

Determinants of Adoption of Computer Assisted Auditing Techniques: A Survey of Auditors in Kano State, Nigeria

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Abstract

Computer assisted auditing techniques (CAATs) have been identified as a necessary and sufficient conditions for an effective and qualitative audit report. This study analyzed the determinants of adoption of computer assisted auditing techniques with focus on auditors practicing in Kano, Nigeria. The study adopted survey method where 125 auditors were sampled from seventeen audit firms through a multi-stage sampling technique. The data was analyzed using econometric methods (Ordered Logit Regression) in line with the Unified Theory of Acceptance and Use of Technology (UTAUT). Performance expectancy and effort expectancy were found to be statistically significant determinants of auditors' total intention to CAATs adoption and usage. However, facilitating condition and social influence were not significant in explaining the auditor's total intention to CAATs adoption and usage. The study recommends that, audit firms should invest in technological tools and train auditors on computer tools. Also, the regulatory bodies should consider computer proficiency as part of the regulatory checks. This adoption and usage of CAATs will help the auditors to produce an effective and qualitative audit report.

Keywords: Computer Assisted Auditing Techniques, Performance Expectancy, Effort Expectancy, Facilitating Condition, Social Influence, Nigeria.

1.0 Introduction

The rapid advancement in technology has transformed the business landscape, leading to changes in the auditing profession. Computer assisted auditing techniques (CAATs) have gained popularity in recent years, promising improved efficiency, accuracy, and effectiveness in the audit process. However, despite these potential benefits, the adoption of CAATs among auditors in Kano State, Nigeria remains relatively low. As the largest economy in Africa with high volumes of transactions susceptible to fraudulent cases. A total of 10,917 fraud cases reported between 2000-2009, (Adeyemo, 2012). The government in an attempt to curtail these established two agencies (Economic and Financial Crimes Commission and Independent Corrupt Practices Commission) to fight the surge but to no avail (Omonuk & Oni, 2015). This is because these agencies are by nature reactive to fraudulent acts by investigating cases bordering on economic and financial crime, whereas auditing is preventive rather than reactive to fraud. Thus, despite the above problems of huge financial data and prevalence of fraud and corruption in the country, available literature show that few studies have being conducted on the application and adoption of CAATs in auditing process in Nigeria, such studies include the work of Dale et al. (2011) and that of Omonuk & Oni (2015). The studies covered the Lagos Axis possibly due to the concentration of businesses and presence of major auditing firms (big four). This trend has made it a necessity to explore the applicability of Computer Assisted Audit Techniques (CAATs) in other parts of the country (such as Kano). Consequently, this research covers this gap by analyzing auditors' adoption or otherwise of CAATs in Kano State.

Another knowledge area this study would contribute on is the fact that, the studies on CAATs such as those conducted by Mohammad et al. (2017), seemed to have focused on factors influencing the adoption of Computer Assisted Auditing Techniques by external auditors in Jordan rather than analyzing Auditors' adoption of CAATs. Similarly, the study by Mansour (2016) also focused attention on factors affecting the adoption of CAATS in audit processes in Jordan while Mohammed and Mitra (2013) studied the barriers of using Computer Assisted Auditing Techniques in the private sector of Iran and the study by Appah, et al. (2013), which examined the use of Computer Assisted Auditing Tools and Techniques in Nigeria. It is evident therefore, that previous CAATs studies concentrated more on factors influencing its adoption; However, no study was conducted on Auditors barrier to its usage or just its outright usage. This study differs from the previous ones in that it examines adoption of CAATs among auditors in Kano state, with emphasis on performance expectancy, effort expectancy, facilitating condition and social influence as well as two moderating factors adopted in this study, which are the Auditor's gender and years of professional experience.

Moreover, in terms of methodological gap identified in the area of the study, previous studies (such as Siti, et al, 2017) used linear regression model when the relationship between the dependent and independent variables is non-linear. Although, Omonuk (2015) used non-linear model in a study conducted in Southern Nigeria, there is still none conducted in Northern Nigeria, particularly Kano State. It is evident from the literature reviewed that most of the dependent variable used in the prior studies is binary variable, which, cannot be used in a linear model. Other aspects of the gap in literature are period of the study (2020) and the two additional explanatory variables included in this study (Gender and Years of Professional Experience). Therefore, this study attempts to fill these gaps. Therefore, this study aims to identify the determinants that influence the Auditors adoption of CAATs in Kano State with reference to the UTAUT model and explore the reasons behind auditors' decisions regarding its integration into their practices.

