefits.

Regarding the third objective, the inferential analysis revealed a significant positive relationship between self-efficacy and audit process efficiency in NYSC by considering the coefficient value of 0.501 and p-value of 0.000. In this regard, the third hypothesis that projected a significant relationship between self-efficacy and audit process efficiency in NYSC is accepted, which implies that increase in staff self-efficacy regarding CAS will lead to increased audit process efficiency in NYSC and vice versa. In view of that, the result of is in line with the finding of Punjami and Mahadevan (2021), which investigate the influence of computer self-efficacy, online communication self-efficacy and awareness of COVID-19 on perceived net benefits of online learning. The outcome of the study shows a significant positive effect of self-efficacy on the intended net benefit, which is similar to the present research. Similarly, Saba (2016) investigates the implications of e-learning systems and self-efficiency on students' outcomes by updating Delone and Mclean IS success model and found significant positive effect of self-efficacy on students' outcome in the study area.

The forth objective of the research assesses the influence of innovativeness on audit process efficiency in NYSC. Based on the result, there is significant positive relationship between innovativeness and audit process efficiency in NYSC evident from the coefficient and p-value of .264 and 0.003 respectively. Hence, the fourth hypothesis that expected positive relationship between innovativeness and audit process efficiency in NYSC is accepted and the null hypothesis is then rejected. This implies that increase in innovativeness increases audit process efficiency in NYSC and vice versa. Accordingly, this result is in line with the finding Otia and Bracci (2022), which investigate the influence of digital innovativeness on public sector auditing, evidence from supreme audit institutions. It was found that innovativeness have strong positive effect on public sector auditing. In agreement, Taiwo et al. (2019) affirmed the result of this study by examining the effect of innovative technology on internal audit of local governments of Osun state, Nigeria. The study found significant positive effect of innovative technology on internal audit of local government in the study area.

CONCLUSIONS AND RECOMMENDATION

This study aimed to evaluate how different qualitative characteristics of computerized accounting system affect audit process efficiency in NYCS. Based on different analytical tools applied from the data collected in northeastern branches of Nigerian NYSC, the study concludes that the quality of CAS in NYSC improves the accuracy, reliability, and integrity of the financial data used for audit purposes. This is because, the auto-accounting system ensures data consistency, completeness, and timeliness as well as reducing errors and discrepancies that hinder audit efficiency. In addition, the study concludes that despite efforts to ensure high-quality information in NYSCs' accounting system, the accuracy, completeness and reliability of data is not affecting the efficiency of the audit process because auditors are compensating the data deficiencies through validation procedures, manual checks, and alternative sources of information, which is mitigating the impact of data quality on audit efficiency. Furthermore, it is concluded that the accountants using the computerized accounting system in NYSC are exhibiting greater confidence in their abilities to perform accounting functions that supplement

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that audit tasks effectively and efficiently. Thus, the accountants' self-confidence motivates auditors to set higher goals, exert greater effort in facing the audit challenges, leading to greater audit process efficiency. Moreover, this study concludes that NYSC is agile to encourage accountant in experimenting with new accounting and audit tools and equipments, which put them in a better position to adapt to evolving technological environments and regulatory requirements, driving efficiency improvements.

In line with the findings obtained, this study recommends NYSC to implement a schedule for regular accounting system maintenance and update to ensure the sustenance of optimal performance and compatibility with the evolving auditing requirements. This can better be achieved when the accounting system is customized to align with specific audit requirements and workflows. In addition, the commission should conduct a comprehensive review of the existing audit process and procedures to identify inefficiencies and bottlenecks that caused its unrelatedness to the quality of accounting information. Then, they should look for opportunities to streamline the procedures, improve communication and enhance coordination among accounting and audit team members.

Furthermore, accounting staffs of the commission should be offered continuous support and resources including access to user manuals, online tutorials and helpdesk assistance. This will encourage them to seek for help and guidance whenever needed to boost their confidence and competence in using the accounting system. Finally, governments should establish policies and guidelines that promote the adoption and innovative accounting technologies and methodologies within government agencies not only the NYSC. Thus, they should support the innovativeness by providing incentives, funding and technical assistance to promote government agencies' innovativeness.

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