The rest of the paper is divided into four sections; section two is literature review from previous studies. Third section describes methodology used in conducting this study. Section four comprises of the results and discussion, and fifth section captures conclusions and recommendations.

2.0 Literature Review and Hypotheses Development

The Concept of Computer Assisted Auditing Techniques (CAATs)

CAATs is defined as a technique used to perform various procedures in auditing (ASOS, 2003). CAATs are computer programs and data that auditors use as part of the audit procedures to process data of audit significance contained in a client's information system (CIS) and which allow auditors to develop new ways to achieve the general audit objectives (Kamesam, 2001). Similarly, Singleton (2003) defines CAATs as computer tools and techniques that an auditor (external or internal) uses as part of their audit procedures to process data of audit significance contained in an entity's information systems. It is the practice of using computers to automate the IT audit processes. CAATs normally includes using basic office productivity software such as spreadsheet, word processors and text editing programs and more advanced software packages involving the use of statistical analysis and business intelligence tools.

A more recent definition is to limit the use of the term to various tools, techniques and software that help auditors to conduct control and confirmation tests, analysis and verification of financial statement data, and continuous monitoring and auditing (Lin & Wang, 2011). CAATs can therefore be conclusively used to denote techniques that can be used to help audit in a more effective, efficient, and timely manner, in other words, it is the use of technology to evaluate controls by extracting and examining relevant data.

Review of Empirical Literature

This section presents a review of relevant literature on CAATs adoption in auditing, drawing from previous research on technology adoption models, factors influencing technology adoption, and prior studies on CAATs in auditing.

The volume of economic transactions makes it increasingly difficult for organizations to maintain comprehensive audit records, thus their dependence on information technology (IT) for recording and processing business transactions encompassed in the corporate digital infrastructure (Arens et al., 2012). Venkatesh et al. (2012) in their study, found that hedonic motivation influences behavioural intention to use a technology. In CAATs adoption context, hedonic motivation is seen as the perceived pleasure of using CAATs by individual auditor. If an auditor feels that it is “cool” to use the features, functions, and interface of CAATs, then hedonic motivation would increase the Auditors’ intention to use CAATs. Hedonic motivation influences habit which then influences behavioural intention to use a technology (Venkatesh et al, 2012). Habit is seen as the extent to which individual auditor tends to use CAATs automatically due to prior usage behaviour. It is anticipated that if an auditor has a habit to use technology in audit process (for example, spreadsheet & statistical software), will likely have intention to use CAATs. This finding collaborated that of Tan et al. (2011) who measured technology performance through cost effectiveness in their study.

Bringing down the analysis of empirical literature to Africa, Appah et al. (2013) examined the use of computer assisted auditing tools and techniques by accounting firms in the Niger Delta of Nigeria. The study, as other prior studies substantiated the results of earlier research of the relationship between CAATs and the four components of UTAUT. The empirical analysis provided an association between the use of CAATs and all the explanatory variables in the model. Based on the empirical findings, it was found that the adoption of computer assisted auditing tools and techniques has become a beneficial choice for auditors in the 21st century complex business environment and an efficient tool to increase the productivity as well as the audit functions.

Olasanmi (2013) in his study sought to identify the various types of fraud encountered during financial transactions in Osun State, Nigeria. Evaluating the adoption of computer aided audit tools (CAATs), the findings of the study showed that 72.8% of the respondents agreed that CAATs have played a major role in fraud detection, and hence can be used to curb fraud to a minimal level in organizations. In achieving the set objective, he adopted the linear regression model to analyze the data collected. This result is supported by Mehra (2011), who carried out research on how CAATs can be used to detect fraud in journal entries and other areas of auditing which include the review of unusual transactions, payroll cycle, and procurement cycle. He found that CAATs could be used to address the risk of fraud in all these areas also to detect potentially fraudulent activities.

James, et al., (2013) in their research used UTAUT to identify and then examine factors potentially influencing auditors use or non-use of CAATS, drawing data from 181 auditors from the big four, national and local firms in United States. The results indicate that outcome expectations, the level of organizational pressure and technical infrastructure support influence the likelihood that auditor will use CAATS.

Isabel and Carlos, (2013) carried out research on computer Assisted auditing techniques: new determinant on individual adoption among Portuguese statutory auditors. The research revealed that

procedures for data manipulation and extraction and tools to manage electronic working papers are the most popular and have the most frequent use. The work of Javad et al. (2013) studied the barriers of using computer assisted auditing techniques in Iranian private-sector auditing, where they administered questionnaires on the Iranian certified Auditors and analyzed the data using correlation and linear regression analysis. The results showed that, the most important barrier of using CAATs by private-sector Iranian auditors is their unfamiliarity with CAATs.

In another analysis of attributes that impact information technology audit quality, Dichapong et al. (2013) studied IT and financial audit practitioners that built on prior work that has proposed frameworks of IT audit quality. Identified and evaluated potential construct suggested by these frameworks as well as financial auditing literature. They developed a survey tool and asked IT and accounting practitioners to assess the impact of these items on IT audit quality. A factor analysis is used to refine the set of IT audit quality factors identified and they were able to provide insight into the prioritized impact of each factor on IT audit quality. In comparison to prior research, they discovered that additional factors are significant for IT audit quality and that the relative importance of the factors for IT audit quality differs for IT verses financial audit.

The research by Aidi, et al., (2014) on IT adoption by internal auditors in the public sector of Malaysia, the objective of which was to investigate the current IT adoption among internal auditors and to identify the factors that influence IT adoption and non-adoption. Questionnaire were administered to all the internal auditors in the Malaysian public sector. The study adopted technological, organizational, and environmental (TOE) model which shows the direct impact of technology on productivity of internal auditors in Malaysian public sector using linear regression model to analyze the data. Factors that influence the usage level of CAATs by auditors in Malaysia were examined by Amanuddin (2015) and the results indicated that effort expectancy is the most influential factor that affects the usage level of CAATs by auditors in Malaysia as compared to other factors outlined in the UTAUT.

In investigating the likely adoption of Computer Assisted Auditing Techniques and audit quality, in Nigeria, Omonuk (2015) drew a sample from Nigeria to investigate whether or not, auditors effectively audit computerized accounts and whether there exist a relationship between the use of CAATs and audit quality using descriptive statistics, correlation analysis and logistic multiple regression, he was able to provide evidence that CAATs are effectively used, that there exist a positive relationship between the use of CAATs and audit quality and that in a sample that excludes the big 4 international audit firms, local Nigerian firms are not effective in applying CAATs and as such do not produce quality audit report.

Similarly, the study by Mansour (2016) focused on factors affecting the adoption of CAATs in audit processes using the survey method to validate UTAUT in Jordan. He adopted survey method of data collection and found effort expectancy and social influence not statistically significant in influencing the decision of Jordanian external auditors to adopt CAATs. Pall and Richard (2016) conducted an exploratory study of the adoption, application and impacts of continuous auditing technologies in Iceland small business. The adopted a multistage sampling method to select respondent for the study. This exploratory study considers the motivations for adopting a certain type of continuous auditing technology, as well as the applications and impacts of this technology in seven small businesses. Their findings indicate that the technology is usually implemented to increase resource efficiency but is frequently perceived as a tool to fix data quality problems rather than a strategically aligned technology.

The study by Mohammad et al. (2017) is one of the most recent studies on the application of CAATs. Their study on the factors influencing the adoption of Computer Assisted Auditing Techniques by external auditors in Jordan, adopted UTAUT methodology using the online questionnaires administration and found performance expectancy, effort expectancy and social influence to have statistically significant impact on the intention to adopt CAATS while facilitating condition was found to be insignificant. Similarly, Rindang and Synthia (2017) conducted research exploring the use of computer assisted auditing techniques and its impact on the transparency and accountability of financial statements in Indonesia. The objective of the research was to explore the perception of internal auditors in public companies on the use of Generalized Audit Software (GAS) to improve transparency and accountability of financial report. A structured interview was conducted with internal auditors from Indonesian listed companies and agency theory as well as technology acceptance model (TAM) were used. The results indicate that not all participants agreed that GAS helps them in producing a transparent and accountable financial report.

Marilene and Alice (2018) in their study on the contribution of computer assisted auditing techniques and business intelligence instruments in financial audit used document analysis method, in both qualitative and quantitative data to experiment the contribution of CAATs to financial audit and audit quality in Romania. The study found that, in the computerized era, financial auditors increasingly turn to PC tools and special financial audit programs to make their work more efficient. They also found that, CAATs adoption in the modern computerized environment does not only create new opportunities but new risk which requires additional rules for security, fairness, and acceptable margin of error. Thus, permanently influencing the work of Auditors.

The analysis of the empirical studies show convergence in terms of method of data analysis, with majority using linear regression models and few adopting non-linear model. It is equally observed that majority of studies such as those of Mohammed et al. (2017), Mansour (2016) and Aidi et al. (2014) used non-linear data on linear models. Thus, this study attempted to fill the identified gaps in terms of coverage and method of data analysis. This study has the following hypotheses:

- Ho₁: Auditors' performance expectation has no significant impact on Auditors' CAATs adoption in Kano State.
- Ho₂: There is no significant relationship between efforts expectancy and Auditors' CAATs adoption in Kano State.
- Ho₃: Facilitating condition has no significant effect on Auditors' CAATs adoption in Kano State.
- Ho₄: Social influence has no significant effect on Auditors' CAATs adoption in Kano State.

Review of Theoretical Literature

Studies have evolved over the years on the applicability and reliability of CAATs. These studies adopted the 'Unified Theory of Acceptance and Use of Technology' (UTAUT) by Venkatesh et al, (2003). The UTAUT aims at explaining user intention to use a newly developed information system and subsequent behavior towards its usage (Venkatesh et al, 2003). The theory stipulates that there are four key constructs thus: performance expectancy, effort expectancy, social influence and facilitating conditions.

The modified version of the UTAUT model would be adopted for this study, based on recent research by Curtis and Payne (2008), James et al, (2014), Mahzan and Lymer (2008), Payne and Curtis (2010). Thus, this study would investigate if performance expectancy, effort expectancy, social influence, and facilitating conditions influence actual CAAT adoption. Furthermore, the UTAUT model formed the basis for the formulation of empirical models for this study where the four key constructs are the critical parameters for the testing of Auditors' acceptance of CAATs in Kano State.

This extra construct is proposed based on examination of the literature available (for example, Javnrin and Bierstaker (2005) and Information System Audit and Control Association (ISACA) (1999), on motivational factors for CAATs adoption, which the researcher believe, may not be adequately emphasized by the wider general UTAUT model as a key construct in this context. The remainder of this section explores each of the constructs from UTAUT as are proposed for testing in this study to illustrate their theoretical application to the model development.

Performance Expectancy: Auditing standards and guidelines clearly suggest that usage of technology tools could help to enhance efficiency and effectiveness of internal Auditors' work (IIA standard 1220.A2). In addition, other literature on CAATs has shown that internal auditors adopt CAATs to be able to perform various functions such as to test program controls (Progob & Isenberg, 1999), to gain better understanding of their client IT controls (Neuron, 2003), to facilitate risk assessment during planning processes (Paukowits, 2000) and to improve the efficiency of audit testing (Hudson, 1998). As such, it seems clear that CAATs are perceived to be potentially an important tool for internal auditors in the performance of their audit work.

Effort Expectancy: UTAUT's effort expectancy construct, addressing perceived ease of use, is also tested in this study. UTAUT suggested that there was a direct (positive) effect of perceived ease of use via effort expectancy on behavioural intention (Venkatesh et al, 2003). All other things being equal, UTAUT would suggest that there is a higher likelihood that internal auditors would adopt CAATs when they are easy to use and therefore do not have to undergo a difficult learning curve to make use of CAATs. Despite apparent support for this construct in UTAUT, Hu, Chau, Sheng, Liu, and Tam (1999) concluded from their study that among knowledge workers no amount of ease of use would compensate for low perception of systems usefulness.

Facilitating Conditions and Social Influence: Facilitating conditions and social influence are the other two major constructs that are proposed by UTAUT. In the context of CAATs adoption by internal auditors, the facilitating conditions that can impact on their motivations to adopt CAATs are the adequacy of information on what CAATs can do, support from vendors or software providers as well as support from top management in their organizations (CICA, 1994).

Following the foregoing parameters outlined in the UTAUT and their direct considerable impact on audit efficiency, audit effectiveness and quality of audit report, this study is optimistic that the theory adopted will guide the study and provide the necessary basis for the evaluation of the set objectives and hypothesis.

3.0 Methodology

The questionnaire was design based on the constructs derived from the literature review. Multi-stage sampling method was adopted where 125 auditors were sampled from seventeen audit firms through a

multi-stage sampling technique and data analyzed using econometric methods (Ordered logit regression) in line with the UTAUT.

Variables of the Study

Dependent Variable: The dependent variable of the study is Total Intention to CAATs Adoption and usage (TIAU). TIAU is the expression of the auditor’s intention to adopt and use CAATs in the audit process. It is an ordinal and categorical variable, measured using a five-point Likert scale.

Independent Variables: The independent variables of the study consist of the following.

- i. Performance Expectancy (PE): Performance expectancy measures the expected performance improvement of an auditor from the adoption and use of CAATs in the audit process. It is the degree to which an individual believes that using the tool will help him or her better achieve desired outcomes (Venkatesh et al, 2003). It is a categorical and ordinal variable, measured in five-point Likert scale.
- ii. Effort Expectancy (EE): Effort expectancy refers to the degree of ease associated with the use of the tool (Venkatesh et al. 2003). Venkatesh et al. (2003) argues that effort expectancy is expected to be more salient in the early stages of a new behavior, when process issues represent hurdles to overcome and later become supplanted by instrumentality concerns. It is a categorical and ordinal variable, measured in five-point Likert scale.
- iii. Facilitating Condition (FC): Facilitating conditions are defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the tool. In an audit context, this infrastructure may involve audit firms providing appropriate CAATs resources and computer support to their employees such as specialized instrument, support Centre, hotline. It is a categorical and ordinal variable, measured in five-point Likert scale.
- iv. Social Influence (SI): Social influence is the perception of the Auditor on the social influence CAATs have on the community of Auditors. It is a categorical and ordinal variable, measured in in five-point Likert scale.

4.0 Results and Discussion

Table 1: Ordered Logit regression Coefficients and Marginal Effect

Variables	Ordered Logit Coefficient (ATIAU)	Marginal Fixed Effect
Performance Expectation	0.608* (0.177)	-0.497* (0.290)
Effort Expectation	0.585* (0.189)	-0.537* (0.324)
Facilitation Condition	1.490 (0.387)	0.399 (0.260)
Social Influence	1.277 (0.346)	0.244 (0.271)
Constant cut1	0.315 (0.397)	-1.156 (1.262)
Constant cut2	3.165 (4.190)	1.152 (1.324)
Observations	116	116

Source: Survey Results, 2021.

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

The result presented in Table 1 seeks to examine the factors affecting Auditors adoption and use of CAATs in their audit processes in Kano state Nigeria. Robust standard errors were reported to account

for the data diagnostics. Table 1 shows the robust ordered regression coefficients and their marginal effects of the variables included in the model. The result is presented in parts. First, are those variables that are statistically significant with a positive causal relationship with the dependent variable (Total Intention for CAATs Adoption and Usage), and secondly, those variables that are statistically insignificant in predicting the DV. The independent variables included in the model are Performance Expectation, Effort Expectancy, Facilitating Condition, Social Influence. However, the ordered logit regression results focused on two critical components of the analysis. Regression robust coefficients and marginal effects are discussed.

Performance Expectation (PE)

Measures the expected performance improvement of an Auditor from the adoption and use of CAATs in the audit process. The estimated result shows that the variable is positively related to the ordered log odd of Auditor's total intention of CAATs adoption and usage (TIAU) and found to be statistically significant at the 10% level. This is in conformity with the a-priori expectation and conforms to the studies of (Dias & Marques, 2018; The World Bank, 2017; KPMG, 2015). Moreover, from the result, a one unit increase in the PE (that is, going from 1 to 5; Strongly Agree to Strongly Disagree), will lead to expected 0.61 increase in the ordered log odd of CAATs adoption and usage, given all of the other variables in the model are held constant. This implies that the more an Auditor experiences ease in his/her audit process leading to performance improvement, the more likely to adopt and use CAATs in the subsequent audit tasks. Similarly, on Table 1, a marginal effect of 49.7% is expected in the ordered log odd from a unit increase in PE.

Testing the null hypothesis (H_{01}), which is the null hypothesis for performance expectation, states that "Auditors' performance expectation has no significant impact on Auditors' CAATs adoption in Kano State." The P-value (0.096) shows statistical significance at 10% level, which suggest that we reject the null hypothesis and accept the alternative hypothesis, which states that Auditor's performance expectation has significant impact on Auditor's CAATs adoption in Kano State.

Effort Expectancy (EE)

Measures the degree of ease associated with the use of the tool in the audit process. EE is expected to be more salient in the early stages of a new behavior when process issues represent hurdles to overcome and later become supplanted. The estimated result shows that the variable is positively related to the ordered log odd of Auditor's total intention to CAATs adoption and usage (TIAU) and found to be statistically significant at 10% level. This is in conformity with the a-priori expected causal relationship and has conformed to the previous studies that show statistically significant and positive causal relationship with the dependent variable (Ahmad et al., 2019). Moreover, from the result, a one unit increase in the EE (that is, going from 1 to 5; Strongly Agree to Strongly Disagree), will lead to expected 0.59 increase in the ordered log odd of CAATs adoption and usage, given all of the other variables in the model are held constant. This implies that the more an Auditor experiences ease in his/her audit process leading to performance improvement, the more likely to adopt and use CAATs in the subsequent audit tasks. Similarly, on Table 1, a marginal effect of 53.7% is expected in the ordered log odd from a unit increase in EE.

The hypothesis (H_{02}) for effort expectancy states that there is no significant relationship between effort expectancy and Auditor's CAATs adoption in Kano State. The P-value (0.096) for H_{02} hypothesis is significant and as such we reject the null hypothesis, which suggests that effort expectancy do not

influence Auditor's intention to accept CAATs in Kano State and therefore accept the alternative hypothesis showing great influence on Auditor's total intention to adopt and use CAATs.

Facilitating Condition (FC)

This construct measures the degree to which an Auditor believes that the provision of organizational and technical infrastructure supports the adoption and usage of CAATs. This involves audit firms proving specialized computer tools and resources to ease implementation of audit tasks. FC is statistically insignificant and positively related to the ordered log odd of Auditor's total intention of CAATs adoption and usage (TIAU). From the result, a one degree increases in the FC (that is, going from 1 to 5; Strongly Agree to Strongly Disagree), will lead to expected 1.49 increase in the ordered log odd of CAATs adoption and usage, given all of the other variables in the model are held constant. This implies that the more an Audit firm provides organizational and technical support, more willing an Auditor to adopt and use CAATs. This finding is counter intuitive and contradicts the findings of the studies of (Bierstaker et al., 2014; Mahzan & Lymer, 2014). Similarly, from the result on Table 1 shows a marginal effect of 39.9% is expected in the ordered log odd from a degree increase in FC.

Hypothesis for Facilitating Condition (Ho₃) states that Facilitating condition has no significant effect on Auditors' CAATs adoption in Kano State. FC shows statistical insignificance, which suggests we accept the null hypothesis and reject the alternative. Thus, FC has no significant effect on Auditor's CAATs adoption in Kano State.

Social Influence (SI)

This is the Auditor's perception on the social influence of CAATs on the community of Auditors. It measures the impact on the perceived improvement and ease of accomplishing audit tasks, as it affects the Auditors adoption and use of CAATs. The estimated result shows that the variable is positively related to the ordered log odd of Auditor's total intention of CAATs adoption and usage (TIAU) and found to be statistically insignificant in explaining the Auditor's total intention for CAATs adoption and usage. This conflicts with the a-priori expectation and the studies of (Kesharwani & Bisht, 2012; Zuiderwijk et al., 2015). In an audit context, social influence comes from the head of internal audit department, audit committee, or other people who may affect the decision of internal auditors on whether to accept and use CAATs or not (Mahzan & Lymer, 2014). However, this is an opportunity for further studies to find out the direction of causality as well as statistical significance of the variable.

Ho₄ is the last null hypothesis relating to the constructs of UTAUT, which is relating to the impact of social influence on Auditor's CAATs adoption in Kano State. The P-value (1.277) is statistically insignificant, suggesting that we accept the null hypothesis and reject the alternative. The null hypothesis states that SI has no significant effect on Auditor's CAATs adoption in Kano State.

5.0 Conclusion and Recommendations

The relevance as well as usefulness of CAATs in the audit processes and functions cannot be overemphasized yet the usage of CAATs amongst Auditors is still very low in relations to its expected benefits (Dias & Marques, 2018). From the results, this study finds that the most important constructs of the UTAUT model which affects the Auditor's intention to adopt and use CAATs are performance expectation and effort expectancy.

It is pertinent to note and conclude that the other two constructs, facilitating condition and social influence were not effective in explaining the total intention of Auditors to adopt and use CAATs in Kano

State, Nigeria. In view of the major findings and conclusion drawn, the study provides the following recommendations:

- i. Audit firms should invest in the provision of technological tools such as computers and audit software, as well as enabling environment for Auditors. This will go a long way in ensuring technological tools availability and accessibility for Auditors and by extension increases the likelihood of adoption and usage of CAATs.
- ii. There should be a special training for Auditor on CAATs usage as well as reward system that will encourage female Auditors to accept and use CAATs.
- iii. Accounting and auditing regulatory body should include the use of technologies such as CAATs as part of the regulatory standards. Such a regulation will encourage senior professional Auditors who may be aversive to technology to deliberately update their computer skills, which will make CAATs adoption and usage possible.

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